

Application Process for Electricity Licences

1. Manner of Application for Electricity Licences

1.1 An application for an Electricity Licence shall be:

- (a) made in writing in the form prescribed in paragraph 2, addressed to the Authority and delivered or sent by prepaid post to the Authority at its principal office or sent by electronic mail to an address specified by the Authority; and
- (b) signed and dated by or on behalf of the applicant, stating, where signed on behalf of the applicant, the capacity of the signatory.

1.2 Within 15 Business Days of it receiving an application for an Electricity Licence, the Authority shall write to the applicant to:

- (a) confirm receipt of a Proper Application; or
- (b) inform the applicant that its application is incomplete and set out what information and/or documentation the Authority requires in order to be able to start to process the application.

1.3 The Authority will assess a Proper Application within 90 Business Days of its receipt of such application, subject to the applicant's compliance with paragraph 6.1 below.

2. Form of application

2.1 An application in respect of a Bulk Generation Licence shall be made in the form specified in Part 1 of Schedule 1 and shall contain the information specified therein.

2.2 An application in respect of a TD&R Licence shall be made in the form specified in Part 2 of Schedule 1 and shall contain the information specified therein.

2.3 An application in respect of a Large Scale Self-Supply Licence shall be made in the form specified in Part 3 of Schedule 1 and shall contain the information specified therein.

3. Application Fees

3.1 Subject to paragraph 3.2, the prescribed fee in relation to an application of the description specified in the first column of the table in Schedule 2 shall be the corresponding fee specified in the second column of that table.

3.2 Where more than one fee would, but for this paragraph, be payable in respect of a particular application, the prescribed fee shall be the higher or highest such fee.

4. Publication of notice of application

4.1 In accordance with Section 21(3) of the EA, upon receipt of a Proper Application for an Electricity Licence (subject to paragraph 1.2) with the corresponding application fee as set out in Schedule 3, the Authority shall publish a notice on its Official Website and in

the Gazette in respect of such application. The Authority shall publish such notice on its Official Website within 5 Business Days of notifying the applicant pursuant to paragraph 1.2 above and in the Gazette as soon as practicable thereafter.

- 4.2 In accordance with Section 21(3) of the EA, the notice published under paragraph 4.1 shall state:
- (a) the name of the applicant;
 - (b) the objects of the application;
 - (c) that the application will be available for viewing by any member of the public at the Authority's office and on the Official Website;
 - (d) an invitation to the public to make comments;
 - (e) the period within which any comments in relation to the issue of the Electricity Licence may be lodged with the Authority;
 - (f) the address where any comments may be submitted (and that such comments may be made electronically); and
 - (g) such other particulars as may be determined by the Authority.

5. **Application for Renewal of Electricity Licences**

- 5.1 Applications for the renewal of Electricity Licences should be submitted with the information and documents required under paragraph 2 above to the Authority at least six (6) months before the expiry of their existing licence.

6. **Procedures for determination by the Authority of applications for Electricity Licences and applications for renewal of Electricity Licences**

- 6.1 During the Assessment Period, the Authority may determine that the application contains an omission or any discrepancies. In this event, pursuant to Section 22(2) of the EA, the Authority shall write to the applicant as soon as possible setting out what further information or documents need to be provided by the applicant to the Authority within the prescribed period to determine the application. The Authority has a responsibility to ensure that licenses are awarded to entities and parties that can participate on a sustainable and viable basis in the Bermuda electricity sector. Therefore, the Authority may decide to request supplemental information in support of an application within a stipulated time pursuant to Section 22(2) of the EA, including any information the Authority may deem necessary for an assessment of the technical and financial aspects of an applicant and application, as well as the operational and business competence of an applicant.
- 6.2 During the Assessment Period, the Authority shall be entitled to consider comments from members of the public, pursuant to the Authority's rules of practice and procedure regarding public consultations under Section 70 of the RAA.
- 6.3 Upon completion of its assessment, the Authority will decide whether it will:
- (a) grant an Electricity Licence with conditions; OR

- (b) grant an Electricity Licence without conditions; OR
- (c) propose to refuse the applicant's application for an Electricity Licence in which case paragraph 6.5 below applies.

6.4 The Authority may grant an Electricity Licence provided:

- (a) the applicant has paid the relevant application fee;
- (b) the applicant has paid the required Government authorisation fees;
- (c) the Authority decides such grant is consistent with the purposes of the EA and any Ministerial directions made regarding the structure of the electricity sector pursuant to the EA;
- (d) the applicant has provided a Proper Application;
- (e) the applicant has provided any further information required by the Authority pursuant to paragraph 6.1 above.

6.5 The Authority may propose to refuse to grant an Electricity Licence if:

- (a) the applicant has failed to pay the relevant application fee;
- (b) the applicant has failed to pay the required Government authorisation fees;
- (c) the grant of such licence is not consistent with the purposes of the EA and any Ministerial directions made regarding the structure of the electricity sector pursuant to section 8 of the EA;
- (d) any person(s) named in the application are disqualified to any extent from acting in connection with the affairs of any company;
- (e) any person(s) or entity named in the application are undischarged bankrupts, have been declared insolvent or are subject to a voluntary arrangement with creditors;
- (f) any person(s) or entity named in the application has an unspent criminal conviction;
- (g) any person(s) or entity name in the application has unsatisfied court judgment(s);
- (h) the applicant, or any person or entity named in the application has previously had a licence application refused or a licence revoked;
- (i) the applicant is insolvent;
- (j) the Authority considers information supplied to be false or misleading; and,
- (k) the applicant has failed to provide, when requested, additional information within the required time.

- 6.6 If the Authority proposes to refuse an application, the Authority will provide a written notice to the applicant. Such notice will state that the Authority proposes to refuse the application, the reasons why the Authority proposes to refuse the application and the time within which representations may be made by the applicant. The applicant will have 21 days from the date of the notice to make representations about why it disagrees with the Authority's proposal to refuse the application and to provide any further information required. The Authority shall consider any representations duly made. If the applicant does not make any representations within 21 days of the notice, or if after considering any representations, the Authority is still of the view that the application should be refused, the applicant will be notified in writing of the decision to refuse the licence. Such notification will, where no representations have been made, restate the reasons for the refusal of the application; and where representations were made, state the reasons for the refusal of the application, referring to the representations made where appropriate.
- 6.7 On granting an Electricity Licence, the Authority will send to the successful applicant a signed and sealed licence to the address indicated in section 2.1 of the applicant's form of application.

SCHEDULE 1

Part 1: Form of Application in respect of a Bulk Generation Licence

1 Purpose of the Application

The purpose of this application is to initiate the licensing process for a Bulk Generation Licence for a Class 3 facility. The proposed solar facility at the [REDACTED] [REDACTED] is a 6MW facility powered entirely by solar energy technology (the Project). The Project is proposed by the [REDACTED] and in 2017 was subject to a competitive bid solicitation for the development, construction and long-term operation of the facility. Saturn Power International Inc. was selected as the preferred proponent through this competitive bid solicitation. The expected commercial operation date is Sept 2019.

The project will be owned and operated by Saturn Solar Bermuda 1 Ltd., a subsidiary of the Saturn Power Inc. family of companies. The Saturn Solar Bermuda 1 Ltd. company has received its Certificate of Incorporation from the Government of Bermuda and Section 114b license from the [REDACTED].

- 1.1 Pursuant to Section 21(1) of the Electricity Act 2016 (the "EA"), a person that wishes to obtain or renew a Bulk Generation Licence shall submit to the Authority an application in respect of such licence.
- 1.2 This is an Application to the Regulatory Authority (the "Authority") for a Bulk Generation Licence. Under Section 20(1)(b) of the Electricity Act 2016 (the "EA"), a Bulk Generation Licence authorises the licence holder to engage in the bulk generation of electricity in Bermuda.

2 Applicant Information

In accordance with Section 23(2) of the EA, please provide the following information on the Project and the Project's directors, Controllers and Senior Executives.

2.1 **Project Information**

<p>Name and registered address (if applicable) of applicant in full. In the case of a partnership or other joint venture (other than a body corporate), give the names and addresses of each party concerned and indicate the preferred address for notifications</p>	<p>Saturn Solar Bermuda 1 Ltd. c/o [REDACTED] (Bermuda) [REDACTED] [REDACTED]</p>
<p>Where the applicant is a body corporate: (i) the jurisdiction under which it is incorporated; and (ii) if applicable, its registered number.</p>	<p>(i) Bermuda (ii) Registration No. [REDACTED]</p>
<p>Name, address, facsimile number (where applicable), telephone number and electronic mail address of person to whom correspondence or enquiries concerning the application should be directed</p>	<p>[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]</p>
<p>Is this an application to obtain a new licence or renew an existing licence?</p>	<p>New</p>

2.2 **Information on Project owners, directors, Controllers and Senior Executives**

- (a) Provide the following information for all directors, Controllers and Senior Executives of the Site and Project (this evidence may be submitted under confidential cover, pursuant to Sections 33 and 34 of the Regulatory Authority Act (the "RAA")).

Legal name of person	Role (applicant, etc.)	Principal business office address	Social Insurance number	Date of birth	Data Universal Numbering System (DUNS) number (applicant and owners only)
Douglas Wayne Wagner	Founder, Chairman of the Board and CEO	140 Foundry Rd, Baden, ON Canada, N3A 2P7	[REDACTED]	[REDACTED]	Not Applicable
Raymond George Roth	Founder, Board Member and COO	140 Foundry Rd, Baden, ON Canada, N3A 2P7	[REDACTED]	[REDACTED]	Not Applicable
Karen Bertram	Vice President of Finance	140 Foundry Rd, Baden, ON Canada, N3A 2P7	[REDACTED]	[REDACTED]	Not Applicable
Tai Nguyen	Chief Investment Officer & Vice President Strategic Capital	140 Foundry Rd, Baden, ON Canada, N3A 2P7	[REDACTED]	[REDACTED]	Not Applicable
Neel Bungaroo	Vice President, General Counsel	140 Foundry Rd, Baden, ON Canada, N3A 2P7	[REDACTED]	[REDACTED]	Not Applicable
Michael Brugge	Vice President of Engineering	140 Foundry Rd, Baden, ON Canada, N3A 2P7	[REDACTED]	[REDACTED]	Not Applicable

(b) Describe the legal interests in the Project of each owner and each director, Controller and Senior Executive.

Person	Legal Interests
Saturn Power International Inc.	100%

- (c) Provide legal names for all of applicant's Affiliates (including Affiliates of the applicant and the applicant's owners), if any.

Entity	Affiliates
Saturn Solar Bermuda 1 Ltd.	<ol style="list-style-type: none"> 1. Saturn Power Corporation; 2. Saturn Power Enerji A.S.; 3. Saturn Power Netherlands BV1; and 4. Saturn Power Netherlands BV2.
SATURN POWER INTERNATIONAL INC.	N/A

- (d) Describe the technical experience of the applicant and its owners in designing, building, and/or operating similar projects, particularly in comparable jurisdictions.

Owner	Relevant Experience
Saturn Power International	Saturn Power has developed and contracted over 100 MW of solar, battery storage and wind power projects, including developments in Canada, the United States and Turkey. The company has expertise in project financing, engineering, procurement and construction (EPC) as well as the operation and maintenance of existing renewable assets.

A list of Saturn Power International's Board and Senior Management as well as projects developed by Saturn Power can be found on the next 3 pages:

Owner	Relevant Experience
Douglas Wayne Wagner Founder & Chief Executive Officer Chairman, Board of Directors	A graduate of Loughheed Business College, a pioneer and entrepreneur with over 40 years of business experience. A veteran in the renewable energy industry, Doug has committed to build successful projects throughout both North America and Europe, relying on his diligent assessment and evaluation of all aspects of renewable projects. Doug's expertise comes in the financing, development and operation of renewable energy projects having directed Saturn's entire 85MW portfolio.
Raymond George Roth Founder & Chief Operating Officer Member, Board of Directors	Ray has provided leadership, guidance and development acumen to Saturn Power's operations since the company's inception in 2007. Specifically, he has managed Saturn's successful development, construction and long-term operation of the 10 MW Gesner Wind Farm and 10MW David Brown Solar Farm, both in Ontario, Canada. Ray has also been closely involved in securing, development, constructing and operation of Saturn's Turkish portfolio and has also managed the development and sale of three 10MW solar farms in Ontario that continue to operate to this day. Ray provides extensive construction and land experience and is heavily involved in Saturn's development portfolio and business operations on a day-to-day basis

Owner	Relevant Experience
<p>Karen Bertram Vice President of Finance</p>	<p>Karen has over 25 years of extensive knowledge in tax, audit, financial statement analysis and finance. She has significant experience in various private and public industries as a CFO, Tax Consultant, Investment Advisor, Financial System Implementation specialist and Public Accounting Firm Partner. Karen graduated from the University of Waterloo's Chartered Accountancy Program and is a member of the Chartered Professional Accountants (CPA) of Ontario and CPA Canada.</p>
<p>Tai Nguyen Chief Investment Officer & Vice President Strategic Capital</p>	<p>Tai has been involved in the renewable energy sector since its infancy. He has in-depth knowledge of the sector having worked in engineering, government, and finance. He has lived and worked throughout the world and has completed transactions in Canada, USA, and Asia. He has worked in both the public and private markets and has transacted on billions worth of projects globally. Tai has worked in power system planning, project finance, investment banking and private equity with some of the most reputable organizations globally including the Ontario Power Authority, BNP Paribas, and Bank of America Merrill Lynch. He holds a Bachelor of Applied Science in Electrical Engineering from the University of Waterloo, and a Masters in Global Finance at the NYU Stern School of Business.</p>
<p>Neel Bungaroo Vice President, General Counsel</p>	<p>Neel leads the overall management of the legal functions and legal affairs at Saturn. Neel has corporate, commercial and energy law experience and is licensed to practice in the Province of Ontario, England & Wales, and the British Virgin Islands. Neel was previously practicing as a corporate and commercial lawyer at leading global law firms, Allen & Overy LLP and Mourant. In addition, Neel was General Counsel at another international renewable energy company, advising on a broad range of agreements and initiatives. He has also completed an executive program at Harvard Business School on Corporate Restructuring and Mergers & Acquisitions.</p>
<p>Michael Brugge Vice President of Engineering</p>	<p>Mike brings a diverse range of skills having been involved in Power Electrical Engineering for more than 10 years. Mike has led the Electrical Engineering of a vast array of global PV installations and is currently responsible for Load Flow Modelling and Electrical Engineering of the largest battery installation in Canada. His experience working with ESA, UL and IEEE give him the edge on knowing the requirements for navigating leading technologies and made him a champion for Power Engineering issues. Prior to his work in Power Engineering, Mike was a facility engineering consultant focused on industrial distribution management.</p> <p>Mike has engineered over 150MW of constructed solar facilities in Canada and the USA over his career. As the leader of our Engineering team, Mike applies his technical expertise, his detail-oriented attention and focus on quality to ensure the safe and efficient design of all of our projects. He is responsible for resource assessments for projects, high level system sizing and detailed design. He has developed strong relationships with equipment vendors of critical project components and brings valuable contract negotiation experience to the table.</p> <p>Mike holds a Bachelors and Masters of Applied Science in Electrical Engineering from the University of Windsor.</p>

Solar PV Project Name	Application (Ground / Rooftop / Canopy / Landfill)	City, State	Project Size (kW- dc)	Year Completed
Mississippi Mills Solar	Ground Mount	Town of Mississippi Mills, Ontario, Canada	13,000	Q1 - 2012
William Rutley Solar Farm	Ground Mount	Township of South Stormont, Ontario, Canada	13,000	Q3 - 2012
David Brown Solar Farm	Ground Mount	Township of South Stormont, Ontario, Canada	13,000	Q4 - 2015
Tatkoy Solar Farm	Ground Mount	Seydisehir, Turkey	6,500	Q2 - 2017
Deschutes Solar Farm	Ground Mount	Deschutes, Oregon, USA	13,860	Q4 - 2017
Nigde Solar Farm	Ground Mount	Bor, Turkey	3,900	Q1 2018
Gozler Solar Farm	Ground Mount	Gozler, Turkey	2,600	Q1 2018
Chiloquin Solar Farm	Ground Mount	Chiloquin, Oregon, USA	13,860	Q1 2018
Blind River Portfolio	Ground Mount, Rooftop	Blind River, Ontario, Canada	3,745	Q2 2018

3 Project Description

3.1 Location of the proposed Site

The proposed site is located on the Finger peninsula of St. David's Island at the LF Wade International Airport at 3 Cahow Way Street, St. George's, DD03, Bermuda. The land will be leased by Saturn Solar Bermuda 1 Ltd from the Government of Bermuda. A copy of the draft Agreement to Lease as well as the Lease are included under Appendix A.

Agreement to Lease and Lease are in the process of being amended between the Parties

3.2 Generating Units

(a) Provide the information in the table below, for each proposed generating unit.

Unit Name	Technology	Fuel Source	Capacity (kW)	Est. Annual Gross Gen. (kWh)	Est. Annual Gen. Sold to Grid (kWh)	Est. Capacity Factor	Est. Economic Life
Huawei Inverter	DC/AC Inverter	Sunlight	120x 50kW =6,000 kW	104,083	104,083	22.2%	25 years
Total			TOTAL = 6,000 kW	12,490,000	12,490,000		

(b) Describe the maintenance schedule for the units.

Unit Name	Maintenance Schedule
Huawei DC/AC Inverter	The inverter units require very low level of maintenance. Their functionality is monitored remotely 24 hours a day, 7 days a week, via an on-line monitoring system. Any concerns with system performance of the inverters will be checked on-site by a technician on an as-needed basis. Spare inventory of inverters will be kept on site to allow for same-day replacement in the case of a malfunctioning unit. If an inverter malfunctions, it represents only 1% of production reduction for the entire project.

(c) Provide information on self- consumption of electricity provided by the generating units for this Project.

How much electricity generated by the Project does the applicant plan to consume at its own facilities (kWh)	100 kWh per year
Describe the facilities that will consume the electricity	-Inverters - SCADA monitoring system.
Describe the proposed facilities that will be used to connect the generating equipment to your facilities that will consume the electricity.	The power for the inverters will be drawn from the LV connection while the power from the communication equipment will be drawn from a LV panelboard and run through a UPS.

3.3 Interconnection Facilities

Describe all interconnection facilities, such as power lines, substations, switchyards, and other transmission equipment, and right-of-way (if required). Attach technical plans or photos if necessary.

Saturn will utilize an underground medium voltage feeder to collect power in 1MW blocks from loop fed MV transformers. The protection for this feeder will consist of a pad mount fusible disconnect. The underground feeder will leave the project site and travel east to existing [REDACTED] infrastructure of underground vaults and spare conduits leading back to the substation. The MV feeder will connect to a dedicated feeder and breaker back at [REDACTED] Civil Air Termination Substation.

See the preliminary drawing sett attached as Appendix B for a detailed look at the layout of the solar facility and interconnection facility.

3.4 Fuel Characteristics

Describe the following fuel characteristics for the Project.

What type or types of fuel will be used	Sunlight
Company or companies that will supply the fuel (attach fuel supply agreement)	n/a
Origin of fuel	Sunlight
Description of facilities used to import and store (attach technical plans and/or photographs)	n/a
Attach scenarios with projections of the amount of each fuel that the Project will use	unlimited

3.5 Permits

In accordance with Section 23(1)(a) of the EA, provide evidence that the applicant has obtained such permission as required under the Companies Act 1981, the Development and Planning Act 1974, the Building Act 1988, the Clean Air Act 1991, and any other relevant legislation. Attach copies of such permissions.

Saturn has engaged [REDACTED], Ltd ([REDACTED]) to conduct the Environmental Impact Assessment (EIA) for the Project. All appropriate permits have been provided to date.

3.6 Safety

Describe the safety, emergency, and auxiliary systems that will ensure that the Project can be built and operated safely. Attach relevant technical plans and safety and emergency procedures.

Safe operations of the Project is of paramount importance to Saturn and the following features will be included in the design. See preliminary drawing package attached as Appendix B and detailed Project Health and Safety (H&S) Program attached as Appendix C. A custom H&S Program package will be prepared for the project site prior to start of construction.

In addition, consider that the project will meet or exceed local safety requirements through the inclusion of:

- i. The facility will be designed in compliance with local electrical safety codes.
- ii. The final design drawings will be signed and sealed by a Professional Engineer licensed in the province of Ontario, Canada.
- iii. A disconnect operated by Saturn will connect the 22kV feeder to the Project and can disconnect power flow from the facility to the 22kV feeder immediately when necessary.

- iv. A breaker operated by [REDACTED] will connect the 22kV feeder to the [REDACTED] which enables [REDACTED] to disconnect the Project from the grid when necessary.
- v. A DC-disconnect is installed between the power generating solar modules and the inverters and can cut off the flow of power, when necessary
- vi. Performance and output data of the Project will be shared with [REDACTED] in real time providing them with the information required to ensure no negative impact on the local grid.
- vii. Development of a Health and Safety Plan during construction and operation will ensure that anyone entering the Project site are properly trained on H&S procedures, are provided with appropriate Personal Protective Equipment, and understand hazards, risks and requirements.

3.7 Water supply routes and facilities

Describe how the generating plant will obtain the water supply necessary for operations.

If this plan requires permits or approvals from an agency, provide documentation that these permits or approvals have been granted.

The Project does not require water for operation.

3.8 Projected timeline and cost

Submit:

- (a) **a schedule detailing the expected Project timeline, including design and engineering milestones, construction milestones, and expected in-service date; and**

The Project is expected to follow the schedule summarized in the table below.

Milestone	Target
ENGINEERING	
Preliminary Design	Complete
Finalization of Easements	Complete
Input from Airport Risk Assessment	Complete
Final Issue for Construction Design	Complete
PERMITTING	
Development Permit	Complete
Building Permit	Complete

INTERCONNECTION	
Feasibility Studies	Complete
Interconnection Agreement	Complete
PROCUREMENT	
Solar Modules	Complete
Transformers	Complete
Racking & Piles	Complete
Inverters	Complete
CONSTRUCTION	
Site Clearing	██████████
Fencing Installation	██████████
Pile Installation	██████████
Trenching Installation (on site)	██████████
Trenching and Conduit Installation (off site)	██████████
Racking Installation	██████████
Transformer Installation	██████████
Inverter Installation	██████████
Module Delivery	Complete
Module Installation	██████████
Electrical Terminations	██████████
██████████ Installation	██████████
Commissioning	██████████
Commercial Operation	██████████
Site Restoration and Clean-Up	██████████

- (b) **an estimate of the cost of developing the Site, installing the proposed facilities, and operating the facilities over the estimated economic lifetime of the Project.**

The expected capital cost for the installation of the Project is approximately ██████████ USD. The expected annual expenses for the Project is approximately ██████████ USD for the first year including costs for regular Operations & Maintenance tasks, management, major equipment replacement in later years, land lease payments, auditing, and insurance. Annual expenses are expected to escalate each year at the rate of inflation.

4 **Business Plan and Audited Financial Statements**

Section 23(1)(c) of the EA requires that the applicant has demonstrated the necessary financial capacity to build and maintain the Project.

Accordingly, attach a business plan and audited financial statements, as described below. You may submit these documents under confidential cover, pursuant to Sections 33 and 34 of the RAA.

4.1 **Business Plan and financial information**

The applicant must provide a business plan. The business plan must, at a minimum, describe:

(a) **The applicant's business goals, objectives, and mission;**

The goal of the Project is to produce clean, emission-free, and sustainable, power through the conversion of sunlight into electricity therefore reducing Bermuda's dependence on dirty diesel power generation. This Project provides the island of Bermuda with a price-stable and cost-efficient source of electricity with predictable supply. Saturn Power's mission is to ensure the safe, efficient and timely installation of the Project and long-term operation of the Project to exceed the expectations of the Government of Bermuda, the citizens of Bermuda and local agencies.

(b) **The ownership structure of the applicant, and what experience the applicant and its owners have in developing and operating similar projects;**

Saturn Solar Bermuda 1 Ltd. is owned by Saturn Power International Inc. which is part of the Saturn Power family of companies. The main directors of these entities are the same two people listed in section 2.2(a) and 2.2(d).

At Saturn Power Inc, this same team has been responsible for the development, permitting, engineering, financing, and construction of over 70 MW's of solar facilities in Canada and internationally. The company was founded over ten years ago and has seen great success with renewable energy development.

A list of constructed and operating renewable energy projects developed by Saturn Power Inc is summarized in the proceeding table. In addition, a list of renewable energy projects which Saturn Power Inc. developed and which are currently under construction with commercial operation dates set for end of 2017 are listed on the next table.

Saturn Power Developed Project	Nameplate Capacity	Land acquisition	Planning/ Permitting	Solar Resource	Interconnection	Engineering	Financing	Equipment Procurement	Construction	Operations
David Brown Solar Farm	10 MW AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gesner Wind Farm	10 MW AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
William Rutley Solar Farm	10 MW AC	✓	✓	✓	✓					
SunE Rutley Solar Farm	10 MW AC	✓		✓						
Mississippi Mills Solar	10 MW AC	✓	✓	✓	✓					
Solvation S Solar Farm	480 kW AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Blind River Health Centre Solar Project	400 kW AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Brockville Laurier Solar Project	240 kW AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tatkoy Solar Farm	4.3 MW AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Deschutes Solar Farm	9.9 MW AC	✓	✓	✓	✓	✓	✓	✓	✓	
Chiloquin Solar Farm	9.9 MW AC	✓	✓	✓	✓	✓	✓	✓	✓	
TOTAL	75.22 MW AC									

Saturn Power Projects Currently Under Construction	Nameplate Capacity	Land acquisition	Planning/ Permitting	Solar Resource	Interconnection	Engineering	Financing	Equipment Procurement	Construction	Operations
Blind River FIT 3 Solar Projects (5 sites)	2.5 MW AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nigde Solar Farm	3 MW AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gozler Solar Farm	2 MW AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Seydisehir Solar Farm	20.3 MW AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Stratford Festival Hydro Battery Energy Storage	8 MW / 40.8 MWh	✓	✓	✓	✓	✓		✓	✓	
Graber Place Energy Storage	6 MW / 28 MWh	✓	✓	✓	✓	✓		✓	✓	
TOTAL COD by Q4 2017	41.8 MW AC									

Saturn Power Inc. also continues to own and operate several assets including the projects listed on the proceeding table.

Operating Facility Maintained by Saturn Power

Nameplate Capacity

David Brown Solar Farm	10 MW AC
Gesner Wind Farm	10 MW AC
Solvation S Solar Farm	480 kW AC
Blind River Health Centre Solar Project	400 kW AC
Brockville Laurier Solar Project	240 kW AC
TOTAL	21.1 MW AC

(c) **How the applicant will provide the energy, capacity, and other services it is contracted to provide under the Power Purchase Agreement (“PPA”) or shall provide under power purchase arrangements (if necessary);**

The execution of the Project will follow the similar process applied for all of Saturn Power’s ground mount solar projects. The project stages are summarized below:

- i. **Site Control:** Permissions to access and alter the proposed site for the project will be secured through a Lease Agreement between Saturn and the Government of Bermuda.
- ii. **Interconnection:** ██████ has conducted an Interconnection Assessment to determine any required upgrades to the existing ██████ system to accept the project.
- iii. **Resource Assessment:** Saturn has used the industry accepted PVSystem modelling software to determine the optimal design parameters and the expected annual energy generation for the site.
- iv. **Engineering:** Saturn’s internal engineering team has conducted the preliminary engineering design for the Project. The engineering team is responsible for ensuring the design is safe, efficient and compliant with local codes.
- v. **Permitting & Approvals:** Saturn has engaged an experienced local consultant (Bermuda Environmental Consulting Ltd) to support the permitting and approvals of the Project.
- vi. **Airport Risk Assessment:** Saturn has engaged Associated Engineering to conduct the airport risk assessment and minimize impacts to the operation of the airport.
- vii. **Power Purchase Agreement:** Saturn and ██████ have executed the PPA which will guarantee a payment for each kilowatt-hour of energy produced.
- viii. **Construction:** A local contractor will be utilized to construct the facility using imported equipment for such specialized units as the solar modules, inverters, racking, transformers and other electrical equipment.

(d) **The resources that the applicant will use to provide its contracted services; and**

The following resources are expected to be used to provide the contracted services:

- i. **Internal resources** – Saturn Power has internal personnel to provide engineering design services, legal counsel, financing coordination, development and management of the facility.
- ii. **Bermudian Consultants** – Saturn Power has engaged the following Bermudian consultants to support the Project:
 - **Bermuda Environmental Consulting Ltd** – for EIA preparation, stakeholder consultation and permitting support

- [REDACTED] Ltd – for local legal counsel
- **Other Consultants** – Saturn Power has engaged the following other consultants to support the Project:
- **Associated Engineering** – to provide airport consultation services, risk assessment support, glint/glare studies and other specialized assessment work relating to the sensitive location of the project.

iii. **Local Contractors** – Saturn Power will engage the following local contractors to support the construction of the Project

- [REDACTED]
- [REDACTED]
- [REDACTED]

iv. **Financers** – Saturn Solar Bermuda 1 Ltd. is in the process of closing an investment with a potential investor.

(e) **The applicant’s financial plan, including estimates for key financial indicators against which the applicant, its owners, and creditors will measure its financial performance.**

In addition, the applicant must provide information and explanation as to how it will finance the proposed activities that would occur under a license.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]



4.2 **Audited Financial Statements**

Submit audited financial statements for the applicant and for each of its owners for the last three fiscal years. Applicant must submit financial statements prepared in accordance with International Financial Reporting Standards, or other generally accepted accounting principles as applicant may select with the Authority's written approval.

[REDACTED]

5 **Executed PPA**

In accordance with Section 23(2) of the EA:

- 5.1 Where the applicant is applying for a Bulk Generation Licence, it must submit copies of the PPA that it has negotiated and executed with the TD&R Licensee. If such applicant is also the TD&R Licensee, the applicant may submit details of its power purchase arrangements in lieu of an executed PPA. These agreements or arrangements may be submitted under confidential cover, pursuant to sections 33 and 34 of the RAA.

Attached under **Appendix E**, please find a copy of the executed PPA with [REDACTED]

6 **Evidence of Applicant's Probity**

In accordance with Section 23(1)(d) of the EA, an applicant must submit evidence of its probity and suitability to be granted a licence. Applicant must submit attestations signed before a Commissioner for Oaths by himself or herself, in the case of an individual, or its directors, Controllers and Senior Executives, in the case of a company or partnership, of their probity, using the language provided in Appendix A.

[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED] [REDACTED]	[REDACTED]
[REDACTED] [REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]



DATED

[REDACTED]

AGREEMENT FOR LEASE

relating to

LAND AT THE FINGER, ST DAVID'S

between

[REDACTED]

and

SATURN SOLAR BERMUDA 1 LTD.

[REDACTED]

* This agreement may be subject to amendment

* This agreement is subject to Public Access To Information (PATI) request and it is a possibility that substantial parts of it could be required to be made available upon public request

CONTENTS

CLAUSE

1.	Interpretation	1
2.	Landlord's Works	8
3.	Satisfaction Date	9
4.	Site Access and Site Access Protocol	9
5.	Planning Application	10
6.	Planning Appeal	10
7.	Notification of planning decisions	11
8.	Right to waive Unacceptable Conditions	11
9.	Third Party Applications	11
10.	Unacceptable Condition Disputes	11
11.	Planning Long Stop Date	12
12.	Termination	14
13.	Agreement for lease	14
14.	Tenant's Works	15
15.	Inspection	17
16.	Contractors	17
17.	Practical Completion and Rectification Period	18
18.	Works Long Stop Date	19
19.	Insurance	19
20.	Damage after Practical Completion	20
21.	Rent	20
22.	Tenant's occupation prior to the grant of the Lease	21
23.	Termination on Tenant's insolvency and material non-compliance by the Tenant	21
24.	Notice to Mortgagee	22
25.	Consequences of termination	27
26.	Timetable for engrossments	23
27.	Completion of grant of the Lease	23
28.	Entire agreement	23
29.	Joint and several liability	23
30.	Notices	24
31.	Disputes	25
32.	Governing law	27
33.	Jurisdiction	27

ANNEX

ANNEX A, AGREED FORM OF LEASE	29
-------------------------------------	----

THIS AGREEMENT is dated 4 June 2018

PARTIES

- (1) [REDACTED] represented by the [REDACTED] (Landlord).
- (2) SATURN SOLAR BERMUDA 1 LTD. a local company incorporated and registered in Bermuda with company number 52946 whose registered office is at Park Place, 55 Par La Ville Road, Hamilton HM11, Bermuda (Tenant).

BACKGROUND

- (A) The Landlord owns the freehold of the property commonly known as "the Finger" near to the Bermuda L.F. Wade International Airport (Property) and has agreed to grant the Tenant a lease of the Property on the terms contained in this agreement.
- (B) The Landlord has agreed to undertake the Landlord's Works (as defined below) to enable the Property to be used as a solar energy production facility and the Tenant has agreed to construct a 6 MW utility scale solar PV facility (Solar PV Facility) on the Property.
- (C) The Tenant has agreed to apply for final planning permission for its proposed works and, subject to obtaining a Satisfactory Planning Permission for those works, to construct the Solar PV Facility before the grant of the lease.

AGREED TERMS

1. INTERPRETATION

The following definitions and rules of interpretation apply in this agreement.

1.1 Definitions:

Access Road: the road from the public highway to the Property passing over part of the Airport.

Airport: The L.F. Wade International Airport, St David's.

[REDACTED] or such other person or body responsible for the maintenance and operation of the Grid.

Bond: a letter of credit (in form and substance and from an issuer acceptable to the Landlord, acting reasonably) for the initial amount of [REDACTED] (to increase every year by reference to increases in the Bermuda Consumer Prices Index) as security for the obligations of the Tenant under this agreement and under the Lease (including, but not limited to, in respect of the reinstatement of the Property at the expiry of the Lease).

EPC Contract: an engineering procurement and construction contract for the Tenant's Works to be entered into between the Tenant and an EPC Contractor in the form approved in writing by the Landlord (such approval not to be unreasonably withheld or delayed).

EPC Contractor: Such suitably experienced and competent engineering procurement and construction contractor as may be appointed by the Tenant to carry out the Tenant's Works and approved by the Landlord (such approval not to be unreasonably withheld or delayed), together with any replacement contractor that may be appointed by the Tenant in accordance with the terms of this agreement and approved by the Landlord (such approval not to be unreasonably withheld or delayed).

Cabling Works: the works required to connect the Development to the Substation.

Connection Agreement: a connection agreement to be entered into between [REDACTED] and the Tenant in respect of (amongst other things) the connection of the Development to the Grid.

Construction Period: the period from but excluding the Satisfaction Date until completion of the Lease.

Contracts: means the EPC Contract and the O&M Contract and **Contract** means either of them as the context dictates or requires.

Contractors: the EPC Contractor and the O&M Contractor, and **Contractor** means or either of them as the context dictates or requires.

Determining Authority: the Development Applications Board or other appropriate determining body or person.

Development: the construction on the Property of the Solar PV Facility in accordance with the Power Purchase Agreement and the Connection Agreement and the subsequent use of the Property as a Solar PV Facility.

Development Specification: the plans, specifications, drawings and other data in respect of the Development to be carried out on the Property and the Cabling Works in each in the form annexed to the Power Purchase Agreement and/or the Connection Agreement including any variations or amendments that may be made in accordance with clause 14.6 and clause 14.7.

Event of Default: any of the events set out in clause 23.1.

Expert: an independent surveyor who shall be a Member or Fellow of the Royal Institute of Chartered Surveyors with ten or more years' post-qualification experience in major infrastructure projects appointed to determine a dispute as an expert in accordance with clause 31.

Finally Determined: where a Third Party Application has been made, the first of the following events to occur:

- (a) permission to bring a Third Party Application (where required) has not been granted and the period within which an application for permission to appeal against such refusal has expired without a further Third Party Application being made;
- (b) all Third Party Applications have been withdrawn; and

- (c) a judgment of the Supreme Court confirming the Planning Permission.

Grid: the interconnected network for the distribution of electricity in Bermuda.

Hazardous Substance: any substance, waste, solid, liquid or gaseous matter the presence of which on the Property requires under the laws of Bermuda the undertaking of remediation works, including but not limited to asbestos, petroleum or petroleum derived substances, or any combination of the above deemed hazardous, hazardous waste, solid waste, toxic or pollutant, a deleterious substance, a contaminant or a source of pollution or contamination under the laws of Bermuda.

Independent Engineer: the independent engineer appointed under the EPC Contract.

Independent Surveyor: the surveyor appointed under clause 10.

Landlord's Attorneys: [REDACTED]

Landlord's Works: limited site preparation works intended to create a clear area on the Property which will include:

- (a) erection of an 8 foot chain-link fence at the northern boundary of the Property;
- (b) removal of the fuel storage tank currently unearthed and lying on the ground in the north-east corner of the Property;
- (c) cutting back and grinding of vegetation bordering the tarmac to the edge of the tarmacked area of the Property;
- (d) removal of vegetation and milled material (old tarmac) from the tarmacked area of the Property.

but which shall exclude the removal of vehicles, buildings or other material on any land adjacent to the Property or any other works of any nature on any land not comprised within the Property and also exclude any ongoing maintenance obligation by the Landlord following practical completion of the Landlord's Works.

Lease: a lease in the agreed form annexed to this agreement subject only to any minor amendments approved by the Landlord (such approval not to be unreasonably withheld or delayed) necessitated by:

- (a) any variations made to the Development Specification under clause 14.6 or clause 14.7; or
- (b) any change in the location of the Access Road

Lease Completion Date: the day that is ten working days after the Practical Completion Date.

Material: all designs, drawings, models, plans, specifications, design details, photographs, brochures, reports, notes of meetings, calculations, schedules, programmes, bills of quantities, budgets and any other materials provided in connection with the Tenant's Works and all updates, amendments, additions and revisions to them and any works, designs, or inventions incorporated or referred to in them for any purpose relating to the Tenant's Works.

Notice of Completion of Making Good: the Independent Engineer's certificate or written statement issued in accordance with the EPC Contract certifying that any defects, shrinkages or faults appearing in the Tenant's Works during the Rectification Period and for which the EPC Contractor was responsible under the EPC Contract have been made good.

O&M Contract: an operation and maintenance contract to be entered into between the Tenant and the O&M Contractor in the form approved in writing by the Landlord (such approval not to be unreasonably withheld or delayed).

O&M Contractor: such suitably experienced operator as may be appointed by the Tenant to operate and maintain the Development and approved by the Landlord (such approval not to be unreasonably withheld or delayed), together with any replacement operator that may be appointed by the Tenant in accordance with the terms of this agreement and approved by the Landlord (such approval not to be unreasonably withheld or delayed).

Operating Licences: all licences, consents, permits or permissions required to operate the Solar PV Facility, including but not limited to under the Electricity Act 2016, the Clean Air Act 1991, the Water Resources Act 1975 or otherwise.

Planning Appeal: an appeal to the Minister responsible for planning by the Tenant against:

- (a) the refusal of the Determining Authority to grant Planning Permission; or
- (b) the non-determination of the Planning Application; or
- (c) any one or more conditions attached to the Planning Permission.

Planning Appeal Decision: the written decision of the Minister responsible for planning on the Planning Appeal.

Planning Application: an application for Planning Permission.

Planning Long Stop Date: date calculated in accordance with clause 11.1 to clause 11.3 (inclusive).

Planning Permission: final planning permission for the Development.

Power Purchase Agreement: the power purchase agreement to be entered into between BEECO and the Tenant in respect of (amongst other things) the purchase of electrical energy produced by the Development.

Practical Completion Date: the date stated in the Practical Completion Statement.

Practical Completion Statement: the Independent Engineer's written statement issued in accordance with the EPC Contract stating that:

- (c) practical completion of the Tenant's Works has occurred according to the terms of the EPC Contract;
- (d) confirming that all site tests and commissioning have been completed satisfactorily;
- (e) that the Development is fully operational;
- (f) confirming that all Operating Licences have been obtained,

and setting out the date on which practical completion occurred.

President: [REDACTED]

Professional Team: the EPC Contractor, the O&M Contractor and any other specialist advisors or sub-consultants that may, with the approval of the Landlord (not to be unreasonably withheld or delayed), be appointed for the time being in connection with the construction, design and/or management of the Development.

Property: the property to be known as "The Finger" adjacent to the Airport as more particularly defined in the Lease.

Rectification Period: the rectification period or defects liability period for the making good of defects, shrinkages or other faults in the Tenant's Works under the EPC Contract.

Rent Commencement Date: the Lease Completion Date.

Requisite Consents: all construction permits and any other consents, licences and authorisations required from any competent authority, statutory undertaker or person for the carrying out of the Tenant's Works.

Review Period: either:

- (a) 21 days following the date of issue of a Planning Permission by the Development Applications Board; or
- (b) 21 days following the notification of a decision of the [REDACTED]

RICS: Royal Institute of Chartered Surveyors.

Satisfaction Date: the latest of the following dates:

- (a) the date the Site Access Protocol is completed;
- (b) the date of practical completion of the Landlord's Works;
- (c) the date on which it is established under this agreement that a Satisfactory Planning Permission has been granted;

- (d) the next Working Day after the expiry of the Review Period (provided that no Third Party Application is commenced by such date); and
- (e) in the event that any Third Party Application is commenced, the next Working Day after the date on which:
 - (i) the Third Party Application is Finally Determined, and
 - (ii) a Satisfactory Planning Permission is finally granted or upheld whether after a reference back to the Determining Authority;so that the Satisfactory Planning Permission is no longer open to challenge in any way by the issue of further Third Party Applications.

Satisfactory Planning Permission: a Planning Permission free from any Unacceptable Condition

Site Access Protocol: a site access protocol with the operator of the Airport regulating the way in which the Tenant, the Professional Team and any other persons involved in the Development will be permitted to pass over the Airport to access the Property, such site access protocol to be approved in writing by the Landlord, such approval not to be unreasonably withheld or delayed.

Substation: the electricity substation at St. David's Road or such other substation as the Landlord may approve.

Tenant's Attorneys: [REDACTED] or any other attorneys whose details have been given by notice from time to time by the Tenant to the Landlord

Tenant's Surveyor: Any surveyor whose details may be given in writing from time to time by the Tenant to the Landlord.

Tenant's Works: the works to construct the Development on the Property and the Cabling Works in each case to be carried out by the Tenant in accordance with the Development Specification.

Third Party: a person other than:

- (a) the Landlord;
- (b) the Tenant; or
- (c) anyone acting on the Landlord's or Tenant's behalf.

Third Party Application: a Third Party's application for judicial review of a decision by Minister of Home Affairs to grant Planning Permission following a Planning Appeal, including an application to the Supreme Court for judicial review and any appeal of any decision of the Supreme Court.

Unacceptable Condition: a condition imposed by the Planning Permission in the Tenant's reasonable opinion:

- (a) will increase materially the cost of carrying out the Development; or
- (b) will reduce materially the profitability of the Development.

Works Long Stop Date [REDACTED]

- 1.2 Clause, Schedule and paragraph headings shall not affect the interpretation of this agreement.
- 1.3 A person includes a natural person, corporate or unincorporated body (whether or not having separate legal personality).
- 1.4 The Schedules and Annexes form part of this agreement and shall have effect as if set out in full in the body of this agreement. Any reference to this agreement includes the Schedules and Annexes.
- 1.5 A reference to a company shall include any company, corporation or other body corporate, wherever and however incorporated or established.
- 1.6 Unless the context otherwise requires, words in the singular shall include the plural and in the plural shall include the singular.
- 1.7 Unless the context otherwise requires, a reference to one gender shall include a reference to the other genders.
- 1.8 A reference to a statute or statutory provision is a reference to it as amended, extended or re-enacted from time to time.
- 1.9 A reference to a statute or statutory provision shall include all subordinate legislation made from time to time under that statute or statutory provision.
- 1.10 A reference to writing or written includes fax but not email.
- 1.11 References to a document in agreed form are to that document in the form agreed by the parties.
- 1.12 A reference to this agreement or to any other agreement or document referred to in this agreement is a reference to this agreement or such other agreement or document as varied or novated (in each case, other than in breach of the provisions of this agreement) from time to time
- 1.13 Unless the context otherwise requires, references to clauses, Schedules and Annexes are to the clauses, Schedules and Annexes of this agreement and references to paragraphs are to paragraphs of the relevant Schedule.

- 1.14 Any words following the terms **including, include, in particular, for example** or any similar expression shall be construed as illustrative and shall not limit the sense of the words, description, definition, phrase or term preceding those terms.
- 1.15 Any obligation on a party not to do something includes an obligation not to allow that thing to be done.
- 1.16 Unless this agreement otherwise expressly provides, a reference to the **Property** or the **Development** or the **Tenant's Works** is to the whole and any part of them.
- 1.17 Any reference to the Landlord's consent or approval being required is to a consent or approval in writing which must be obtained before the relevant act is taken or event occurs.
- 1.18 A reference to a **working day** is to a day other than a Saturday or Sunday on which banks in Bermuda are open for general deposit taking business.

2. LANDLORD'S WORKS

- 2.1 Subject only to completion of the Bond, the Landlord shall commence and carry out the Landlord's Works forthwith following the date of this agreement and shall use all reasonable endeavours to complete the Landlord's Works as soon as reasonably practicable.
- 2.2 The Landlord shall give the Tenant 5 working days' notice of practical completion of the Landlord's Works and shall allow the Tenant and the Tenant's Surveyor to inspect the Landlord's Works and make representations to the Landlord's Surveyor either during the inspection or immediately thereafter and the Landlord's Surveyor shall take proper account of any representations made by the Tenant or the Tenant's Surveyor when considering whether to issue a certificate confirming practical completion of the Landlord's Works.
- 2.3 The Landlord's Surveyor shall issue a certificate confirming the date on which practical completion of the Landlord's Works as soon as reasonably possible after practical completion of the Landlord's Works.
- 2.4 Subject to clause 2.7 and clause 2.8, the Landlord shall indemnify and keep the Tenant indemnified against all reasonable costs and expenses properly incurred by the Tenant to undertake and complete the Development if:
- (a) the Landlord's Works have not been carried out properly or in full; or

- (b) notwithstanding completion of the Landlord's Works, the Tenant incurs additional costs and expenses required to complete the Tenant's Works directly as a result of any Hazardous Substance on the Property; and

the Tenant takes all reasonable steps to mitigate the amount of its additional costs and expenses and provides the Landlord with full details of any extra work or extra costs required to undertake and complete the Tenant's Works directly caused by the presence of any Hazardous Substance on the Property along with supporting evidence certified as true and correct by the Independent Engineer.

2.5 The Tenant shall not be entitled to make any claim against the Landlord under clause 2.4 unless the Tenant gives the Landlord prior notice in writing (by way of an Indemnity Notice) of:

- (a) any failure by the Landlord to carry out the Landlord's Works properly or in full; or
- (b) the presence of any Hazardous Substance on the Property which in the view of the Tenant may require the Tenant to undertake additional works or to incur additional costs to undertake and complete the Landlord's Works.

2.6 The Landlord shall have 14 days from its receipt of an Indemnity Notice to accept or dispute the contents of the Indemnity Notice.

2.7 If the Landlord accepts the contents of the Indemnity Notice, the Landlord shall be given a reasonable opportunity to as soon as reasonably practicable either complete the Landlord's Works as set out in the Indemnity Notice or to undertake remediation works in respect of the Hazardous Substance identified in the Tenant Notice.

2.8 If the Landlord disputes the contents of an Indemnity Notice, the dispute shall be dealt with in accordance with clause 31.

3. SATISFACTION DATE

3.1 Subject to clause 3.2, this agreement comes into force on the date of this agreement.

3.2 Clause 13, clause 14, clause 22, clause 26 and clause 27 are conditional on the Satisfaction Date occurring and shall come into force on the Satisfaction Date

3.3 The Landlord and Tenant may only waive the Satisfaction Date by agreement in writing

4. SITE ACCESS AND SITE ACCESS PROTOCOL

4.1 The Tenant shall use all reasonable endeavours to:

- (a) agree the Site Access Protocol with the operator of the Airport; and

- (b) determine the location of the Access Road,
as soon as reasonably practicable after the date of this agreement.
- 4.2 The Tenant shall keep the Landlord regularly informed as to the progress of the Site Access Protocol and before signing or accepting any Site Access Protocol shall provide the Landlord with a final draft of the proposed Site Access Protocol for the Landlord's approval (such approval not to be unreasonably withheld or delayed).
- 4.3 The Tenant shall notify the Landlord as soon as reasonably possible once the location of the Access Road has been determined finally and shall provide the Landlord for its approval (such approval not to be unreasonably withheld or delayed):
 - (a) a plan or series of plans sufficient for use in the Lease identifying the Property, the location of the Access Road and any other related matters; and
 - (b) details of any amendments it wishes to make to the Lease to accommodate or reflect the location of the Access Road or any other changes required as a result of any change to the Development Specification.
- 5. PLANNING APPLICATION**
- 5.1 Within 2 months after the date of this agreement, the Tenant shall submit the Planning Application to the Determining Authority and shall use all reasonable endeavours to obtain the grant of a Satisfactory Planning Permission as soon as reasonably possible.
- 5.2 If it appears necessary to obtain a Satisfactory Planning Permission, the Tenant may amend the Planning Application or withdraw and submit in substitution a revised application for planning permission. Any such amendment, withdrawal and substitution shall be approved by the Landlord (such approval not to be unreasonably withheld or delayed).
- 5.3 The Tenant shall keep the Landlord regularly informed as to the progress of the Planning Application.
- 6. PLANNING APPEAL**
- 6.1 The Tenant shall pursue a Planning Appeal unless the Tenant obtains a written opinion from a suitably experienced attorney advising that a Planning Appeal would have less than a 50% chance of success.
- 6.2 If the Tenant does lodge a Planning Appeal, then the Tenant shall pursue the Planning Appeal with all due diligence.

7. NOTIFICATION OF PLANNING DECISIONS

- 7.1 The Tenant shall give notice to the Landlord within 5 working days of the receipt of any planning decision resulting from the Planning Application (whether original, amended or resubmitted) or the making of a Planning Appeal.
- 7.2 The Tenant shall promptly inform the Landlord of any decision it may take in relation to the making, amending or resubmission of a Planning Application or the making of a Planning Appeal.
- 7.3 Within five working days of receiving notice of the grant of such Planning Permission, the Tenant shall give notice to the Landlord in writing whether or not a condition imposed on the Planning Permission is an Unacceptable Condition. The Tenant shall give reasons if it considers that a condition or requirement is an Unacceptable Condition.

8. RIGHT TO WAIVE UNACCEPTABLE CONDITIONS

- 8.1 The Tenant may waive its right to treat any condition to a Planning Permission or provision as an Unacceptable Condition by giving written notice to the Landlord on or before any of the following dates:
- (a) the date which is 5 working days after the date on which the Tenant serves a notice under clause 7.3 that the condition is an Unacceptable Condition; and
 - (b) that date which is 5 working days after the date on which it receives the Independent Surveyor's written decision pursuant to clause 10.5(b) that a condition to the Planning Permission is an Unacceptable Condition.

9. THIRD PARTY APPLICATIONS

If a Third Party Application is made, the Tenant shall:

- (a) keep the Landlord regularly informed of the progress of any Third Party Application; and
- (b) within five working days after receiving it, give the Landlord a copy of any judgment issued by the court in relation to the Third Party Application proceedings.

10. UNACCEPTABLE CONDITION DISPUTES

- 10.1 In the event of any dispute arising between the Landlord and the Tenant about whether or not a condition to the Planning Permission is an Unacceptable Condition, the Landlord and the Tenant shall use all reasonable endeavours to seek to settle the dispute as quickly

as possible. If the dispute has not been settled within a period of 10 working days of the dispute arising then it shall be referred to an Independent Surveyor to determine.

10.2 An Independent Surveyor shall be appointed by agreement between the Landlord and the Tenant or, if the Landlord and Tenant are unable to agree an appointment, either of them may request the appointment to be made by the President.

10.3 An Independent Surveyor must be a Fellow of the RICS, with at least ten years' post qualification experience including experience in major infrastructure developments.

10.4 If an Independent Surveyor appointed dies or becomes unwilling or incapable of acting, or does not deliver the decision within the time required by this clause, then:

(a) either the Landlord or the Tenant may apply to the President to discharge the appointed Independent Surveyor and to appoint a replacement Independent Surveyor; and

(b) this clause shall apply in relation to the replacement Independent Surveyor as if it was the first appointed Independent Surveyor.

10.5 The Independent Surveyor shall act as an expert and shall be required to:

(a) decide whether or not a condition to the Planning Permission is an Unacceptable Condition; and

(b) prepare a written note of the decision and give a copy of the decision to both the Landlord and the Tenant within 15 working days of the date of the Independent Surveyor's appointment.

10.6 The Landlord and the Tenant shall each be entitled to make submissions to the Independent Surveyor and shall provide (or procure that others provide) the Independent Surveyor with the assistance and documents that the Independent Surveyor reasonably requires to reach a decision.

10.7 The Independent Surveyor's written decision shall be final and binding in the absence of manifest error or fraud.

10.8 The costs of the Independent Surveyor shall be borne equally by the Landlord and the Tenant or in such different proportion as the Independent Surveyor shall direct.

11. PLANNING LONG STOP DATE

11.1 Subject to clause 11.3, the Planning Long Stop Date is 4 June 2019 unless on that date:

(a) a Planning Application has been submitted to the Determining Authority but has not been determined;

- (b) a Planning Appeal has been lodged but has not been determined;
- (c) a Planning Permission has been granted but it is not yet established under this agreement whether or not the Planning Permission is a Satisfactory Planning Permission,
- (d) a Satisfactory Planning Permission has been granted but the Review Period has not expired; or
- (e) a Satisfactory Planning Permission has been granted but a Third Party Application has been made which has not been Finally Determined;

in which case the Planning Long Stop Date shall be extended as set out in clause 11.2.

11.2 If any of the circumstances set out in clause 11.1(a) to clause 11.1(e) (inclusive) apply, the Planning Long Stop Date shall be extended to:

- (a) (where clause 11.1(a) applies) the date which is 10 working days after the latest of the following dates:
 - (i) the date on which the Planning Application is refused by the Determining Authority;
 - (ii) if a Planning Permission is granted pursuant to the Planning Application, the date on which it is established under this agreement that the Planning Permission is not a Satisfactory Planning Permission;
 - (iii) if it is established under this agreement that the Planning Permission granted pursuant to the Planning Application is a Satisfactory Planning Permission, the date on which the Review Period expires; and
 - (iv) if it is established under this agreement that the Planning Permission granted pursuant to the Planning Application is a Satisfactory Planning Permission and a Third Party Application is made within the Review Period, the date on which the Third Party Application is Finally Determined;
- (b) (where clause 11.1(b) applies) the date which is 10 working days after the latest of the following dates:
 - (i) the date on which the Planning Appeal is dismissed;
 - (ii) if a Planning Permission is granted pursuant to the Planning Appeal, the date on which it is established under this agreement that the Planning Permission is not a Satisfactory Planning Permission;
 - (iii) if it is established under this agreement that the Planning Permission granted pursuant to the Planning Appeal is a Satisfactory Planning Permission, the date on which the Review Period in respect of the Planning Appeal Decision expires; and

- (v) if it is established under this agreement that the Planning Permission granted pursuant to the Planning Appeal is a Satisfactory Planning Permission and a Third Party Application is made within the Review Period, the date on which the Third Party Application is Finally Determined;
- (c) (where clause 11.1(c) applies) the date which is 10 working days after the latest of the following dates:
 - (i) the date on which it is established under this agreement that the Planning Permission is not a Satisfactory Planning Permission;
 - (ii) if it is established under this agreement that the Planning Permission is a Satisfactory Planning Permission, the date on which the Review Period expires;
 - (iii) if it is established under this agreement that the Planning Permission is a Satisfactory Planning Permission and a Third Party Application is made within the Review Period, the date on which the Third Party Application is Finally Determined.
- (d) (where clause 11.1(d) or clause 11.1(e) applies) the date which is 10 working days after the latest of the following dates:
 - (i) the date on which the Review Period expires;
 - (ii) if a Third Party Application is made within the Review Period, the date on which the Third Party Application is Finally Determined.

11.3 Notwithstanding the provisions of clause 11.1 and clause 11.2, the Planning Long Stop Date shall in no circumstances be later than 4 December 2019.

12. TERMINATION

If the Satisfaction Date has not occurred by the Planning Long Stop Date either the Landlord or the Tenant may at any time after the Planning Long Stop Date (but only before the Satisfaction Date) give written notice to the other to determine this agreement.

13. AGREEMENT FOR LEASE

13.1 In consideration of the Tenant's obligations under this agreement, the Landlord shall grant to the Tenant and the Tenant shall accept from the Landlord the Lease on the terms set out in this agreement.

13.2 The Tenant cannot require the Landlord to grant the Lease to any person other than the Tenant (here meaning SATURN SOLAR BERMUDA 1 LTD., incorporated and registered in Bermuda with company number 52946, only).

- 13.3 The Tenant cannot assign, sublet, charge, or otherwise share or part with the benefit of this agreement whether in relation to the whole or any part of the Property other than as permitted by clause 13.4.
- 13.4 The Tenant may with the prior written consent of the Landlord (not to be unreasonably withheld or delayed) charge the benefit of this agreement to a bank or other person providing the Tenant with funding (a Mortgagee) to assist the Tenant to finance the undertaking and completion of the Tenant's Works.
14. TENANT'S WORKS
- 14.1 The Tenant shall forthwith after the Satisfaction Date at the Tenant's expense apply for and use all reasonable endeavours to obtain the Requisite Consents in respect of the Tenant's Works.
- 14.2 The Tenant shall use reasonable endeavours to:
- (a) commence the Tenant's Works as soon as reasonably practical after the Satisfaction Date; and
 - (b) complete the Tenant's Works within nine months after the Satisfaction Date.
- 14.3 The Tenant shall not start the Tenant's Works until the Tenant has:
- (a) obtained all Requisite Consents required for the Tenant's Works;
 - (b) produced all Requisite Consents required for the Tenant's Works to the Landlord and obtained the Landlord's confirmation that they are satisfactory to the Landlord such confirmation not to be unreasonably withheld or delayed,
 - (c) given the Landlord four copies of the plans and specifications for the Tenant's Works;
 - (d) informed the Landlord and the insurers of the Property of the date on which it intends to start carrying out the Tenant's Works, and
 - (e) obtained written confirmation that each member of the Professional Team and all other persons involved in or who may have access to the Property to undertake the Development will comply with the Site Access Protocol.
- 14.4 The Tenant shall use all reasonable endeavours to procure that the Tenant's Works are carried out:
- (a) in accordance with the Site Access Protocol;
 - (b) with due diligence and in a good and workmanlike manner;
 - (c) using only good quality materials and well-maintained plant and equipment;

- (d) in accordance with this agreement, the Satisfactory Planning Permission, the Development Specification and the Requisite Consents in respect of the Tenant's Works;
- (e) in accordance with all statutory or other legal requirements and the recommendations or requirements of the local authority or statutory undertakings;
- (f) in compliance with all relevant Bermudian standards, codes of practices and good building practice;
- (g) by selecting and using materials so as to avoid known hazards to the health and safety of any person and to ensure the long term integrity of the Property; and
- (h) so as to cause as little disturbance and inconvenience as possible to the Landlord, to the operation of the Airport and the owners and occupiers of any neighbouring land and not infringe any of their rights nor the rights of any other person in relation to the Property.

14.5 The Tenant shall:

- (a) allow the Landlord and its surveyors access to the Property to inspect the progress and quality of the Tenant's Works (both while the Tenant's Works are being carried out and afterwards) at reasonable times and on reasonable prior notice;
- (b) give the Landlord the information it reasonably requests to establish that the Tenant's Works are being and have been carried out in accordance with this agreement;
- (c) give notice to the Landlord as soon as the Tenant's Works have been completed;
- (d) co-ordinate or procure co-ordination of the Professional Team;
- (e) keep the Landlord's Surveyor regularly informed as to progress of the Tenant's Works;
- (f) promptly inform the Landlord's Surveyor of any material problems or delays in the performance of the EPC Contract together with the Tenant's recommendations for overcoming and/or mitigating them; and
- (g) give at least five working days' notice to the Landlord's Surveyor of all meetings to be held in connection with the progress of the Tenant's Works and permit the Landlord's Surveyor to attend and to make representations.

14.6 The Tenant shall not, (subject to clause 14.7), vary, alter, add to or remove anything from the Development Specification without the Landlord's consent (such consent not to be unreasonably withheld or delayed).

- 14.7 The Tenant may make minor variations to the Development Specification without the Landlord's consent provided that:
- (a) the variations are insubstantial and immaterial;
 - (b) the variations are in accordance with the Satisfactory Planning Permission, the Requisite Consents in respect of the Tenant's Works and any statutory requirements;
 - (c) any substitute materials used are of an equal or better quality and suitability to those originally specified;
 - (d) the variations do not delay the completion of the Tenant's Works; and
 - (e) the Tenant informs the Landlord of the variations within a reasonable time; or
 - (f) the variations are required by any competent authority or statutory undertaking as a condition of the grant or continuance of the Satisfactory Planning Permission or any of the Requisite Consents in respect of the Tenant's Works

15. INSPECTION

- 15.1 The Landlord and the Landlord's Surveyor may enter the Property, at any time after the commencement of the Tenant's Works, upon reasonable notice to the EPC Contractor, to inspect progress of the Tenant's Works and the materials used. In entering the Property, the Landlord and Landlord's Surveyor shall not obstruct progress of the Tenant's Works and shall:
- (a) not give any instructions or make any representations directly to the EPC Contractor or Professional Team; and
 - (b) comply with the Tenant and EPC Contractor's health and safety and site rules.
- 15.2 The Tenant shall procure that any instructions or representations made to the Tenant by the Landlord or the Landlord's Surveyor that comply with the terms of this agreement are promptly dealt with to the Landlord's reasonable satisfaction.

16. CONTRACTORS

- 16.1 The Tenant confirms it shall take, all reasonable steps to be reasonably satisfied that each Contractor is suitable and competent having regard to its responsibilities in relation to the Development and under its Contract.
- 16.2 The Tenant shall as soon as reasonably practicable provide a final draft of each Contract to the Landlord for its approval (such approval not to be unreasonably withheld or delayed) and forthwith following the grant of the Landlord's approval enter into each Contract with the relevant Contractor and supply a certified copy of each Contract to the Landlord.

- 16.3 The Tenant shall use all reasonable endeavours to procure that each Contractor performs and observes the terms of its Contract. The Tenant agrees not to vary, waive or release any of the terms of the any Contract without the Landlord's consent (such consent not to be unreasonably withheld or delayed).
- 16.4 The Tenant shall not do or omit to do anything that would entitle a Contractor to regard its Contract as terminated by breach. The Tenant shall immediately inform the Landlord if the Tenant believes a Contractor may be intending to rescind its Contract.
- 16.5 The Tenant shall not terminate the employment of a Contractor or treat a Contract as repudiated without first informing the Landlord of its intention to do so and discussing with the Landlord the appointment of a suitable substitute contractor approved by the Landlord (such approval not to be unreasonably withheld or delayed).

17. PRACTICAL COMPLETION AND RECTIFICATION PERIOD

- 17.1 The Tenant shall use reasonable endeavours to procure that the Independent Engineer
- (a) gives at least 5 working days' notice to the Landlord of the Independent Engineer's intention to inspect the Tenant's Works for the purpose of issuing the Practical Completion Statement and allows the Landlord and the Landlord's Surveyor to attend the inspection and make representations to the Tenant either during the inspection or in writing immediately thereafter; and
 - (b) without fettering the discretion of the Independent Engineer in carrying out duties under the EPC Contract, takes proper account of any representations that are made in accordance with clause 17.1(a) when considering whether to issue the Practical Completion Statement in accordance with the terms of the EPC Contract.
- 17.2 The Tenant shall use reasonable endeavours to procure that the Independent Engineer gives a copy of the Practical Completion Statement to the Landlord as soon as practicable after its issue together with a copy of any accompanying snagging list.
- 17.3 The issue of the Practical Completion Statement shall be conclusive evidence binding on the parties that the Tenant's Works have been completed in accordance with the terms of this agreement, subject to the Tenant's obligations during the Rectification Period.
- 17.4 Without prejudice to the generality of clause 16.3, the Tenant shall use all reasonable endeavours to enforce the EPC Contractor's obligations under the EPC Contract to remedy any defects, shrinkages or faults appearing in the Tenant's Works during the Rectification Period.

- 17.5 During the Rectification Period, the Landlord or the Landlord's Surveyor may make written representations to the Tenant identifying defects, shrinkages or faults in the Tenant's Works which the EPC Contractor is obliged to remedy in accordance with the EPC Contract. Without fettering the discretion of the Independent Engineer in carrying out duties under the EPC Contract, the Tenant shall use reasonable endeavours to ensure that the Independent Engineer takes proper account of any such representations.
- 17.6 The Tenant shall use reasonable endeavours to procure that the Independent Engineer:
- (a) gives at least 5 working days' notice to the Landlord of the Independent Engineer's intention to inspect the Tenant's Works for the purpose of issuing the Notice of Completion of Making Good and allows the Landlord and the Landlord's Surveyor to attend the inspection and make representations to the Tenant either during the inspection or in writing immediately thereafter; and
 - (b) without fettering the discretion of the Independent Engineer in carrying out duties under the EPC Contract, takes proper account of any representations that are made in accordance with clause 17.6(a) when considering whether to issue the Notice of Completion of Making Good in accordance with the terms of the EPC Contract.
- 17.7 The Tenant shall use reasonable endeavours to procure that the Independent Engineer gives a copy of the Notice of Completion of Making Good to the Landlord as soon as practicable after its issue.

18. WORKS LONG STOP DATE

If the Practical Completion Date has not occurred by 4.00 pm on the Works Long Stop Date, either the Landlord or the Tenant may, at any time after the Works Long Stop Date (but before the Practical Completion Date), give written notice to the other that, unless the Practical Completion Date occurs within 20 working days of the receipt of that notice (time being of the essence), it may determine this agreement. If the Practical Completion Date does not occur within 20 working days of receipt of that notice then it may, by further written notice determine this agreement with immediate effect.

19. INSURANCE

- 19.1 From the Satisfaction Date until the Practical Completion Date, the Tenant shall insure or shall procure that the EPC Contractor insures, the Tenant's Works, the Property and all plant and unfixed materials and goods delivered to or placed on or adjacent to the Property and intended for incorporation in the Tenant's Works against all perils resulting in loss or damage thereto on customary contractors' all risks terms:

- (a) in the joint names of the Tenant and the EPC Contractor; and

- (b) for not less than their full reinstatement value (taking into account the progress of the Tenant's Works) together with all site clearance and professional fees incurred in connection with such reinstatement.

19.2 In the event of any loss or damage occurring before the Practical Completion Date to the Tenant's Works, the Property, plant, materials or goods so insured, the Tenant shall procure that their reinstatement or replacement is carried out diligently and with all reasonable speed. The Tenant shall apply the proceeds of the insurance towards such reinstatement or replacement and shall make good any deficiency out of the Tenant's own funds.

19.3 The Tenant shall maintain, or procure that the EPC Contractor maintains, insurance in respect of injury to or death of any person or loss or damage to any real or personal property and in respect of any interruption in the operation of the Airport for an indemnity for an amount acceptable to the Landlord (acting reasonably) for any one occurrence or series of occurrences arising out of the same event. Such insurance shall be maintained from the Satisfaction Date until the end of the Rectification Period.

19.4 The Tenant shall require the EPC Contractor and each member of the Professional Team as a condition of its appointment or contract, to maintain adequate professional indemnity insurance cover with a reputable insurer.

19.5 The Landlord and the Tenant mutually agree not knowingly to do or permit anything to be done that may render any insurance policy void or voidable.

20. DAMAGE AFTER PRACTICAL COMPLETION

20.1 The Landlord shall not be entitled to refuse to complete or to delay completion of the grant of the Lease due to any event occurring after the Practical Completion Date that results in:

- (a) any damage to the Development or any part of it;
- (b) any damage to the means of access to the Property; or
- (c) any deterioration in the Property's condition.

20.2 The provisions in the Lease relating to insurance of the Property shall apply from the Satisfaction Date to the date of grant of the Lease.

21. RENT

21.1 The rent per annum shall be [REDACTED] per year.

22. TENANT'S OCCUPATION PRIOR TO THE GRANT OF THE LEASE

22.1 During the Construction Period the Tenant is entitled to occupy the Property for the purpose of carrying out the Tenant's Works.

22.2 This agreement does not operate as a demise of the Property and during the Construction Period:

- (a) any occupation of the Property by the Tenant is by way of licence only;
- (b) the Tenant does not have, and is not entitled to, any estate, right or interest in the Property;
- (c) the Tenant shall not operate any trade or business from the Property nor use the Property for the purpose authorised by the Lease;
- (d) the parties shall observe and perform their respective obligations imposed by the covenants and conditions in the Lease (to the extent that they are not inconsistent with the other provisions of this agreement) as if the Lease had been completed on the Practical Completion Date;
- (e) the Landlord shall have the same rights and remedies in respect of any breach of the obligations imposed on the Tenant by the covenants and conditions in the Lease as if the Lease had been completed on the Practical Completion Date, and
- (f) the Tenant and all other persons involved in the Development shall observe the Site Access Protocol.

23. TERMINATION ON TENANT'S INSOLVENCY AND MATERIAL NON-COMPLIANCE BY THE TENANT

23.1 An Event of Default is any of the following:

- (a) the taking of any step in connection with any voluntary arrangement or any other compromise or arrangement for the benefit of any creditors of the Tenant;
- (b) the appointment of a receiver or manager or an administrative receiver in relation to any property or income of the Tenant;
- (c) the commencement of a voluntary winding-up in respect of the Tenant, except a winding up for the purpose of amalgamation or reconstruction of a solvent company in respect of which a statutory declaration of solvency has been filed with the Registrar of Companies;
- (d) the making of a petition for a winding-up order or a winding-up order in respect of the Tenant;
- (e) the striking-off of the Tenant from the Register of Companies or the making of an application for the Tenant to be struck-off; and

if: the Tenant otherwise ceasing to exist.

23.2 If an Event of Default occurs, the Landlord may, at any time prior to grant of the Lease, determine this agreement by giving written notice to the Tenant.

23.3 If at any time there is any material non-compliance by the Tenant with any of its obligations under this agreement and such default is either:

- (a) not capable of being remedied; or
- (b) is capable of remedy but the Tenant has not remedied the default within 20 working days (or such longer period as may be reasonable in the circumstances) after service on the Tenant by the Landlord of a notice specifying the default;

the Landlord may, at any time prior to grant of the Lease, determine this agreement by giving written notice to the Tenant

24. NOTICE TO MORTGAGEE

24.1 Before taking any steps to determine this agreement under clause 23.2 or clause 23.3, the Landlord shall:

- (a) give notice of its intention to terminate this agreement to any Mortgagee of this agreement of whom the Landlord has received notice; and
- (b) If the Mortgagee confirms in writing to the Landlord within 7 days of the notice that it wishes to remedy the breach, allow the Mortgagee 28 days (or such longer period as may be reasonable in view of the nature of the breach) to remedy the breach.

25. CONSEQUENCES OF TERMINATION

if the Landlord gives notice to determine this agreement under clause 12, clause 18, clause 23.2 or clause 23.3 or the Tenant gives notice to determine this agreement under clause 12 or clause 18:

- (a) subject to clause 25(b) this agreement shall be terminated with immediate effect from the date of the notice to determine and none of the parties shall have any further rights or obligations under this agreement save for:
 - (i) the rights of any party in respect of any earlier breach of this agreement; and
 - (ii) the obligations in the clauses referred to in clause 25(b);
- (b) clause 24 shall continue in force notwithstanding the termination of this agreement under clause 25(a);
- (c) the Tenant shall immediately:

- (i) vacate the Property;
 - (ii) remove all of the Tenant's chattels and equipment from the Property;
 - (iii) (to the extent required by the Landlord) remove the Tenant's Works or any other fixtures constructed by or for the Tenant; and
 - (iv) make good all damage caused by the Tenant as a result of such removal;
- (d) the Landlord shall be entitled to make demand under the Bond.

26. TIMETABLE FOR ENGROSSMENTS

The Landlord's Attorneys shall send the engrossed counterpart Lease to the Tenant's Attorneys within ten working days after the Practical Completion Date.

27. COMPLETION OF GRANT OF THE LEASE

Completion of the grant of the Lease shall take place on the Lease Completion Date.

28. ENTIRE AGREEMENT

28.1 This agreement and the documents annexed to it constitute the whole agreement between the parties and supersede all previous discussions, correspondence, negotiations, arrangements, understandings and agreements between them relating to their subject matter.

28.2 The Tenant acknowledges that no representation or warranty is given or is to be implied by:

- (a) the Landlord entering into this agreement; or
- (b) any step taken by or on behalf of the Landlord in connection with this agreement,

as to the suitability of the Property for the Tenant's Works.

28.3 Nothing in this clause shall limit or exclude any liability for fraud.

29. JOINT AND SEVERAL LIABILITY

Where the Tenant comprises more than one person, those persons shall be jointly and severally liable for the obligations and liabilities of the Tenant arising under this agreement. The Landlord may take action against, or release or compromise the liability of, or grant time or other indulgence to, any one of those persons without affecting the liability of any other of them.

30. NOTICES

30.1 Any notice given under this agreement must be in writing and signed by or on behalf of the party giving it.

30.2 Any notice or document to be given or delivered under this agreement must be:

- (a) delivered by hand; or
- (b) sent by pre-paid post or other delivery service; or
- (c) sent by fax.

30.3 Any notice or document to be given or delivered under this agreement must be sent to the relevant party as follows:

(a) to the Landlord at:

[REDACTED]

[REDACTED]

(b) to the Tenant at:

[REDACTED]

[REDACTED]

[REDACTED]

with a copy to the Tenant's Attorneys, c [REDACTED]

or as otherwise specified by the relevant party by notice in writing to each other party.

30.4 Any change of the details in clause 30.3 specified in accordance with that clause shall take effect for the party notified of the change at 9.00 am on the later of:

- (a) the date, if any, specified in the notice as the effective date for the change; or
- (b) the date five working days after deemed receipt of the notice.

30.5 Giving or delivering a notice or a document to a party's attorneys has the same effect as giving or delivering it to that party.

30.6 Any notice or document given or delivered in accordance with clause 30.1, clause 30.2 and clause 30.3 will be deemed to have been received:

- (a) if delivered by hand, on signature of a delivery receipt or at the time the notice or document is left at the address provided that if delivery occurs before 9.00

am on a working day, the notice will be deemed to have been received at 9.00 am on that day, and if delivery occurs after 5.00 pm on a working day, or on a day which is not a working day, the notice will be deemed to have been received at 9.00 am on the next working day; or

(b) if sent by pre-paid post or other delivery service, at 9.00 am on the fifth working day after posting; or

(c) if sent by fax, at the time of transmission provided that if transmission occurs before 9.00 am on a working day, the notice or document will be deemed to have been received at 9.00 am on that day, and if transmission occurs after 5.00 pm on a working day, or on a day which is not a working day, the notice will be deemed to have been received at 9.00 am on the next working day.

30.7 In proving delivery of a notice or document, it will be sufficient to prove that:

(a) a delivery receipt was signed or that the notice or document was left at the address;

(b) the envelope containing the notice or document was properly addressed and posted by pre-paid post or other delivery service; or

(c) [REDACTED]

30.8 A notice or [REDACTED] shall not be validly given or delivered if sent by email.

30.9 This clause does not apply to the service of any proceedings or other documents in any legal action or, where applicable, any arbitration or other method of dispute resolution.

31. DISPUTES

31.1 If a dispute arises out of or in connection with clause 2, either the Landlord or the Tenant may serve notice on the other requesting that the dispute is determined by an Expert.

31.2 The Landlord and the [REDACTED] of an Expert and shall agree with the Expert the terms of the Expert's appointment.

31.3 If the Landlord and the [REDACTED] or the terms of the Expert's appointment within five working days of either party serving details of a suggested expert on the other, either party shall be entitled to request the President to appoint the Expert and to agree with the Expert the terms of the appointment.

31.4 The Expert must prepare a written decision and give notice (including a copy) of the decision to the [REDACTED] within a maximum of three months of the matter being referred to the Expert.

- 31.5 If the Expert dies or becomes unwilling or incapable of acting, or does not deliver the decision within the time required by this clause then:
- (a) [REDACTED] to discharge the Expert and to appoint a replacement Expert with the required expertise; and
 - (b) this clause shall apply to the new Expert as if they were the first Expert appointed.
- 31.6 The Landlord and the Tenant [REDACTED] entitled to make submissions to the Expert including oral submissions and will provide (or procure that others provide) the Expert with such assistance and documents as the Expert reasonably requires for the purpose of reaching a decision.
- 31.7 To the extent not provided for by this clause, the Expert may use reasonable discretion to determine such other procedures to assist with the conduct of the determination as the Expert considers just or appropriate, including (to the extent the Expert considers necessary) instructing professional advisers to assist the Expert in reaching a determination.
- 31.8 The [REDACTED] shall with reasonable promptness supply each other with all information and give each other access to all documentation and personnel and/or things as they may each reasonably require to make a submission under this clause 31.
- 31.9 Any person appointed as an Expert shall determine the dispute and shall act as an expert and not as an arbitrator. The Expert's written decision on the matters referred to the Expert shall be final and binding on the parties in the absence of manifest error or fraud.
- 31.10 The Expert may direct that any legal costs and expenses incurred by a party in respect of the determination shall be paid by another party to the determination on the general principle that costs should follow the event, but that, in the circumstances, this is not appropriate in relation to the whole or part of such costs. The Expert's fees and any costs properly incurred by him in arriving at his determination (including any fees and costs of any advisers appointed by the Expert) shall be borne by the parties equally or in such other proportions as the Expert shall direct.
- 31.11 The Landlord and the [REDACTED] to give effect to the provisions of this clause and otherwise do nothing to hinder or prevent the Expert from reaching a determination.

32. GOVERNING LAW

This agreement and any [REDACTED] with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of Bermuda.

33. JURISDICTION

Each party irrevocably agrees that the [REDACTED] shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this agreement or its subject matter or formation (including non-contractual disputes or claims).

This agreement has been entered into on the date stated at the beginning of it.

Signed by [REDACTED]

[REDACTED] for and on behalf of [REDACTED]

[REDACTED] in the

presence of

[REDACTED]

Witness

Signed by

for and on behalf of SATURN SOLAR

BERMUDA 1 LTD. in the presence of

[REDACTED]

Witness

[REDACTED]

Minister of Public Works

[REDACTED]

Annex A. Agreed form of Lease

DATED

.....

LEASE

between

[REDACTED]

and

SATURN SOLAR BERMUDA 1 LTD.

[REDACTED]

CONTENTS

CLAUSE

1.	Interpretation	1
2.	Grant	6
3.	The Rights.....	6
4.	The Reservations.....	8
5.	Tenant covenants.....	9
6.	Landlord covenants.....	10
7.	Re-entry	10
8.	Destruction of Property	10
9.	Set-off	11
10.	Disputes	11
11.	Landlord's consent.....	13
12.	Bond.....	13
13.	Joint and several liability.....	13
14.	Entire agreement.....	13
15.	Notices.....	14
16.	Bermuda Government as Landlord.....	14
17.	Governing law.....	15
18.	Jurisdiction.....	15

SCHEDULE

SCHEDULE 1	THE PROPERTY.....	16
SCHEDULE 2	TENANT COVENANTS	17
1.	Rent.....	17
2.	Insurance.....	17
3.	Rebuild following damage or destruction.....	18
4.	Interest on late payment	18
5.	Utilities.....	19
6.	Costs.....	19
7.	Alterations.....	19
8.	Assignment and underletting.....	19
9.	Maintenance and Repair.....	20
10.	Landscaping.....	21
11.	Refuse	21
12.	Sewers and drains.....	21
13.	Compliance with laws and notices.....	21
14.	Encroachments, obstructions and acquisition of rights.....	23
15.	Notify defects.....	23
16.	Third Party Rights.....	23
17.	Remedy breaches.....	23

18.	Indemnity	24
19.	Returning the Property to the Landlord	24
20.	Regulations	25
21.	Use	26
SCHEDULE 3 LANDLORD COVENANTS		27
Quiet enjoyment		27
SCHEDULE 4 EQUIPMENT		28
SCHEDULE 5 MAINTENANCE SCHEDULE		29
SCHEDULE 6 SITE ACCESS PROTOCOL		30

THIS LEASE is dated [DATE]

PARTIES

- (1) [REDACTED] herein represented by the [REDACTED]
- (2) SATURN SOLAR BERMUDA 1 LTD. a local company incorporated and registered in Bermuda with company number 52946 whose registered office is at Park Place, 55 Par La Ville Road, Hamilton HM11, Bermuda (Tenant).

AGREED TERMS

1. INTERPRETATION

The following definitions and rules of interpretation apply in this lease.

1.1 Definitions:

Act of Insolvency:

- (a) the taking of any step in connection with any voluntary arrangement or any other compromise or arrangement for the benefit of any creditors of the Tenant;
- (b) the [REDACTED] in relation to any property or income of the Tenant;
- (c) the commencement of a voluntary winding-up in respect of the Tenant, except a winding-up for the purpose of amalgamation or reconstruction of a solvent company in respect of which a statutory declaration of solvency has been filed with the Registrar of Companies;
- (d) [REDACTED] for a winding-up order or a winding-up order in respect of the Tenant,
- (e) the striking-off of the Tenant from the Register of Companies or the making of an application for the Tenant to be struck-off; or
- (f) the Tenant otherwise ceasing to exist.

Agreement for Lease: the agreement for lease dated [REDACTED] and made between the Landlord and the Tenant.

Airport: the L.F. Wade International Airport, St David's, Bermuda.

Base Rate: the Bermuda dollar base rate from time to time of [REDACTED]

[REDACTED] or such other person or body responsible for the maintenance and operation of the Grid.

Sublease: a sub-lease to [REDACTED] in form and substance acceptable to the Landlord in connection with the construction and use of part of the Property as an electricity sub-station.

Bond: a letter of credit (in form and substance and from an issuer acceptable to the Landlord, acting reasonably) for the initial amount of [REDACTED] to increase every year by reference to increases in the [REDACTED] as security for the obligations of the Tenant under this lease (including, but not limited to, in respect of the reinstatement of the Property at the expiry of the lease).

Connection Agreement: a connection agreement to be entered into between [REDACTED] and the Tenant in respect of (amongst other things) the connection of the Development (as defined in the Agreement for Lease) to the Grid.

Contractual Term: a term of [REDACTED] beginning on, and including the date of this lease and ending on, and including [DATE].

Decommissioning Specification: the plans, specifications, drawings and other data in respect of the works of removal and reinstatement to be carried out by the Tenant in accordance with [REDACTED] in the form agreed in accordance with paragraph 20.2 of Schedule 2 or determined in accordance with clause 10.

Decommissioning Start Date: the date which is [REDACTED] before the end of the term.

Default Interest Rate: [REDACTED] above the Base Rate or, if that base rate is no longer used or published, a comparable commercial rate reasonably determined by the Landlord.

Development: the construction on the [REDACTED] in accordance with the Power Purchase Agreement and the Connection Agreement and the subsequent use of the Property as a Solar PV Facility.

[REDACTED] the drawing attached to this lease and marked "Drawing No. 5510/Q46/504b".

Easement Strip: the [NUMBER] metre wide strip of land within the Landlord's Neighbouring Property shown coloured yellow on Drawing No. [REDACTED] (or such other route within the Landlord's Neighbouring Property as may be approved by the Landlord in accordance with [REDACTED])

Electricity Cables: the underground and overhead cables, wires and lines used, designed or adapted for use in carrying electricity or telecommunications for any purpose relating to the Permitted Use (including, without limitation, all associated apparatus, lines, poles and stays, pylons, insulators and associated guards and wires and all other plant and equipment making up or supporting cables or lines, supports, all control cables, and all connections, cable markers, cable terminals, ducts, drains, inspection hatches, jointing bays and other supporting infrastructure) to be laid in the Easement Strip.

Equipment: the equipment listed in Schedule 4 together with any additional or replacement equipment permitted in accordance with this lease which the Tenant installs from time to time on the Property or the Landlord's Neighbouring Property.

Existing Roads: the existing roads (including gates, fences, kerbs, visibility splays, bridges, culverts, turning circles and passing places) within the Landlord's Neighbouring Property as shown coloured yellow on [REDACTED]

Expert: an independent surveyor who shall be a Member or Fellow of the Royal Institute of Chartered Surveyors with ten or more years' post-qualification experience in major infrastructure projects appointed to determine a dispute as an expert in accordance with clause 10.

Funder: a reputable and substantial bank or other financial institution which has provided finance to the Tenant to assist it to construct and/or operate the [REDACTED]

Grid: the interconnected network for the distribution of electricity in Bermuda.

Insured Risks: fire, explosion, lightning, earthquake, storm, flood, bursting and overflowing of water tanks, apparatus or pipes, escape of water or oil, damage to underground water, oil or gas pipes or electricity wires or cables, impact by aircraft and articles dropped from them, impact by vehicles, riot, civil commotion, malicious damage and any other risks which the Tenant reasonably decides to insure against from time to time.

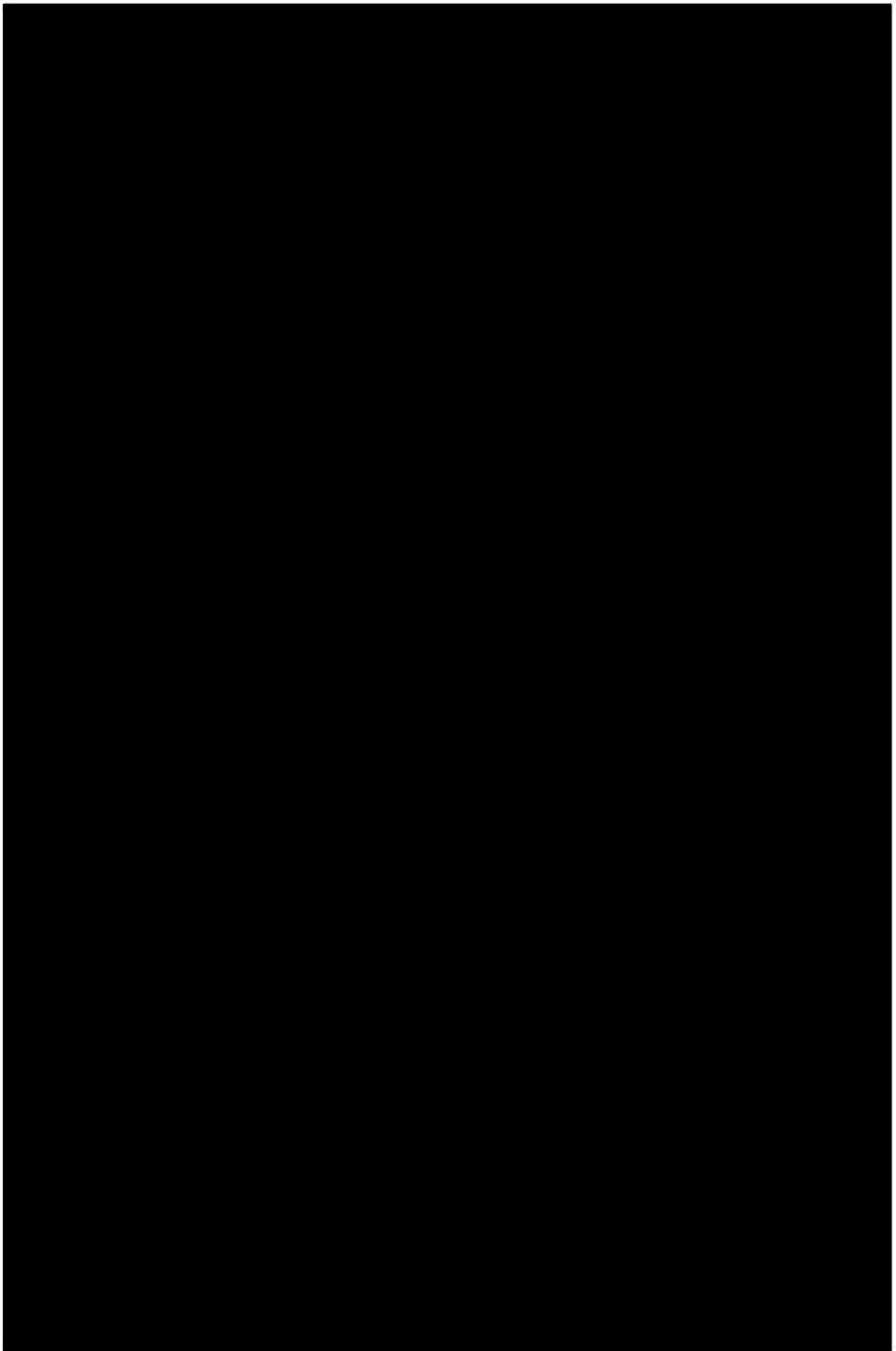
Landlord's Neighbouring Property: each and every part of the adjoining and neighbouring property in which the Landlord has an interest or over which the Landlord has the power to grant any of the Rights, as shown for identifications purposes only hatched green on [REDACTED]

Maintenance Schedule: the maintenance schedule set out in Schedule 5 setting out details of periodic maintenance to the Equipment to be carried out by the Tenant during the Term as it may be amended from time to time with the prior consent of the Landlord, such consent not to be unreasonably withheld or delayed.

Necessary Consents: all permit, consents, licences and authorisations required from any competent authority, statutory undertaker or person for the use of the Property for the Permitted Use.

New Roads: the permanent (including gates, fences, kerbs, visibility splays, bridges, culverts, turning circles and passing places) within the Landlord's Neighbouring Property constructed by the Tenant in the positions shown coloured orange on [REDACTED] or such other routes within the Landlord's Neighbouring Property as may be approved by the Landlord in accordance with clause 3.10.

Permitted User: as a Solar PV Facility.



Power Purchase Agreement: the power purchase agreement dated [REDACTED] between [REDACTED] and the Tenant in respect of (amongst other things) the purchase of electrical energy produced by the Development.

President: means the president of the [REDACTED] or, if there is no such person, the president of the [REDACTED]

Property: the land described in Schedule 1.

Reinstatement Cost: the full cost of reinstatement of the Property as reasonably determined by the Tenant from time to time taking into account inflation of building costs and including any costs of demolition, site clearance, site protection, shoring up, professional fees and expenses and the costs of any other work to the Property that may be required by law and any taxes on any such costs, fees and expenses.

Rent: [REDACTED] payable monthly in advance by twelve equal instalments on each Rent Payment Date.

Rent Payment Date: the first working day of each month.

Reservations: all of the rights excepted, reserved and granted to the Landlord by this lease.

Rights: the rights granted by the [REDACTED]

Roads: the Existing Roads and (if constructed) the New Roads.

Service Media: all media for the supply or removal of heat, smoke, electricity, gas, water, sewage, energy, telecommunications, television, data and all other services and utilities and all structures, machinery and equipment ancillary to those media.

Site Access Protocol: the site access protocol set out in Schedule 6 as it may be amended from time to time.

Solar PV Facility: an up to [REDACTED] utility scale solar PV facility, interconnected to [REDACTED] [St. David's Substation].

Temporary Equipment: the equipment described in Schedule 4 as "Temporary Equipment".

Third Party Rights: all rights, covenants and restrictions affecting the Property, including but not limited to the rights of the Bermuda Airport Authority and the operator of the Airport.

- 1.2 A reference to this lease, except a reference to the date of this lease or to the grant of this lease, is a reference to this deed and any deed, licence, consent, or other instrument supplemental to it.

- 1.3 A reference to the **Landlord** includes a reference to the person entitled to the immediate reversion to this lease. A reference to the [REDACTED] personal representatives, successors in title and assigns.
- 1.4 A **working day** is any day which is not a Saturday, a Sunday, a bank holiday or a public holiday in Bermuda.
- 1.5 Any obligation in this lease on the Tenant not to do something includes an obligation not to allow that thing to be done by [REDACTED] best endeavours to prevent that thing being done by another person.
- 1.5 A reference to the **term** is to the Contractual Term.
- 1.7 A reference to the **end of the term** is to the end of the term however it ends.
- 1.8 Unless the context otherwise requires, a reference to [REDACTED] shall be construed to refer to the whole and any part of it.
- 1.9 Unless the context otherwise requires, any words following the terms **including, include, in particular, for example**, or any similar expression shall be construed as illustrative and shall not limit the sense of the words, description, definition preceding those terms.
- 1.10 A **person** includes a natural person, [REDACTED] (whether or not having separate legal personality).
- 1.11 A reference to **writing** or **written** excludes fax and e-mail.
- 1.12 Unless the context otherwise requires, words in the singular shall include the plural and in the plural shall include the singular.
- 1.13 A reference to laws in general is a reference to all local and national laws as amended, extended or re-enacted from time to time and shall include all subordinate laws made from time to time under them and all orders, notices, codes of practice and guidance made under them.
- 1.14 Unless otherwise specified, a reference to a statute or statutory provision is a reference to it as amended, extended or re-enacted from time to time and shall include all subordinate legislation made from time to time under that statute or statutory provision and all orders, notices, codes of practice and guidance made under it.
- 1.15 The Schedules form part of this lease and shall have effect as if set out in full in the body of this lease. Any reference to this lease includes the Schedules.
- 1.16 Clause, Schedule and paragraph headings shall not affect the interpretation of this lease.

1.17 References to clauses and Schedules are to the clauses and Schedules of this lease and references to paragraphs are to paragraphs of the relevant Schedule.

2. GRANT

2.1 [REDACTED] for the Permitted Use for the Contractual Term

2.2 The grant is made together with the Rights set out in [REDACTED], excepting and reserving to the Landlord, the Reservations set out in [REDACTED], and subject to the Third Party Rights.

2.3 The grant is made in consideration of the Tenant covenanting to pay the Landlord the following sums as rent:

- (a) the Rent;
- (b) all interest payable under this lease; and
- (c) all other sums due under this lease.

3. THE RIGHTS

3.1 Except as mentioned in clause 3.2, neither the grant of this lease nor anything in it confers any right over neighbouring property nor is to be taken to show that the Tenant may have any right over neighbouring property. [REDACTED] The Conveyancing Act 1983 does not apply to this lease.

3.2 The Landlord grants the Tenant the following rights for all purposes connected with the Permitted Use of the Property:

- (a) the right to use the Roads for the purposes of vehicular and pedestrian access to and from the Property;
- (b) subject to giving the Landlord not less than 48 hours' prior written notice and provided the [REDACTED] to the proposed exercise of the rights by the Tenant and subject to such conditions as the Landlord may reasonably impose (except in the case of emergency where no notice to the Landlord is required but subject at all times to the requirements of the Site Access Protocol), the right to enter from time to time such parts of the Landlord's Neighbouring [REDACTED] on with or without vehicles, plant and equipment to (at the Tenant's expense, in a proper and workmanlike manner and in accordance with the terms of this lease):
 - (i) to retain, inspect, maintain, repair, alter, renew, replace and remove the equipment;

- (ii) install the Electricity Cables within the Easement Strip at a depth of not less than 750 millimetres below the present surface of the [REDACTED] Neighbouring Property and afterwards to retain, inspect, maintain, repair, alter, renew, replace and remove the Electricity Cables; and
 - (iii) fell, trim or lop any trees, bushes and other vegetation on the Landlord's Neighbouring Property which obstruct or interfere with the operation of the Equipment provided that the [REDACTED] from the Landlord's Neighbouring Property all timber, wood and vegetation cut and leaves the Landlord's Neighbouring Property neat and tidy.
- (c) the right to use the Electricity Cables in order to transmit electricity to and from the Equipment in order to export to the Grid electricity generated by the Equipment;
 - (d) the right of support from those parts of the [REDACTED] that afford support for the Property;
 - (e) such other rights as may be necessary to facilitate the operations carried out by the Tenant for its Permitted Use subject to obtaining the Landlord's consent, such consent not to be unreasonably withheld or delayed.
- 3.3 The Rights are granted insofar as the [REDACTED] is able to grant them and in common with the [REDACTED] and all persons authorised by the [REDACTED] or otherwise entitled to exercise such (or similar) rights.
- 3.4 The Rights are granted in common with the [REDACTED] and any other person authorised by the Landlord.
- 3.5 The Rights are granted subject to the [REDACTED] insofar as the Third Party Rights affect the [REDACTED] and the Tenant shall not do anything that may interfere with any Third Party Right.
- 3.5 The Tenant shall exercise the Rights only in connection with its use of the Property for the Permitted Use.
- 3.7 The Tenant shall exercise the Rights [REDACTED] and with any regulations made by the Landlord pursuant to paragraph 20 of Schedule 2.
- 3.8 The [REDACTED] laws relating to its use of the Landlord's Neighbouring Property pursuant to the Rights.
- 3.9 The Landlord may at any time acting reasonably require the [REDACTED] to change the route of any of the Roads so long as a means of access to, and egress from, the Property is maintained at all times and the proposed alternative route is reasonable for the purposes of the Permitted Use.

3.10 If at any time during the term, the Tenant reasonably requires to vary the location or route of the Easement Strip or New Roads to another reasonable location or route within the Landlord's Neighbouring Property, the Tenant may do so subject to obtaining the Landlord's prior written approval (such approval not to be unreasonably withheld or delayed).

4. THE RESERVATIONS

4.1 The following rights are excepted and reserved from this lease to the Landlord for the benefit of the [REDACTED] and to the extent possible for the benefit of any neighbouring or adjoining property in which the Landlord acquires an interest during the term:

- (a) rights of [REDACTED] to the extent those rights are capable of being enjoyed at any time during the term;
- (b) the right to use and to connect into and [REDACTED] which are in existence at the date of this lease or which are installed or constructed during the term;
- (c) at any time during the term, the full and free right to develop the Landlord's Neighbouring Property and any neighbouring or adjoining property in which the Landlord acquires an interest during the term as the Landlord may think fit;
- (d) the right to re-route any [REDACTED] and serving the Property or re-route any means of access to or egress from the Property across the Landlord's Neighbouring Property;
- (e) a right of way over the Property at all time and for all purposes in favour of the Landlord's Neighbouring Property for the purposes of gaining access to the public highway as shown in Drawing No. 5510/046/S04b.

notwithstanding that the exercise of any of the Reservations or the works carried out pursuant to them result in a loss of amenity for the Property provided that they do not materially affect the use and enjoyment of the Property for the Permitted Use or the amount of light enjoyed by the Property.

4.2 The Landlord reserves the right to enter the Property, having given reasonable notice to the Tenant (except in the case of an emergency when no notice is required), with its workers, contractors, agents or professional advisers:

- (a) to connect to, lay, repair, maintain or replace [REDACTED] relating to any of the Reservations and/or to repair, replace or renew any boundary fence;

- (b) to inspect its condition and state of repair following which the Landlord may give the Tenant a notice of any breach of any of the Tenant covenants of this lease relating to the condition or repair of the Property;
- (c) to inspect the condition and state of repair of the Equipment following which the Landlord may give the Tenant a notice of any breach of any of the Tenant's covenants in this lease relating to the condition or repair of the Equipment or that the Tenant has not complied with its obligations under the Maintenance Schedule;
- (d) to carry out any works needed to remedy the breach set out in any notice served [REDACTED] to the reasonable satisfaction of the Landlord within the time period specified in the notice; and
- (e) for any other purpose mentioned in or connected with:
 - (i) this lease;
 - (ii) the Reservations; and
 - (iii) the Landlord's interest in the Property and the Landlord's Neighbouring Property.

4.3 The [REDACTED] and by anyone else who is or becomes entitled to exercise them, and by anyone authorised by the Landlord.

4.4 No party exercising any of the Reservations, nor its workers, contractors, agents and professional advisors, shall be liable to the Tenant or other occupier of or person at the Property for any [REDACTED] of its exercising any of those Reservations except for:

- (a) physical damage to the Property, which they shall make good to the reasonable satisfaction of the Tenant; or
- (b) any loss, damage, injury, nuisance or inconvenience in relation to which the law prevents the Landlord from excluding liability; or
- (c) any loss, damage, injury, nuisance or inconvenience caused solely by the negligence of those exercising the Reservations.

4.5 Any action taken by the [REDACTED] to the Landlord's other rights, including those under clause 7.

5. TENANT COVENANTS

The Tenant covenants with the Landlord to observe and perform the covenants in Schedule 2 of this lease.

6. LANDLORD COVENANTS

The [REDACTED] to observe and perform the covenants in Schedule 3 of this lease.

7. RE-ENTRY

7.1 The Landlord may re-enter [REDACTED] in the name of the whole) at any time after any of the following occurs:

- (a) any rent is unpaid 21 days after becoming payable whether it has been formally demanded or not;
- (b) any breach of any condition of, or tenant covenant, in this lease;
- (c) an Act of Insolvency;
- (d) the Connection Agreement is terminated or otherwise comes to an end or ceases to be in force and effect;
- (e) the Power Purchase Agreement is terminated or otherwise comes to an end or ceases to be in full force and effect.

7.2 If the Landlord re-enters the Property (or any part of the Property in the name of the whole) pursuant to this [REDACTED] to any right or remedy of the Landlord in respect of any breach of covenant by the Tenant.

7.3 Before commencing any proceedings for forfeiture of this lease, the Landlord shall:

- (a) give notice of the [REDACTED] and any mortgagee of this lease of whom the Landlord has received notice pursuant to paragraph 8.8 of Schedule 2; and
- (b) if the Tenant or mortgagee confirms in writing to the Landlord within 14 days of the notice that it wishes to remedy the breach, allow the Tenant or mortgagee 28 days (or such longer time as may be reasonable in view of the nature of the breach) to remedy the breach.

7.4 A mortgagee of this lease of [REDACTED] to paragraph 9.8 of Schedule 2 may enforce the terms of clause 7.3 pursuant to and in accordance with the provisions of the Contracts (Rights of Third Parties) Act 2016.

8. DESTRUCTION OF PROPERTY

8.1 If, following [REDACTED], the repair, rebuilding or reinstatement of the Property shall be impossible due to the inability to obtain the necessary planning or other consents:

- (a) the Tenant's obligation to reinstate the Property contained in paragraph 3 of [REDACTED] otherwise shall no longer apply;
- (b) the Tenant shall hold all proceeds of any insurance in respect of the Property on trust for itself and the Landlord in proportion to their respective interests in the Property immediately before the damage or destruction, as agreed in writing between the Landlord and the [REDACTED] in the proportions determined pursuant to [REDACTED];
- (c) the Tenant shall pay (in cleared funds) the Landlord's proportion of such insurance proceeds within 20 working days of the date of receipt of the proceeds of the insurance policy or within 10 working days of the determination pursuant to clause 8.3, whichever is the later.

8.2 For the purposes of [REDACTED] in the Property shall comprise;

- (a) the entitlement to rent for the entire Contractual Term; and
- (b) the right to require the Tenant to return the Property to the Landlord at the end of the term, in the manner set out in paragraph [REDACTED]

8.3 Any dispute arising regarding this [REDACTED] in accordance with clause 10.

9. SET-OFF

The [REDACTED] in full without any set-off, counterclaim, deduction or withholding (other than as required by law).

10. DISPUTES

10.1 If a dispute arises out of or in connection with clause 8 or paragraph 20 of Schedule 2 of this lease either the Landlord or the Tenant may serve notice on the other requesting that the dispute is determined by an Expert.

10.2 The Landlord and the Tenant shall agree on the appointment of an Expert and shall agree with the Expert the terms of the Expert's appointment.

10.3 If the [REDACTED] or the terms of the Expert's appointment within five working days of either party serving details of a suggested expert on the other, either party shall be entitled to request the President to appoint the Expert and to agree with the Expert the terms of the appointment.

- 10.4 The Expert must prepare a written decision and give notice (including a copy) of the decision to the Landlord and the [REDACTED] being referred to the Expert.
- 10.5 If the Expert dies or becomes unwilling or incapable of acting, or does not deliver the decision within the time required by this clause then:
- (a) the Landlord or the Tenant may apply to the President to discharge the Expert and to appoint a replacement Expert with the required expertise; and
 - (b) this clause shall apply to the new Expert as if they were the first Expert appointed.
- 10.6 The Landlord [REDACTED] the Expert including oral submissions and will provide (or procure that others provide) the Expert with such assistance and documents as the Expert reasonably requires for the purpose of reaching a decision.
- 10.7 To the extent not provided for by this clause, the Expert may use reasonable discretion to determine such other procedures to assist with the conduct of the determination as the Expert considers just or appropriate, including (to the extent the Expert considers necessary) instructing professional advisers to assist the Expert in reaching a determination.
- 10.8 The Landlord and the Tenant shall with reasonable promptness supply each other with all information and give each other access to all documentation and personnel and/or things as they may each reasonably require to make a submission under this clause 10.
- 10.9 Any person appointed as an [REDACTED] and not as an arbitrator. The Expert's written decision on the matters referred to the Expert shall be final and binding on the parties in the absence of manifest error or fraud.
- 10.10 The Expert may direct that any legal costs and expenses incurred by a party in respect of the determination shall be paid by another party to the determination on the general principle that costs should follow the event, except where it appears to the Expert that, in the circumstances, [REDACTED] The Expert's fees and any costs properly incurred by him in arriving at his determination (including any fees and costs of any advisers appointed by the Expert) shall be borne by the parties equally or in such other proportions as the Expert shall direct.
- 10.11 The Landlord and the Tenant shall each act reasonably and co-operate to give effect to the provisions of this clause and otherwise do nothing to hinder or prevent the Expert from reaching a determination.

11. LANDLORD'S CONSENT

11.1 Any consent given by the Landlord under this lease may be granted subject to reasonable conditions.

11.2 No consent given by the [REDACTED] any consent required from a third party or imply that any such consent has been given.

12. BOND

12.1 The Tenant shall procure [REDACTED] of this lease and shall notify the Landlord if it becomes aware of any matter or circumstance which may or could affect the issuer from performing its obligations under the Bond.

12.2 Without prejudice to all and any other rights the Landlord may have, the Landlord shall be entitled to make demand under the Bond if:

- (a) an Act of Insolvency occurs in respect of the Tenant, or
- (b) the Tenant fails to observe and perform the tenant covenants under this lease and fails to rectify the same to the satisfaction of the Landlord within 28 days following receipt of the written notice from the Landlord detailing the breach.

12.3 The [REDACTED] on more than one occasion.

12.4 The Landlord shall be entitled to make demand under the Bond irrespective of whether there is a dispute between the Landlord and the Tenant as to whether:

- (a) The Tenant has failed to observe and perform its covenants under this lease; or
- (b) the Tenant has rectified any failure to observe and perform its covenants under this lease whether in the time set out in clause 12.2 or at all.

13. JOINT AND SEVERAL LIABILITY

Where the [REDACTED], those persons shall in each case be jointly and severally liable for their respective obligations and liabilities arising under this lease. The Landlord may take action against, or release or compromise the liability of, or grant any [REDACTED] comprising the Tenant, without affecting the liability of any other of them.

14. ENTIRE AGREEMENT

14.1 This lease, the Agreement for Lease and any documents annexed to it constitute the entire agreement between the parties and supersedes all previous discussions,

correspondence, negotiations, arrangements, understandings and agreements between them relating to their subject matter.

14.2 Each party [REDACTED] annexed to it it does not rely on, and shall have no remedies in respect of, any statement, representation, assurance or warranty (whether made innocently or negligently).

14.3 Nothing in this clause shall limit or exclude any liability for fraud.

15. NOTICES

15.1 A notice given under or in connection with this lease shall be:

- (a) in writing and for the purposes of this clause an e-mail is not in writing;
- (b) given to the [REDACTED]
[REDACTED]
[REDACTED]
- (c) given to the Tenant by:
 - (i) leaving it at the Property; or
 - (ii) [REDACTED] Park Place, 55 Park
[REDACTED]
 - (iii) by fax [REDACTED]

15.2 If a notice is given in accordance with clause 15.1, it shall be deemed to have been received:

- (a) if delivered [REDACTED]
- (b) if sent by prepaid [REDACTED] on the third working day after posting; or
- (c) if sent by fax, at the time of transmission.

15.3 This clause does not apply to the service of any proceedings or other documents in any legal action or, where applicable, any arbitration or other method of dispute resolution.

16. BERMUDA GOVERNMENT AS LANDLORD

Nothing in this Lease shall constitute or be deemed to be an act or consent or approval of the [REDACTED] other than as Landlord and any acts, consents or approvals on the part of the Government of Bermuda in this Lease shall be given and be deemed to have been given solely in its capacity as freeholder of the Property.

17. GOVERNING LAW

This lease and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of [REDACTED]

18. JURISDICTION

Save for any dispute arising out of or in connection with the [REDACTED] of Schedule 2, each party irrevocably agrees that the [REDACTED] shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this lease or its subject matter or formation (including non-contractual disputes or claims).

This document has been executed as a deed and is delivered and takes effect on the date stated at the beginning of it.

Schedule 1 The Property



Schedule 2 Tenant Covenants

1. RENT

[REDACTED] by bank transfer or by any other method that the Landlord from time to time requires by giving notice to the Tenant.

2. INSURANCE

2.1 To effect and maintain insurance of the Equipment (with reputable insurers) at its own cost in the joint names of the Landlord and the Tenant. Such insurance shall be against loss or damage caused by any of the Insured Risks for the full Reinstatement Cost subject to:

- (a) any reasonable exclusions, limitations, conditions or excesses that may be imposed by the insurer; and
- (b) insurance being available on reasonable terms in the Bermuda insurance market.

2.2 To effect and maintain at its own cost in the joint names of the Landlord and the Tenant for such [REDACTED]

[REDACTED] insurance in respect of any liability:

- (a) arising from death or personal injury to third parties;
- (b) damage to property belonging to third parties; and
- (c) in respect of any interruption in the operation of the Airport.

2.3 In relation to any insurance effected by the Tenant under this paragraph:

- (a) [REDACTED]
 - (i) a copy of the current insurance policy and schedule;
 - (ii) a copy of the application form for the policy; and
 - (iii) a copy of the receipt for the current year's premium.
- (b) to notify the Landlord of any change in the scope, level or terms of cover as soon as reasonably practicable after the Tenant has become aware of the change;

2.4 To inform the [REDACTED] that it becomes aware of:

- (a) any matter which occurs in relation to the Tenant or the Equipment that any insurer or [REDACTED] or on what terms, to insure or continue insuring the Equipment;
- (b) any damage or loss that relates to the Equipment;
- (c) any damage or loss to [REDACTED] or in any interference in the operation of the Airport; and
- (d) any other event occurs which might affect any insurance policy relating to the Equipment.

3. REBUILD FOLLOWING DAMAGE OR DESTRUCTION

If the Equipment or any part of it is damaged or destroyed by an Insured [REDACTED] shall:

- (a) promptly notify the Landlord and make a claim under the Insurance policy for the Equipment;
- (b) notify the Landlord immediately if the insurer indicates that the [REDACTED] Cost will not be recoverable in full under the insurance policy;
- (c) use all insurance money received [REDACTED] of which the money was received or (as the case may be) to rebuild or reinstate the Equipment and make good any shortfall out of the Tenant's own monies;
- (d) promptly take such steps as may be necessary and proper to obtain all planning and other consents to repair (or as the case may be) rebuild or reinstate the Equipment;
- (e) subject to obtaining such consents, reinstate or rebuild the Equipment in a manner equivalent in size, [REDACTED] the damage. If the relevant consents cannot be obtained then to reinstate or rebuild the Equipment in a manner and with facilities that are reasonably equivalent to those previously at the Property provided always that:
 - (i) the Tenant shall obtain the Landlord's prior approval to any alterations proposed to the size, quality or layout of the Equipment, such consent not to be unreasonably withheld or delayed; and
 - (ii) the Equipment shall be rebuilt or reinstated to the reasonable satisfaction of the Landlord.

4. INTEREST ON LATE PAYMENT

To pay interest to the [REDACTED] (both before and after any judgment) on any payment due under this lease and not paid within ten days following the date it is due. Such interest shall accrue on a daily basis for the period beginning on the due date and ending on the date of payment.

5. UTILITIES

5.1 To pay all costs in connection with the supply and [REDACTED] and utilities to or from the Property.

5.2 To comply with all laws and with any recommendations of the relevant suppliers relating to the use of those services and utilities and the Service Media at or serving the Property.

6. COSTS

To pay to the Landlord on demand the reasonable and proper costs and expenses (including any attorneys', surveyors' or other professionals' fees, costs and expenses and any taxes on them) assessed on a full indemnity basis incurred by the Landlord (both during and after the end of the term) in connection with or in contemplation of any of the following:

- (a) the enforcement of the tenant covenants of this lease;
- (b) preparing and serving any notice in connection with this lease under [REDACTED] or taking any proceedings under either of that Part, notwithstanding that forfeiture is avoided otherwise than by relief granted by the court;
- (c) preparing and serving any notice under clause [REDACTED];
- (d) the undertaking of any works by the [REDACTED];
- (e) any consent applied for under this lease, whether or not it is granted (except to the extent that the consent is unreasonably withheld or delayed by the Landlord in circumstances where the Landlord is not entitled to unreasonably withhold or delay consent).

7. ALTERATIONS

Except as provided in paragraph [REDACTED]

7.1 Not to make any alteration or addition to the Property or the Equipment without the consent of the Landlord, such consent not to be unreasonably withheld or delayed.

7.2 Not to install, alter the route of, damage or remove any [REDACTED] without the prior written consent of the Landlord, such consent not to be unreasonably withheld or delayed.

8. ASSIGNMENT AND UNDERLETTING

8.1 Not to assign or charge part only of this lease.

- 8.2 Not to assign the whole of this lease without the prior written consent of the Landlord, such consent not to be unreasonably withheld or delayed provided that the Tenant may assign the whole of this lease to the tenant's successor in title under the Power Purchase Agreement or, if the [REDACTED] is terminated without being replaced, to such other person who becomes responsible for operating, and who in fact operates, the Solar PV Facility.
- 8.3 The Landlord and the Tenant agree that the Landlord may give its consent to an assignment subject to any reasonable condition.
- 8.4 Not to underlet the whole or any part of the [REDACTED] Sublease and with the Landlord's prior written consent.
- 8.5 Not to charge the whole of this lease without the prior written consent of the Landlord, such consent not to be unreasonably withheld or delayed provided that the Tenant may charge the whole of this lease to a Funder.
- 8.6 Except as expressly permitted by this lease, the Tenant shall not assign, underlet, charge, part with or share possession or share occupation of this lease or the Property or hold the lease on trust for any person (except by reason only of joint legal ownership).
- 8.7 In this [REDACTED] underletting, charge, parting with possession of or any other devolution of title to this lease or the Property.
- 8.8 No later than one month after a Transaction the Tenant shall:
- (a) [REDACTED]
 - (b) deliver two certified copies of any document effecting the Transaction to the Landlord's attorneys; and
 - (c) pay the Landlord's attorneys a reasonable registration fee of not less than \$500 (plus any applicable taxes).

9. MAINTENANCE AND REPAIR

- 9.1 To undertake periodic maintenance to the Equipment in accordance with the Maintenance Schedule.
- 9.2 In addition to the obligations under [REDACTED] all Equipment in good repair and condition, properly maintained, safe and in good working order to the [REDACTED] throughout the term and, when necessary, renew and rebuild the Property and renew and replace the Equipment.

9.3 To ensure that any [REDACTED] are kept in good working order.

9.4 The Tenant shall use all reasonable endeavours to keep the Equipment operational at all times, and shall investigate promptly, on written request by the Landlord, any persistent reduction in or interruption of the electricity generated by the Equipment.

9.5 The Tenant shall remove any Temporary Equipment from the Property as soon as reasonably practicable and in any event within 6 months from the date of this Lease

10. LANDSCAPING

10.1 To maintain any landscaped and grassed areas of the Property and keep them in a neat and tidy condition and [REDACTED] in accordance with the principles of good arboriculture.

11. REFUSE

11.1 To ensure that any rubbish is regularly collected from the Property.

12. SEWERS AND DRAINS

[REDACTED] or deleterious effluent or other substance which may obstruct or damage them or any neighbouring property.

13. COMPLIANCE WITH LAWS AND NOTICES

13.1 The Tenant shall obtain, maintain throughout the term and comply with the conditions of all Necessary Consents.

13.2 The Tenant shall comply with all laws relating to:

- (a) the use of the Property, Equipment and any part of the [REDACTED] Property used by the Tenant;
- (b) any works carried out at the [REDACTED] by the Tenant; and
- (c) all materials kept at or disposed of from the Property or the [REDACTED]

13.3 Without prejudice to any obligation on the [REDACTED] under this lease, the Tenant shall:

- (a) ensure that no hazardous, toxic or potentially toxic waste or other dangerous substances are stored, buried or disposed of in, on, over or under the Property or any part of the [REDACTED] used by the Tenant in connection with the Permitted Use;
- (b) be liable for and shall indemnify and keep indemnified the Landlord in respect of all environmental damage and liabilities in respect of hazardous materials brought onto or disposed of in the [REDACTED] or the Property by the Tenant or its agents, suppliers, employees, contractors, sub-contractors and consultants;
- (c) ensure that all chemicals and other similar items that the Tenant brings on to the Property or any part of the Landlord's Neighbouring Property used by the [REDACTED] are stored and if appropriate are disposed of in accordance with current legislation; and
- (d) manage and dispose of any waste that arises as a result of the Tenant's use of the Property or the [REDACTED] in accordance with the relevant legislation.

13.4 Within five working days after receipt of any notice or other communication affecting the Property [REDACTED]

- (a) send a copy of the relevant document to the Landlord; and
- (b) take all steps necessary to comply with the notice or other communication and take any other action in connection with it as the Landlord may require.

13.5 The Tenant shall comply with its obligations in relation to the provision and maintenance of a health and safety file. The Tenant shall maintain the health and safety file for the Property and shall give it to the [REDACTED]

13.6 The Tenant shall supply all information to the [REDACTED] requires from time to time to comply with the [REDACTED] under any applicable statutes.

13.7 To give the Landlord full particulars of any notice order or proposal affecting any neighbouring property as soon as the Tenant is aware of it.

13.7 The Tenant shall keep the Property equipped with all fire prevention, detection and fighting machinery and equipment and fire alarms which are:

- (a) required under any relevant law;
- (b) required by the insurers of the [REDACTED] Property (so long as the Tenant has been previously notified of these requirements).

- (c) recommended by the insurers of the [REDACTED] Property (so long as the Tenant has been previously notified of these recommendations);

and shall keep that machinery, equipment and those alarms properly maintained and available for inspection.

14. ENCROACHMENTS, OBSTRUCTIONS AND ACQUISITION OF RIGHTS

14.1 If a third party makes or attempts to make any encroachment over the Property or takes any action by which a right may be acquired over the Property, the Tenant shall:

- (a) immediately inform the [REDACTED] so requests, shall give the Landlord notice of that encroachment or action, or such other confirmation as the Landlord reasonably requires; and
- (b) do such acts and things as the Landlord reasonably requires to prevent or license the continuation of that encroachment or action at the Landlord's sole cost.

14.2 If any person takes or threatens to take any action to obstruct the flow of light or air to the Property or obstruct the means of access to the Property, the Tenant shall:

- (a) immediately inform the Landlord and if the [REDACTED] so requests, shall give the Landlord notice of that action or obstruction, or such other confirmation as the Landlord reasonably requires; and
- (b) do such acts and things that the Landlord reasonably requires to prevent or secure the removal of the obstruction at the Landlord's sole cost.

15. NOTIFY DEFECTS

To give notice to the [REDACTED] or want of repair or damage to, the Property for which the Landlord may be responsible under this lease or any law, as soon as the Tenant becomes aware of it.

16. THIRD PARTY RIGHTS

16.1 To comply with all obligations on the [REDACTED] to the Third Party Rights insofar as they relate to the Property and not do anything (even if otherwise permitted by this lease) that may interfere with any Third Party Right.

16.2 To allow the Landlord and any other person authorised by the terms of any Third Party Right to enter the Property in accordance with its terms.

17. REMEDY BREACHES

17.1 If the Landlord has given the Tenant notice under clause 4.2(b) or clause 4.2(c), of any breach of any of the Tenant covenants in this lease relating to the repair or condition of the [REDACTED] to carry out all works needed to remedy that breach as quickly as possible, and in any event within the time period specified in the notice (or immediately if works are required as a matter of emergency) to the reasonable satisfaction of the Landlord.

17.2 To pay to the Landlord on demand the costs properly incurred by the [REDACTED] out any works pursuant to [REDACTED] (including any attorneys', surveyors' or other professionals' costs and expenses, and any taxes on them, assessed on a full indemnity basis)

18. INDEMNITY

To indemnify the Landlord against all liabilities, expenses, costs, (including but not limited to any attorneys', surveyors' or other professionals' costs and expenses, and any taxes on them, assessed on a full indemnity basis), claims, damages and losses (including but not limited to any diminution in the value of the Landlord's interest in the Property and loss [REDACTED] suffered or incurred by the Landlord arising out of or in connection with:

- (a) the construction, installation, repair, alteration or removal of the Equipment;
- (b) the operation of the Equipment;
- (c) the use of the Property or any parts of the Landlord's Neighbouring Property used in connection with the Permitted Use;
- (d) [REDACTED]
- (e) any breach of any of the Tenant covenants of this lease; or
- (f) any act or [REDACTED] contractors or agents or any other person at the Property with the express or implied authority of any of them.

19. RETURNING THE PROPERTY TO THE LANDLORD

19.1 At the end of the term the Tenant shall return to the Landlord the Property and those parts of the [REDACTED] in connection with the Permitted Use maintained in accordance with the Maintenance Schedule and in the repair and condition required by this lease.

19.2 By the date which is 6 months before the Decommissioning Start Date, the Tenant shall submit to the Landlord a draft [REDACTED] for approval in writing by the Landlord (such approval not to be unreasonably withheld or delayed).

19.3 Any dispute between the Landlord and the Tenant about whether the draft [REDACTED] for compliance with the Tenant's obligations under paragraph 19.4 may be referred by either party for determination in accordance with clause 10.

19.4 Subject to [REDACTED] Before the end of the term, the Tenant shall at its own cost, in a good and workmanlike manner and in accordance with the Decommissioning Specification:

- (a) remove the Equipment from the [REDACTED] Property;
- (b) remove from the [REDACTED] all other chattels (other than the Equipment) belonging to or used by it;
- (c) remove or reinstate any alterations that it has made to the Property or the [REDACTED];
- (d) abandon all services in place, properly capped off; and
- (e) make good any damage caused to the [REDACTED] Property by any removal or reinstatement pursuant to this paragraph 19.4 which shall include (but not be limited to):
 - (i) fill in all holes and return the Property to a level finish;
 - (ii) where areas of tarmac [REDACTED] patching to ensure that the tarmacked surface is brought back to an homogenous visual appearance (but not so as to reinstate the tarmacked areas to the standard of an airport runway);
 - (iii) ensuring that no hazards are [REDACTED];
 - (iv) ensuring that the Property is left clear and free from debris or litter.

19.5 [REDACTED] waive all or any of requirements of paragraph 19.4 by giving the Tenant written notice to this effect.

19.6 The Tenant irrevocably appoints the [REDACTED] agent to store or dispose of any chattels or Items it has fixed to the Property or the Landlord's Neighbouring Property and which have been left by the Tenant on the Property or the Landlord's Neighbouring Property for more than [REDACTED]. The Landlord shall not be liable to the Tenant by reason of that storage or disposal. The Tenant shall indemnify the Landlord in respect of any claim made by a third party in relation to that storage or disposal.

20. REGULATIONS

The Tenant shall observe all reasonable and proper regulations made by the Landlord from time to time in accordance with the principles of good estate management and notified to the Tenant relating to the use of the Landlord's Neighbouring Property provided that:

- (a) such regulations shall not materially interfere with the Tenant's use of the [REDACTED] exercise of the Rights; and
- (b) if there is any conflict between such regulations and the terms of this lease, the terms of this lease shall prevail.

21. Use

- 21.1 Not, without the consent of the Landlord, such consent not to be unreasonably withheld, to use the Property for any purpose other than for the Permitted Use.
- 21.2 Not to do anything at the [REDACTED] or cause loss, damage or injury, to the Landlord or the occupiers of any neighbouring property.
- 21.3 Not to overload any [REDACTED] at or serving the Property.
- 21.4 The Tenant shall answer in writing, as soon as reasonably practicable, any reasonable written questions that the [REDACTED] to which the Property, or any part of it, is put.

Schedule 3 Landlord Covenants

QUIET ENJOYMENT

[REDACTED] that, so long as the Tenant pays the rents reserved by and complies with its obligations in this lease, the Tenant shall have quiet enjoyment of the Property without any [REDACTED] or any person claiming under the landlord except as otherwise permitted by this lease.

[Redacted]

Temporary Equipment

[Redacted]

Permanent Equipment

[Redacted]

Schedule 6 Site Access Protocol

[SITE ACCESS PROTOCOL TO BE INSERTED. SITE ACCESS PROTOCOL WILL REQUIRE TENANT TO COMPLY WITH INTERNATIONAL GUIDELINES RE USE OF PROPERTIES NEAR AIRPORTS]

Executed as a deed by THE

[REDACTED]

represented by the [REDACTED]

[REDACTED] in the presence of

[REDACTED]

[REDACTED]

WITNESS

NAME:

ADDRESS:

Executed as a deed by SATURN SOLAR

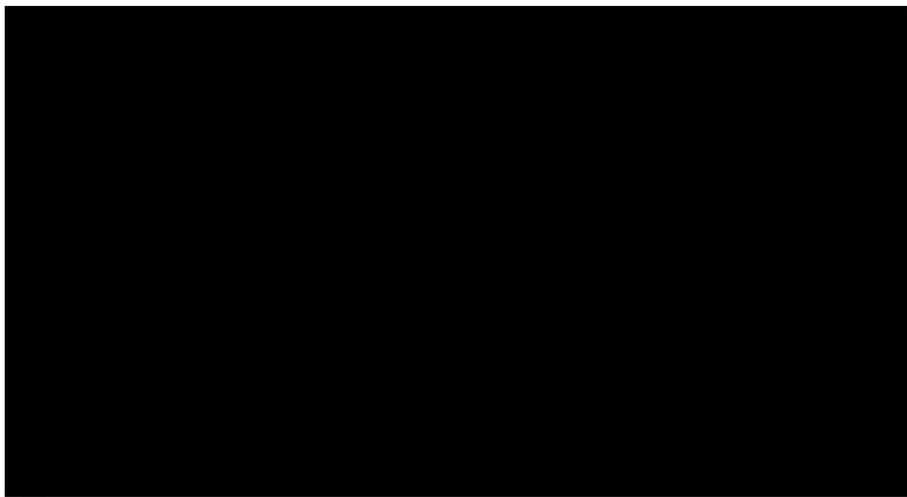
BERMUDA 1 LTD. acting by two

directors

Director

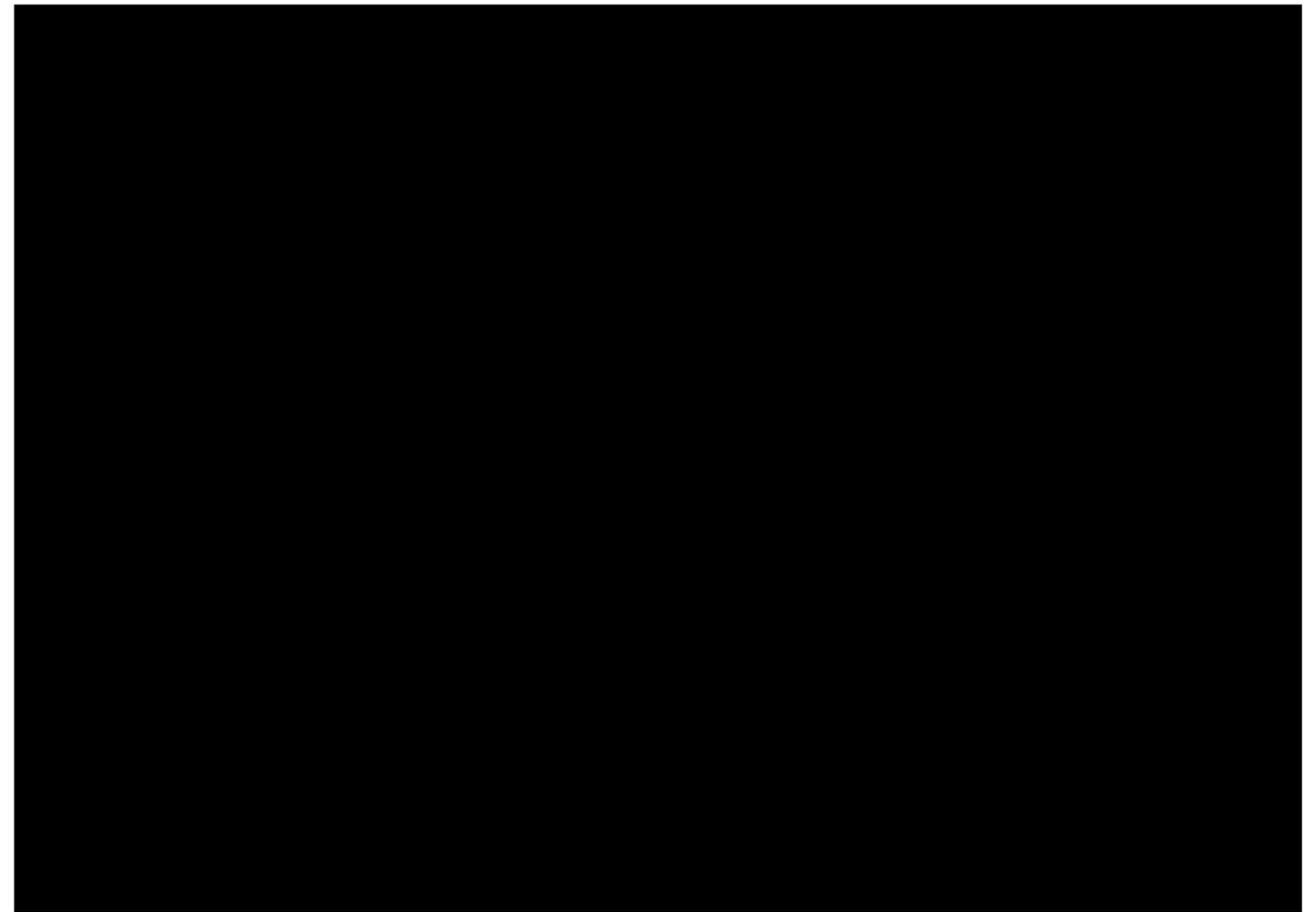
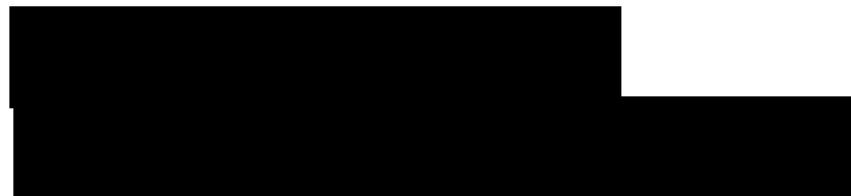
Director

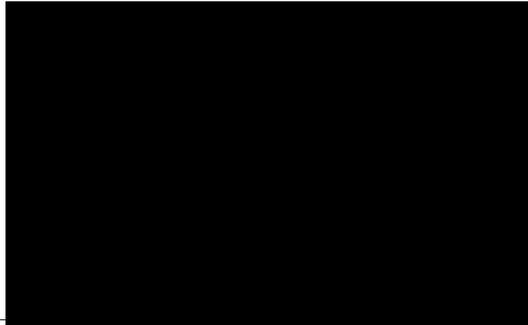
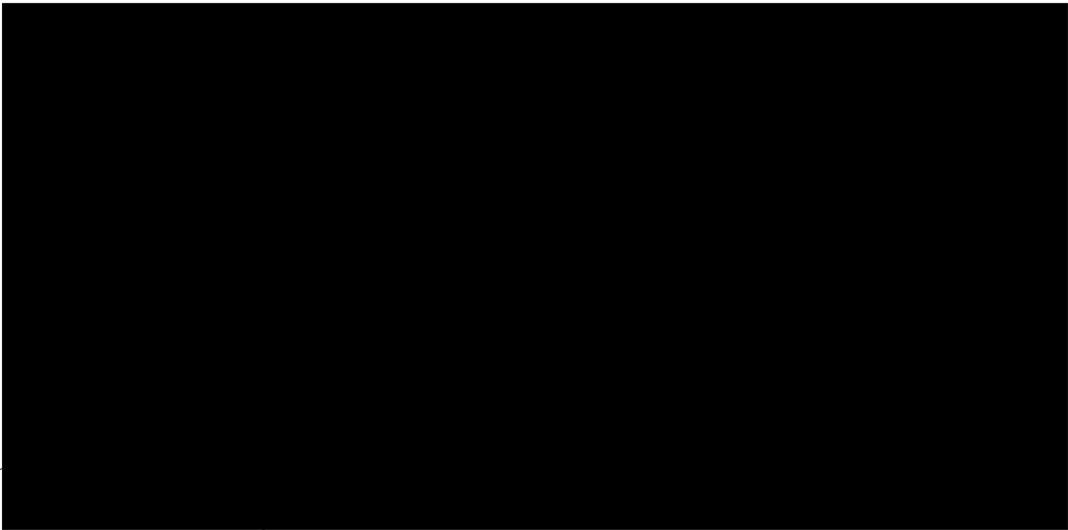
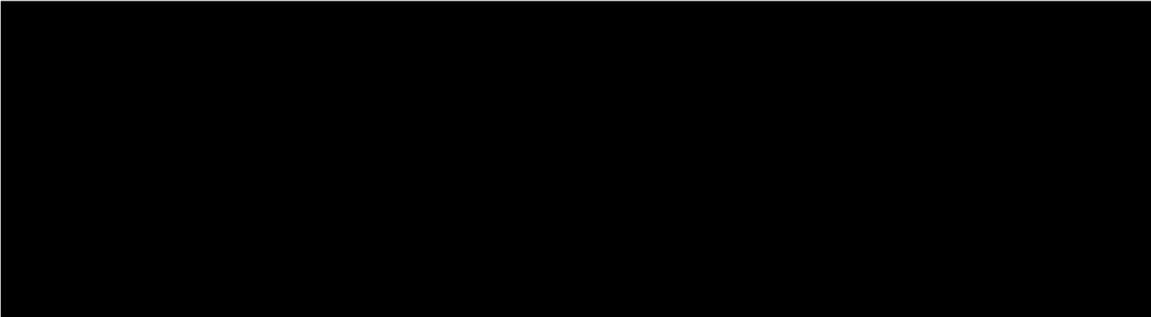
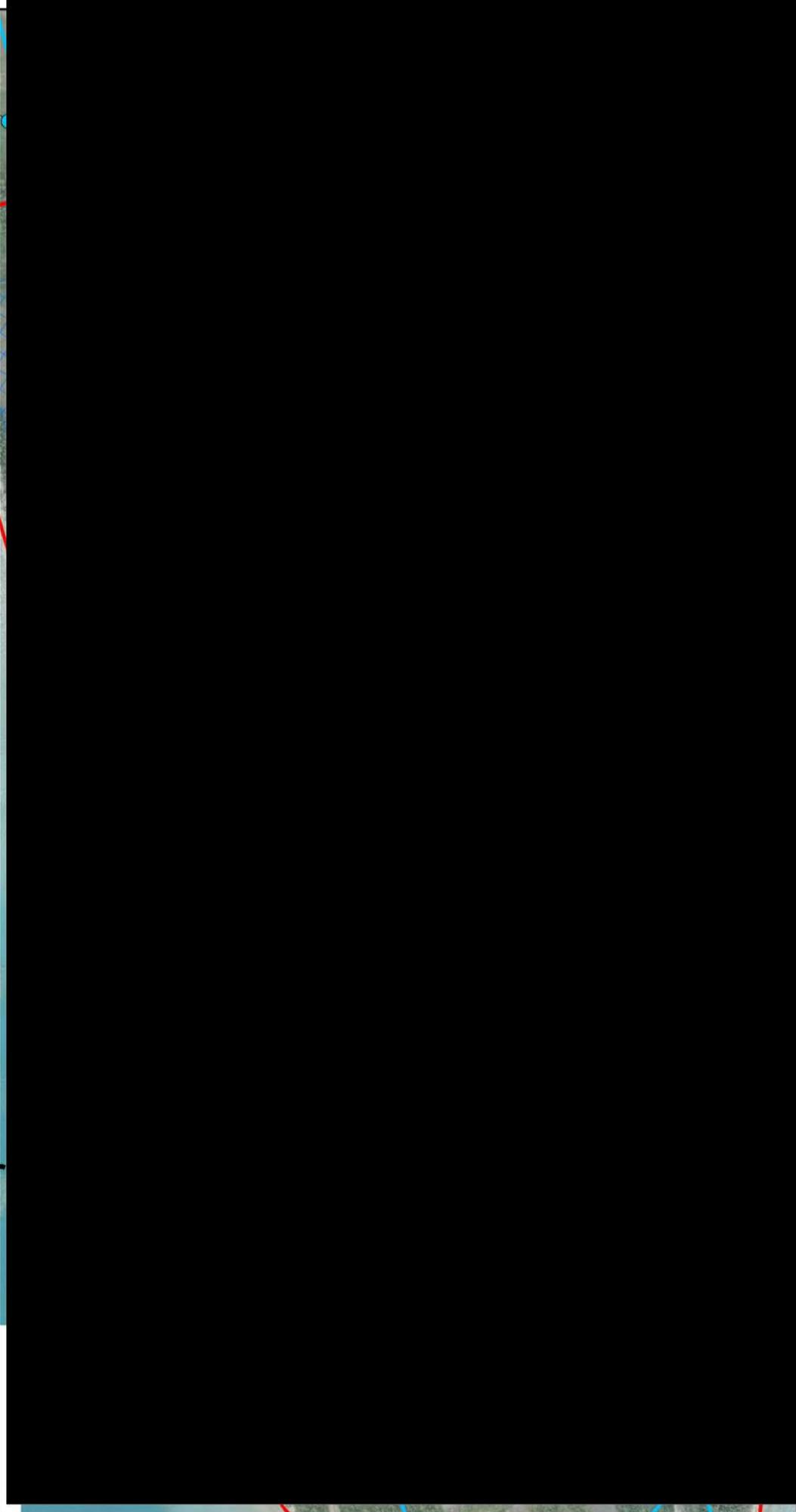




Airport Finger Area
L.F. Wade Airport
St. David's Island
Bermuda

L.F. Wade Airport St. David's Island, Bermuda 6 MW Solar Farm





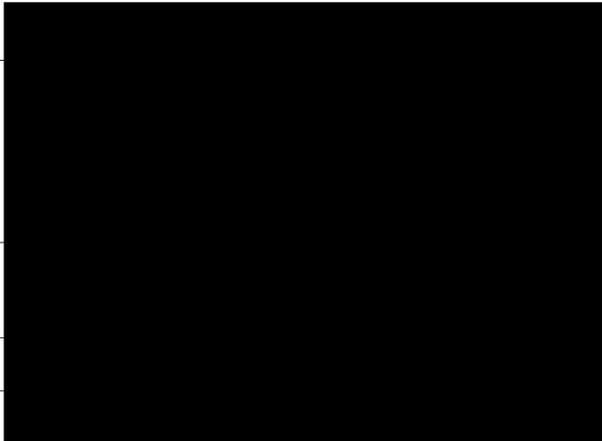
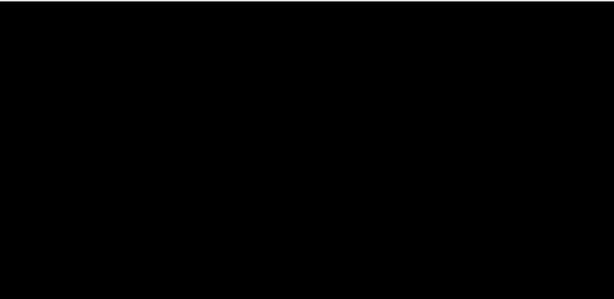
DISCLAIMER

All work shall be performed in compliance to NEC standard. Contractor responsible for verifying all dimensions. Drawings not to be reproduced or used without Saturn approval.

NOTES

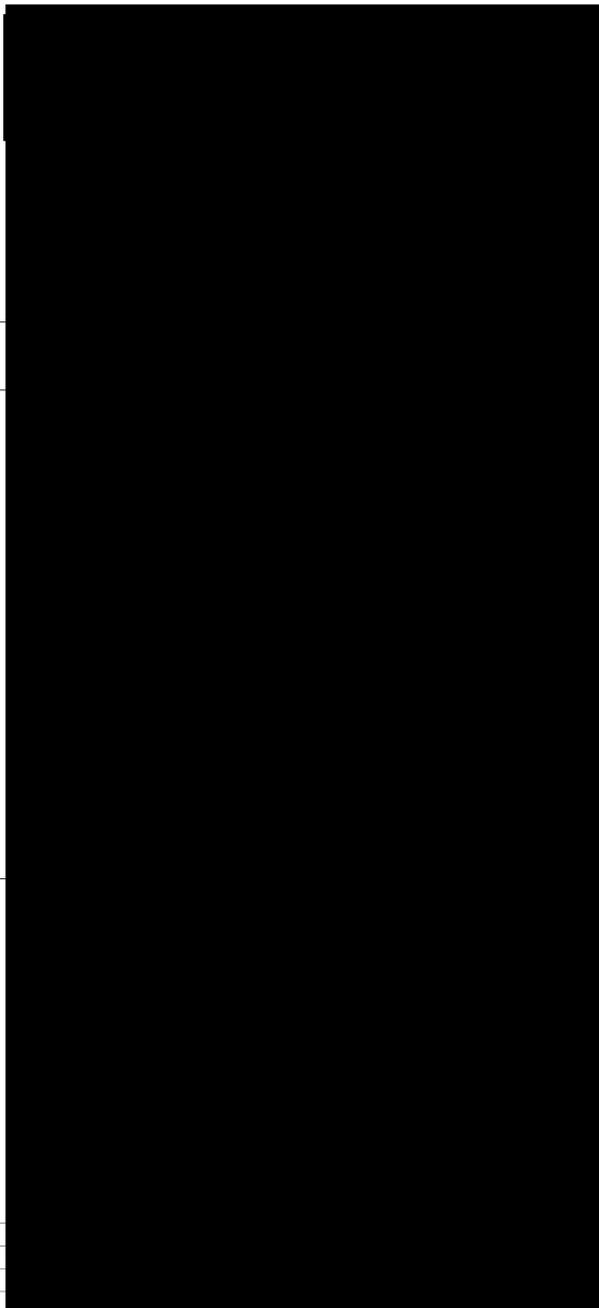
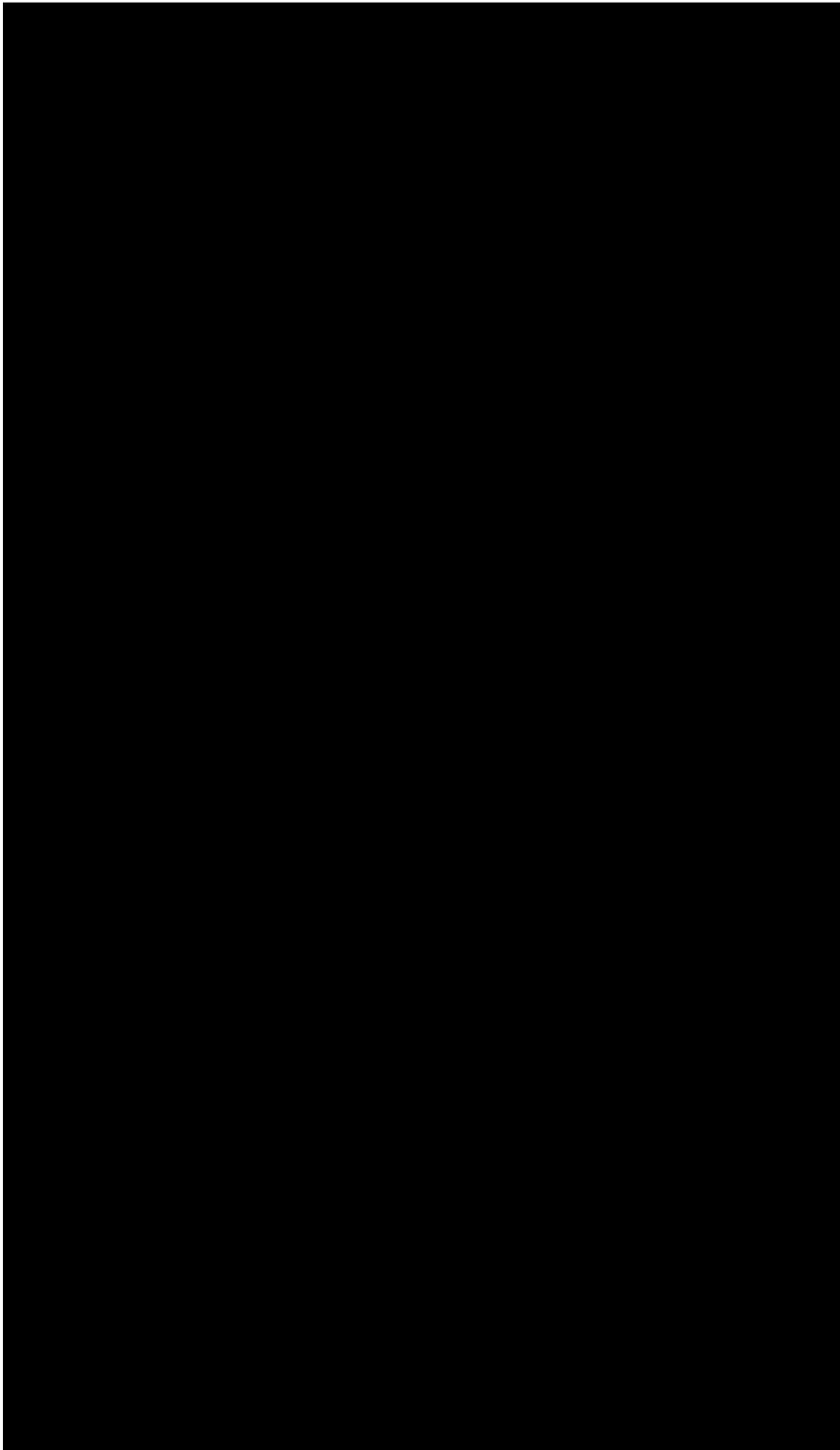
LEGEND

-  LEASED AREA
-  SECURE MUNITIONS STORAGE
-  BERMUDA FIRE AND RESCUE TRAINING AREA
-  EDGE OF LAND
-  TRANSFORMER
-  INVERTER
-  STRING
-  PANELBOARD

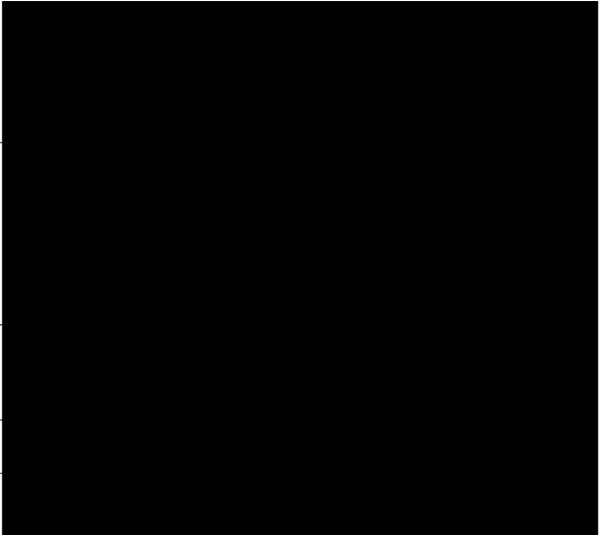


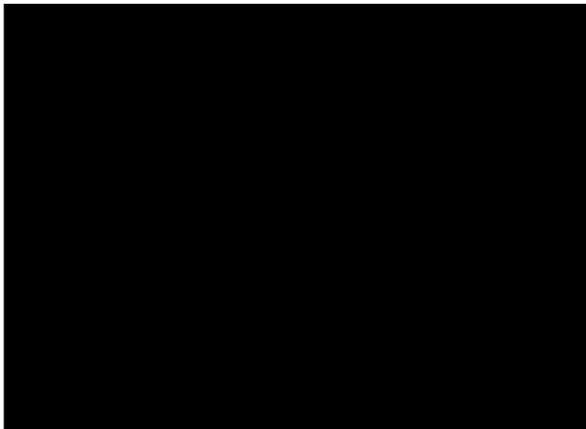
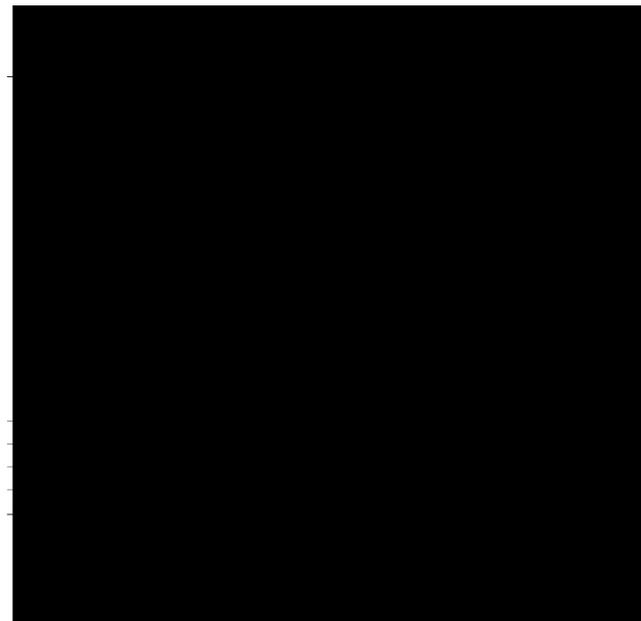
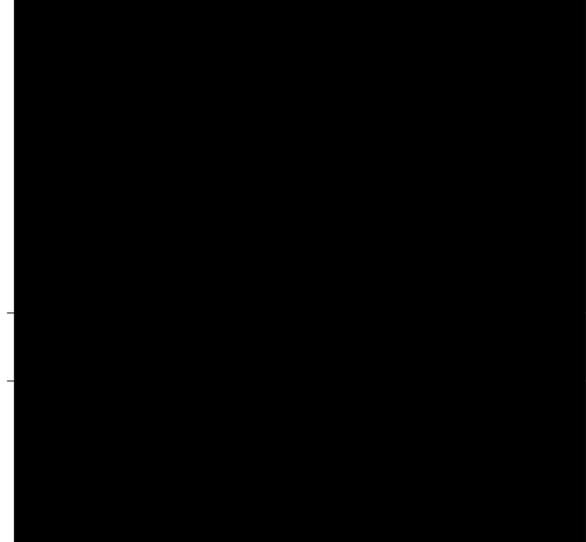
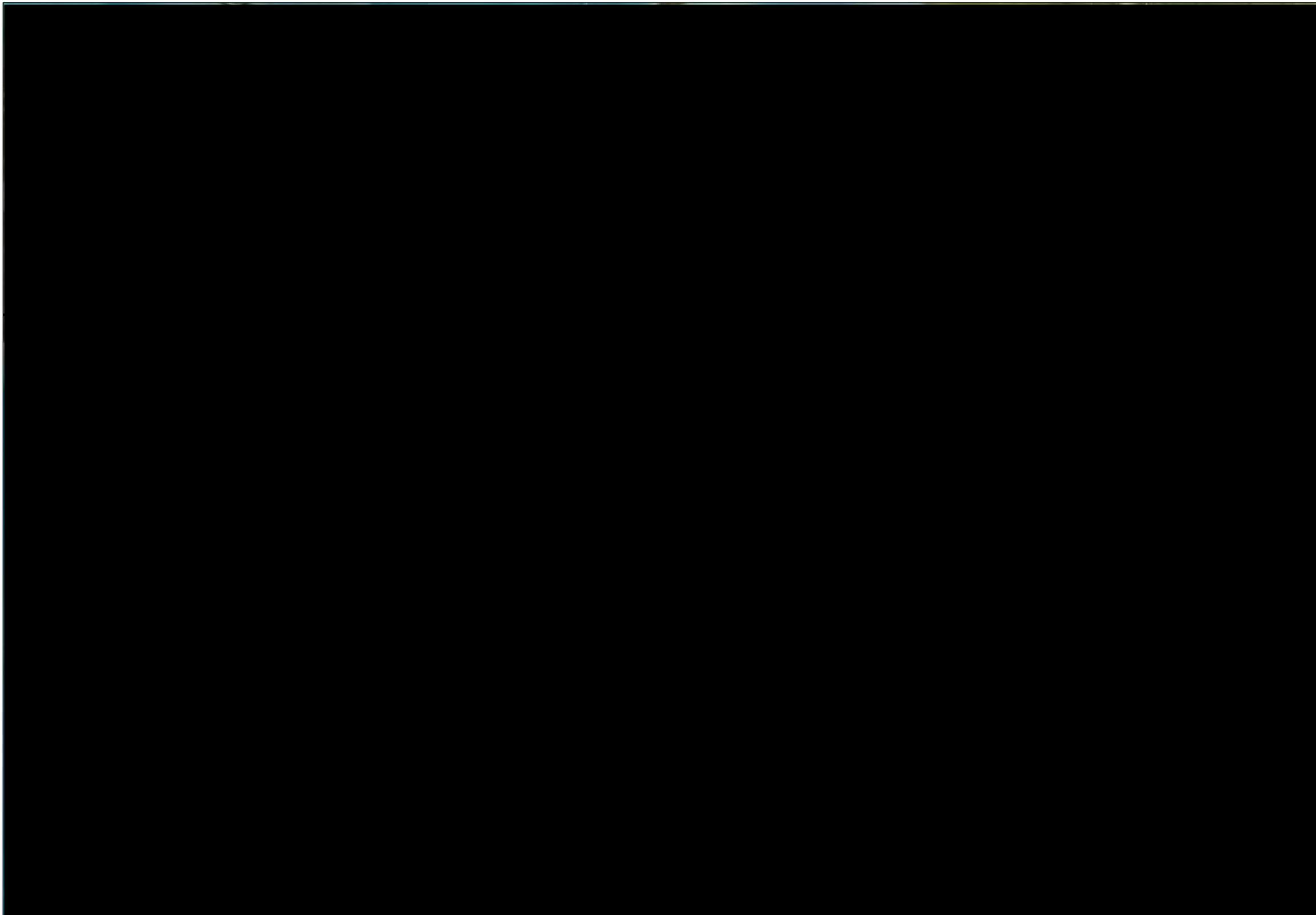


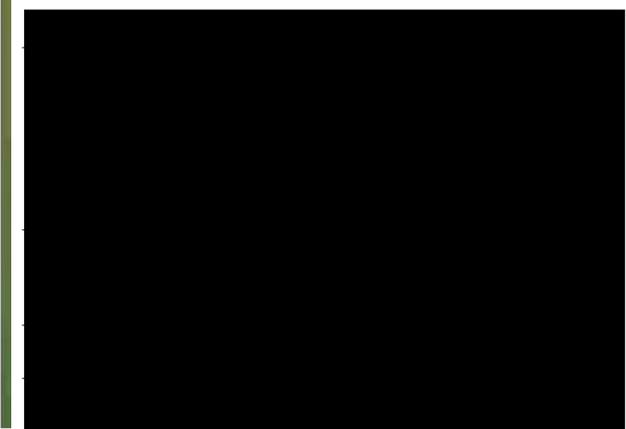
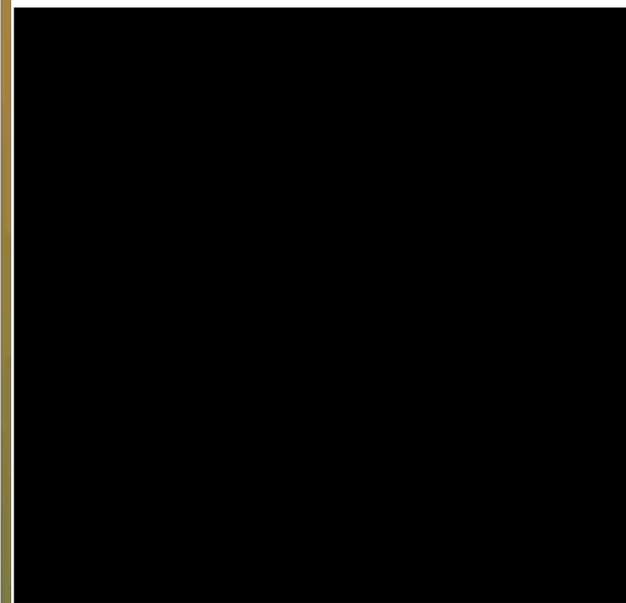
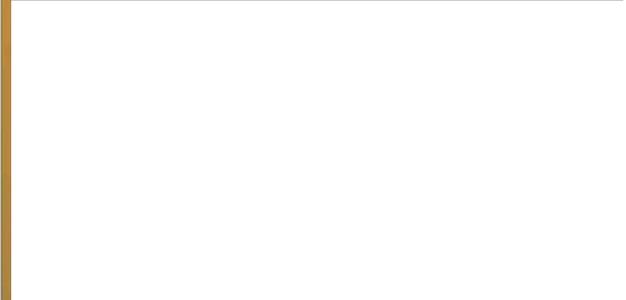
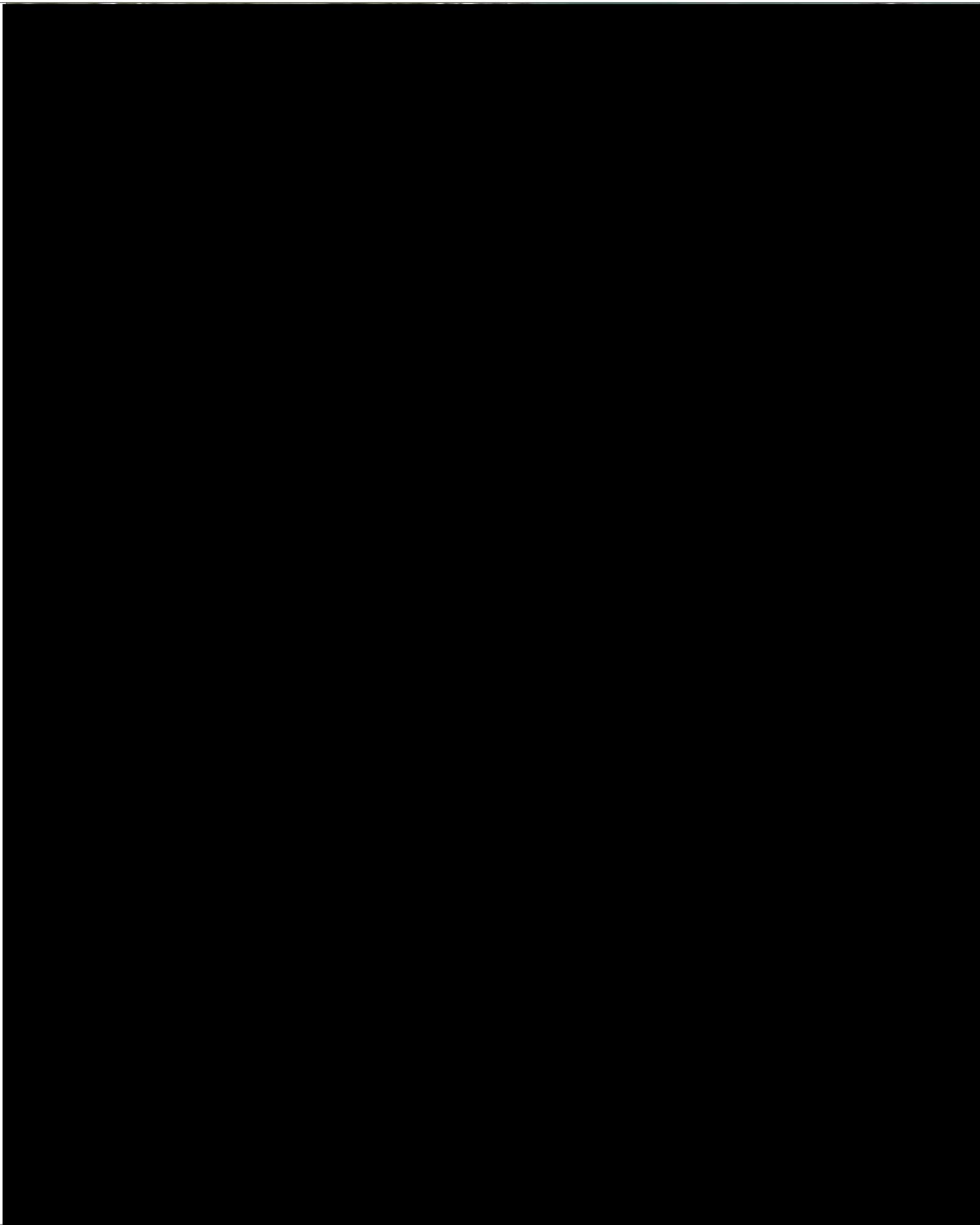
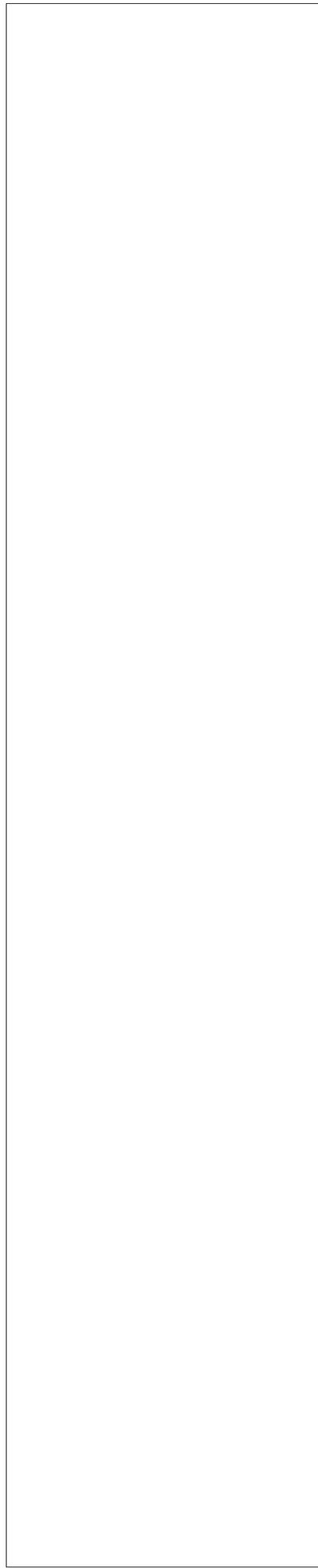
LEGEND



ENGINEER'S
SEAL







[Redacted]

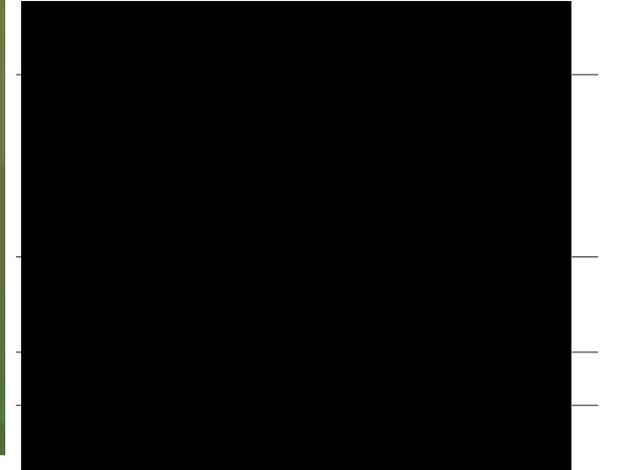
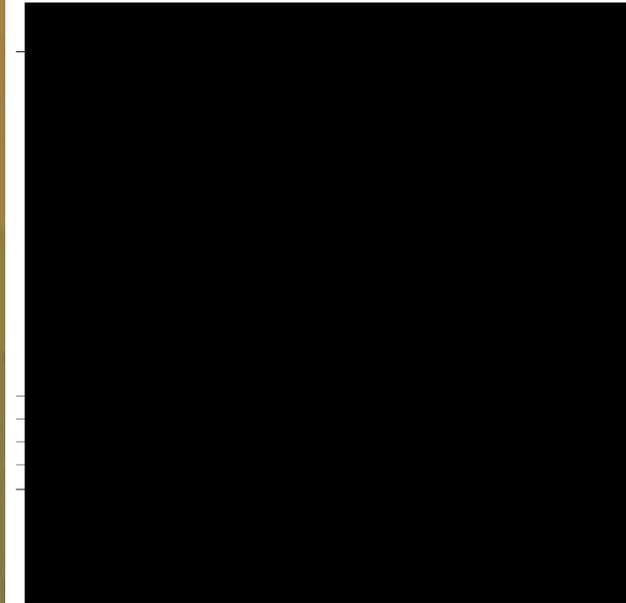
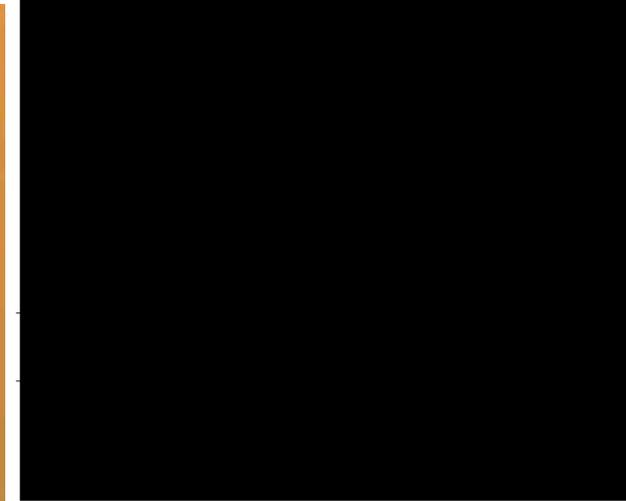
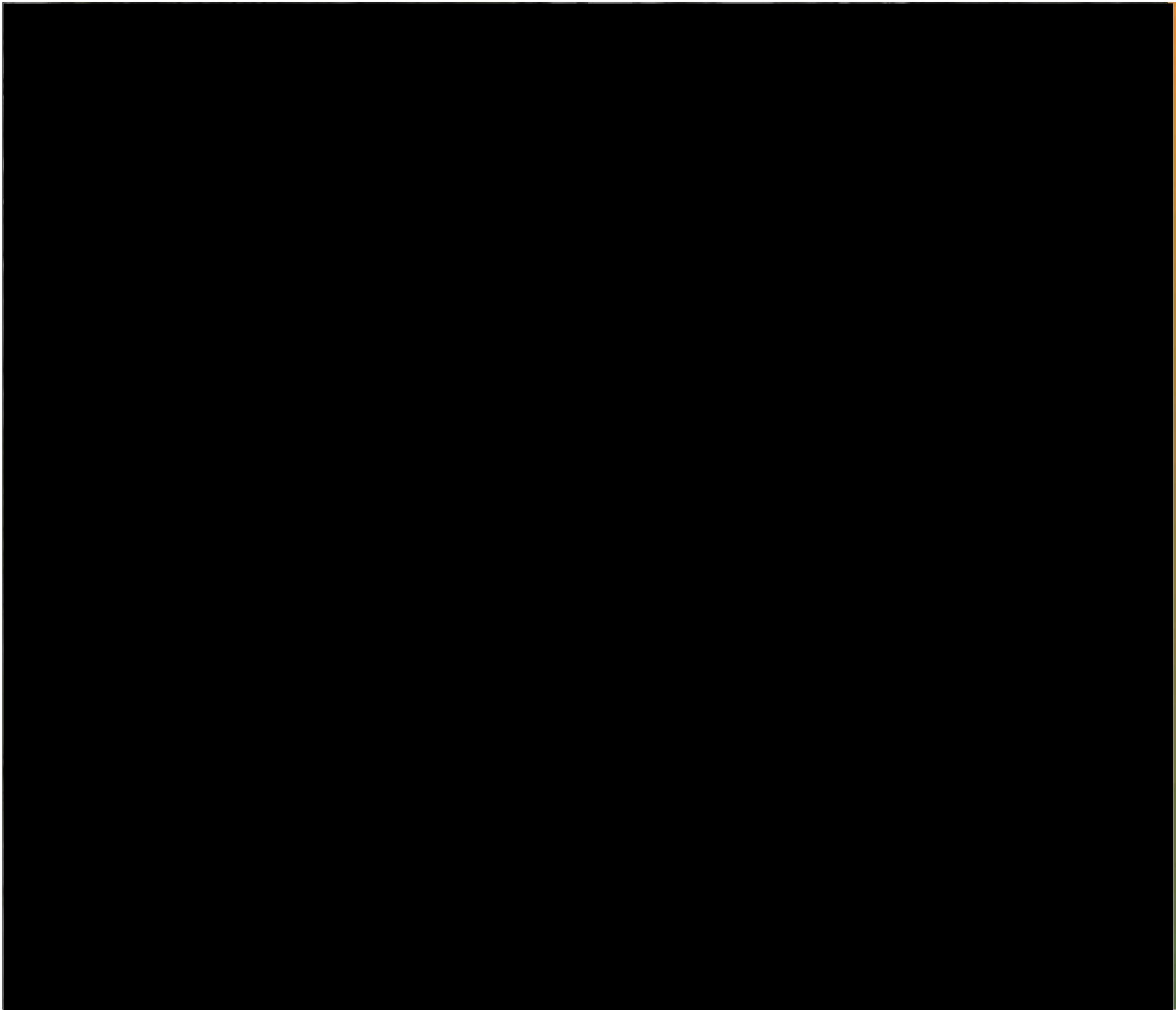
[Redacted]

[Redacted]

[Redacted]

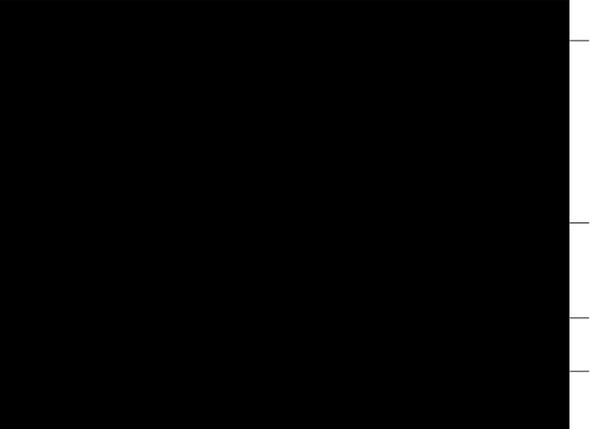
[Redacted]

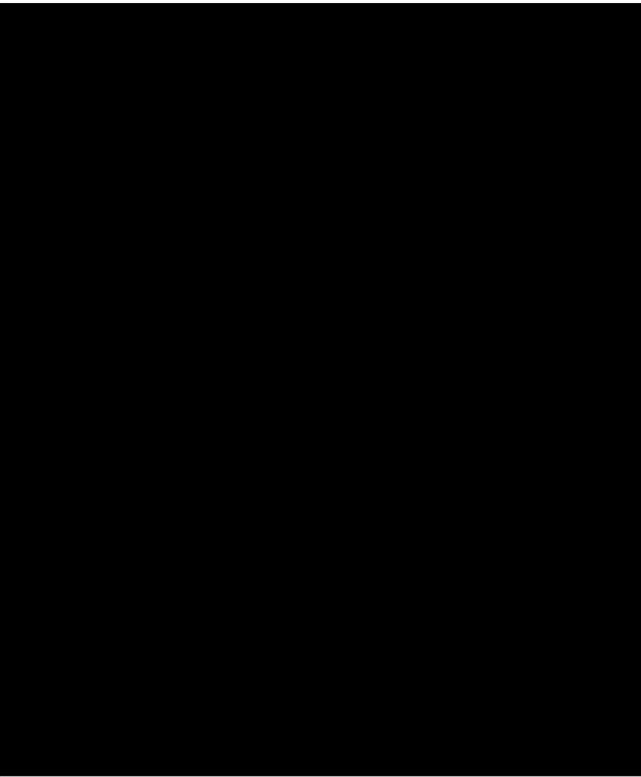
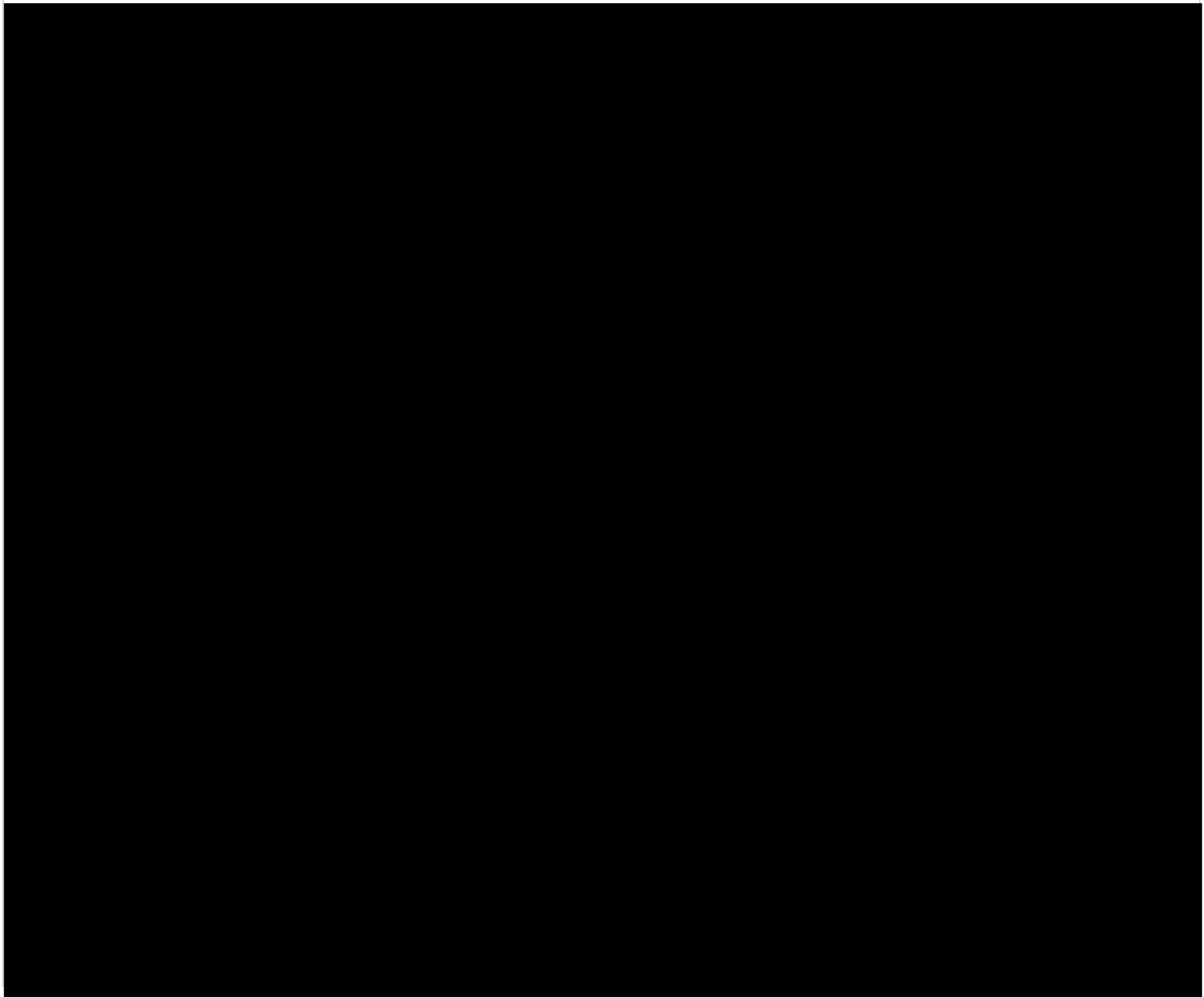
[Redacted]



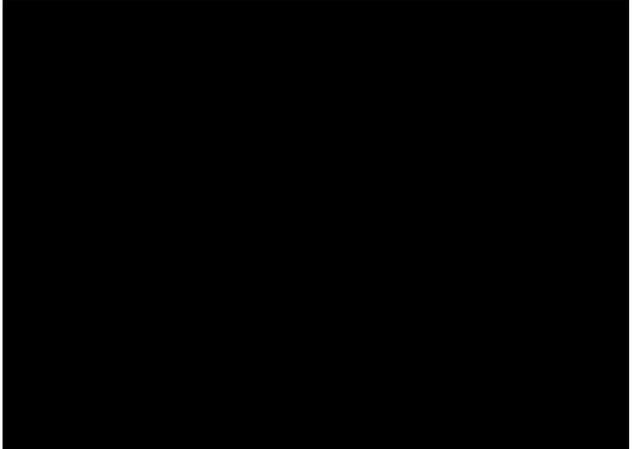
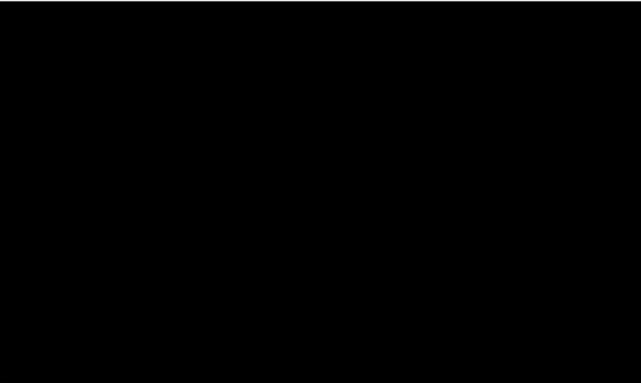


LEGEND



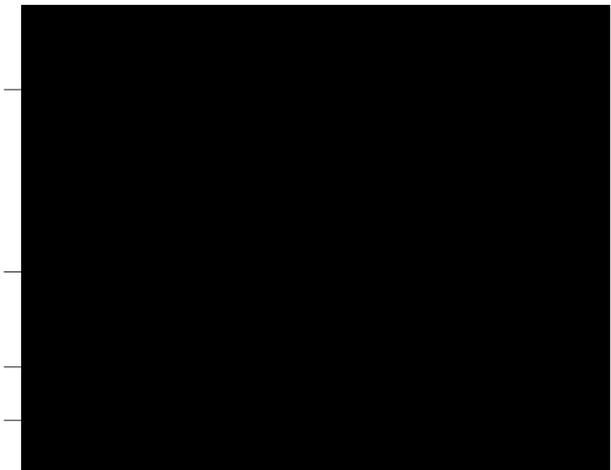
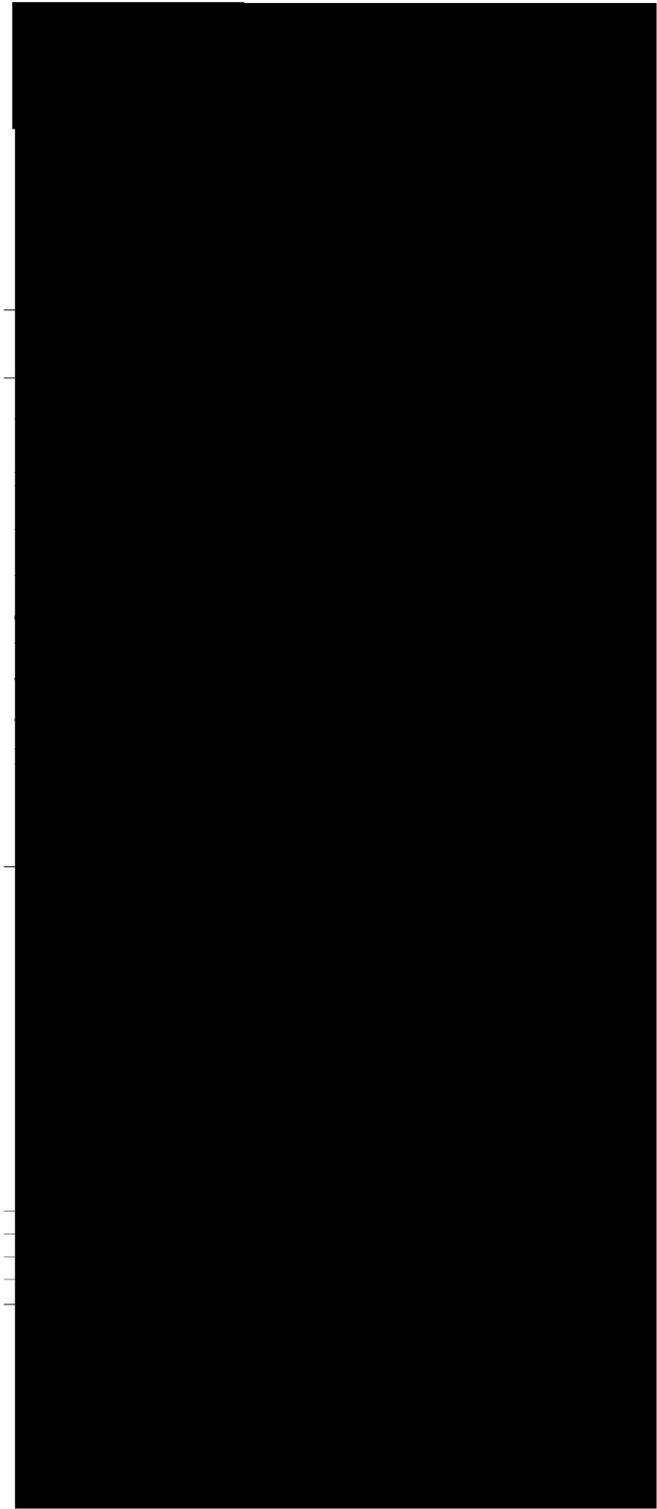
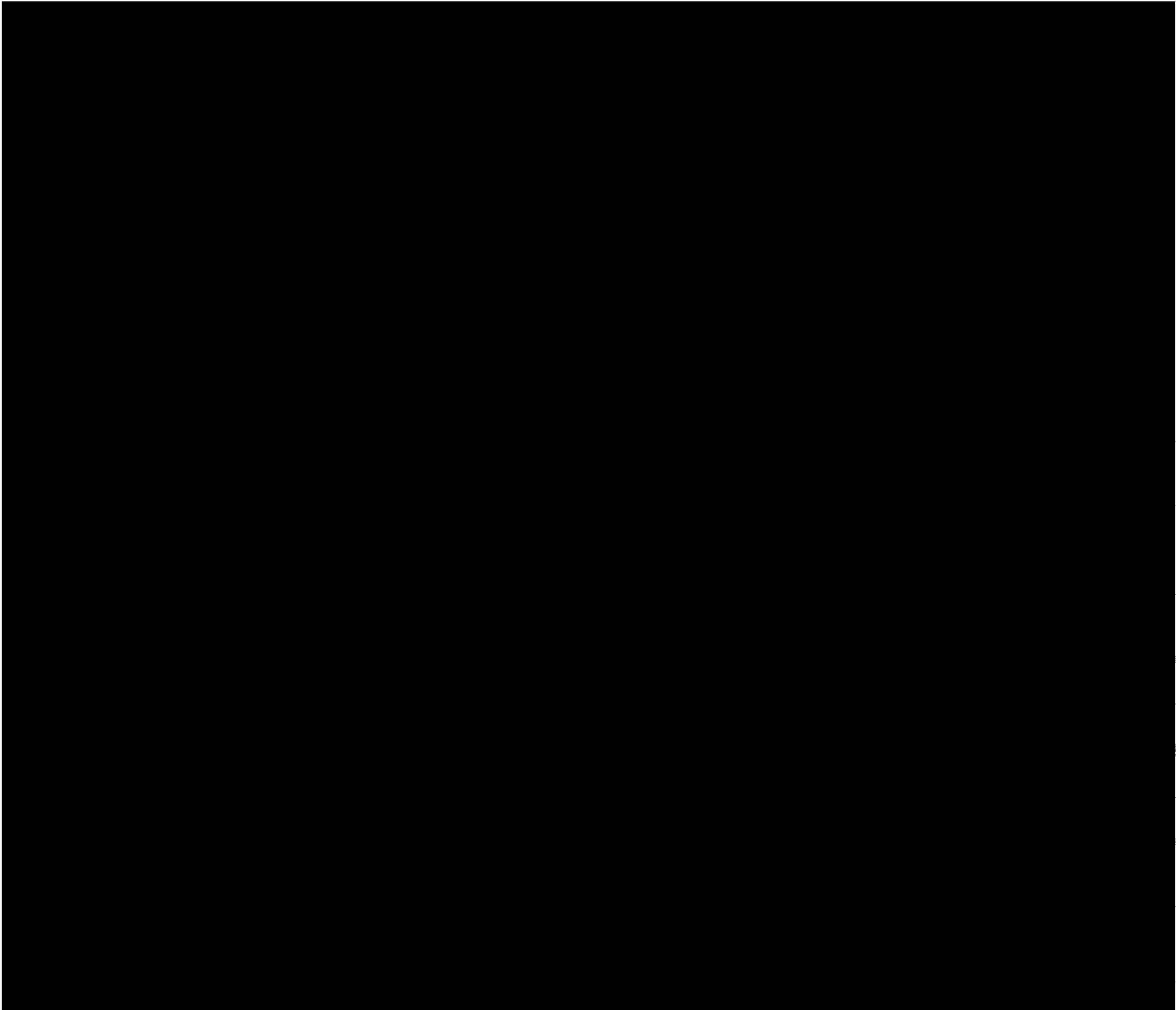


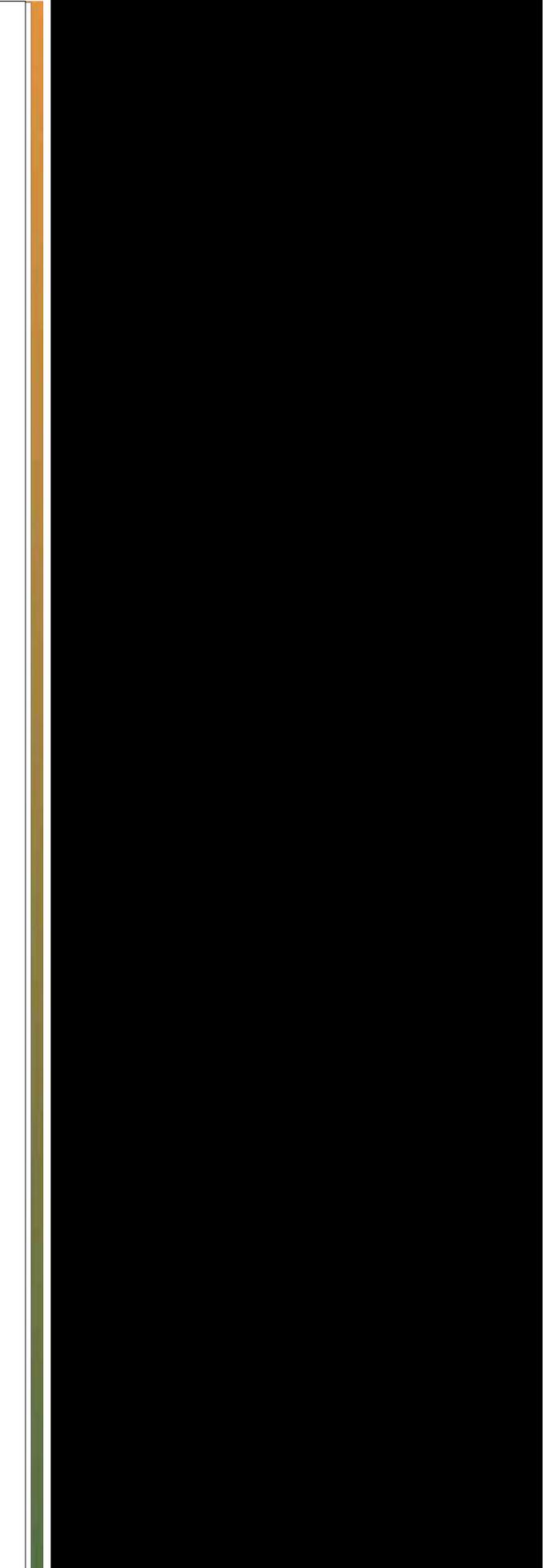
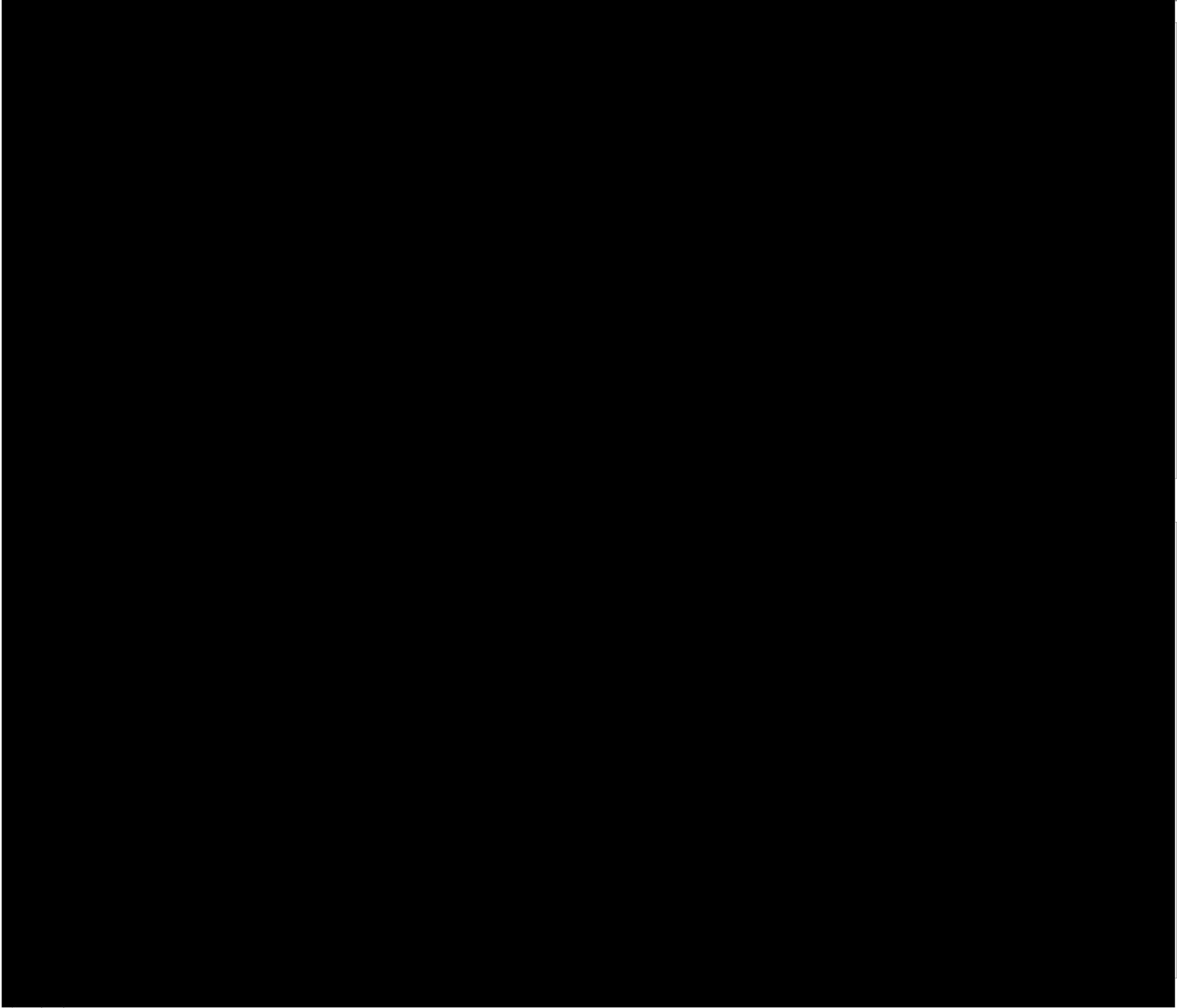
LEGEND



D Transmission Line AC Trench Detail (Typical)

SCALE: NTS









saturnpower

Project Health & Safety Program

Section 1	
HEALTH & SAFETY POLICY	
1.1	HEALTH & SAFETY POLICY
1.2	SUBSTANCE ABUSE POLICY & PROGRAM
1.3	AODA POLICY
Section 2	
WORKPLACE VIOLENCE & HARASSMENT	
2.1	WORKPLACE VIOLENCE POLICY
2.2	WORKPLACE HARASSMENT POLICY
2.3	WORKPLACE VIOLENCE & HARASSMENT PROCEDURE
2.4	WORKPLACE VIOLENCE RISK ASSESSMENT
Section 3	
HEALTH & SAFETY RESPONSIBILITIES	
3.1	CONSTRUCTOR RESPONSIBILITIES
3.2	FORM 1000
3.3	PROJECT MANAGER RESPONSIBILITIES
3.4	PROJECT MANAGER CHECKLIST
3.5	SUPERVISOR RESPONSIBILITIES
3.6	WORKER RESPONSIBILITIES
3.7	CORRECTIVE COUNSELLING POLICY
3.8	CORRECTIVE COUNSELLING FORM
Section 4	
CONTRACTOR HEALTH & SAFETY	
4.1	CONTRACTOR QUALIFICATION
4.2	CONTRACTOR QUALIFICATION PACKAGE
4.3	CONTRACTOR INFRACTION FORM
Section 5	
VISITOR HEALTH & SAFETY	
5.1	VISITORS RESPONSIBILITIES
5.2	VISITORS SIGN IN LOG
Section 6	
HAZARD REPORTING & ASSESSMENT	
6.1	HAZARD REPORTING
6.2	HAZARD REPORT FORM
6.3	HAZARD ASSESSMENT GUIDELINES
6.4	HAZARD AND RISK ASSESSMENT FORM

Section 7	
EMERGENCY RESPONSE PLAN	
7.1	EMERGENCY RESPONSE PLAN - PROJECT SITES
7.2	LIGHTNING & THUNDERSTORMS
Section 8	
INJURY, ILLNESS & INCIDENT REPORTING	
8.1	INJURY, ILLNESS & INCIDENT REPORTING
8.2	INJURY, ILLNESS & INCIDENT REPORT FORM
8.3	WORKER INJURY KIT COVER PAGE
8.4	EMPLOYEE'S REPORT OF INJURY FORM
8.5	LETTER TO HEALTH CARE PROVIDER
8.6	WSIB FUNCTIONAL ABILITIES FORM
8.7	RETURN TO WORK CASE PLAN
8.8	ACKNOWLEDGEMENT FORM
8.9	MODIFIED DUTIES OFFER LETTER
8.10	WSIB FORM 6
8.11	WSIB FORM 7
Section 9	
CRITICAL INJURY REPORTING	
9.1	CRITICAL INJURY REPORTING
9.2	CRITICAL INJURY REPORT FORM
Section 10	
INSPECTION & AUDIT	
10.1	INSPECTION & AUDIT
10.2	HOUSEKEEPING
10.3	SITE SAFETY INSPECTION CHECKLIST
10.4	FIRE EXTINGUISHER INSPECTION CHECKLIST
Section 11	
HEAT / COLD STRESS	
11.1	COLD STRESS
11.2	EXTREME COLD – PREVENTION GUIDE
11.3	HEAT STRESS
11.4	HEAT STRESS – AWARENESS GUIDE
11.5	HEAT STRESS POSTER
11.6	HEAT STRESS TOOL
Section 12	
RIGHT TO REFUSE UNSAFE WORK	
12.1	RIGHT TO REFUSE UNSAFE WORK
12.2	WORK REFUSAL FORM

Section 13	
POSTED HEALTH & SAFETY MATERIALS	
13.1	POSTED HEALTH & SAFETY MATERIALS
Section 14	
JOINT HEALTH AND SAFETY COMMITTEE	
14.1	REPRESENTATIVE AND JHSC COMPOSITION AND SELECTION
14.2	REPRESENTATIVE AND JHSC RECORD KEEPING
14.3	TERMS OF REFERENCE
14.4	REPRESENTATIVE AND JHSC MEMBER NAMES AND WORK LOCATIONS
14.5	JHSC MEETING AGENDA (AS APPLICABLE)
14.6	JHSC MEETING SCHEDULE (AS APPLICABLE)
14.7	RECOMMENDATIONS TO MANAGEMENT
14.8	RECOMMENDATIONS TO MANAGEMENT FORM
14.9	MANAGEMENT RESPONSE TO RECOMMENDATIONS
14.10	MANAGEMENT RESPONSE TO RECOMMENDATIONS FORM
Section 15	
HEALTH AND SAFETY ORIENTATION	
15.1	HEALTH AND SAFETY ORIENTATION
15.2	ORIENTATION CHECKLIST
Section 16	
WHMIS	
16.1	WHMIS
Section 17	
TRAINING	
17.1	TRAINING NEEDS REVIEW
17.2	TRAINING RECORD
17.3	PARTICIPANT EVALUATION FORM
Section 18	
FIRST AID	
18.1	FIRST AID LOG
18.2	TRANSPORTATION OF AN INJURED WORKER
18.3	FIRST AID REQUIREMENTS
Section 19	
INCIDENT INVESTIGATION	
19.1	INCIDENT INVESTIGATION
19.2	IHSA INCIDENT REPORT FORM
19.3	WITNESS STATEMENT FORM
19.4	SCENE DESCRIPTION FORM

Section 20	
EARLY AND SAFE RETURN TO WORK	
20.1	EARLY AND SAFE RETURN TO WORK
20.2	EARLY AND SAFE RETURN TO WORK CONTACT LOG
Section 21	
INTERNAL HEALTH & SAFETY COMMUNICATION	
21.1	INTERNAL HEALTH & SAFETY COMMUNICATION
21.2	SAFETY TALK PROCEDURE
21.3	SAFETY TALK FORM
Section 22	
JOB SAFETY ANALYSIS	
22.1	JOB SAFETY ANALYSIS
22.2	JOB SAFETY ANALYSIS FORM
Section 23	
TRENCHING & EXCAVATIONS	
23.1	TRENCHING & EXCAVATIONS
23.2	TRENCHING & EXCAVATIONS INSPECTION FORM
Section 24	
PERSONAL PROTECTIVE EQUIPMENT (PPE)	
24.1	PERSONAL PROTECTIVE EQUIPMENT
24.2	SITE SPECIFIC PERSONAL PROTECTIVE EQUIPMENT LIST-SOLAR
24.3	SITE SPECIFIC PERSONAL PROTECTIVE EQUIPMENT LIST-GESNER
24.4	SITE SPECIFIC PPE CHECKLIST TEMPLATE
24.5	SITE SPECIFIC WEEKLY PPE INSPECTION CHECKLIST TEMPLATE
Section 25	
FALL PROTECTION	
25.1	WORKING AT HEIGHTS
25.2	DROWNING HAZARDS
Section 26	
LADDERS AND SCAFFOLD SAFETY	
26.1	LADDERS
26.2	SCAFFOLDING
26.3	SCAFFOLD INSPECTION FORM
Section 27	
ELEVATED WORK PLATFORMS (EWP) AND FORKLIFT SAFETY	
27.1	EWP PROCEDURE
27.2	LIFTING DEVICES

Section 28	
CONFINED SPACE	
28.1	CONFINED SPACE
28.2	CONFINED SPACE ASSESSMENT
28.3	CONFINED SPACE ENTRY PERMIT
28.4	CONFINED SPACE ENTRY LOG
Section 29	
ELECTRICAL SAFETY	
29.1	LIVE ELECTRICAL WORK PROCEDURE
29.2	NFPA 70E COMPLIANCE GUIDE
29.3	LIVE ELECTRICAL WORK PERMIT
29.4	LOCK OUT
29.5	LOCK OUT LOG
Section 30	
HOT WORK	
30.1	HOT WORK PROCEDURE
30.2	HOT WORK PERMIT
Section 31	
WASHROOM FACILITIES	
31.1	WASHROOM FACILITIES
Section 32	
SIGNAGE	
32.1	SIGNAGE
32.2	SIGNS
APPENDIX A	
TRAFFIC CONTROL PLAN	
APPENDIX B	
VEHICLE INSPECTION CHECKLIST	



HEALTH & SAFETY POLICY

Title: HEALTH & SAFETY POLICY	Issue Date: September 2016
Project Safety Program Section: 1.1	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

HEALTH & SAFETY POLICY

At **Saturn Power Inc.**, we place the utmost importance on the health, safety and well-being of our Employees and others who may be affected by our work. A major ongoing objective is to protect employees from workplace injury or illness. We are committed to preventing occupational illness and injury and will make every effort to provide a healthy and safe work environment.

To fulfill this commitment:

- We will comply with all legislated requirements and follow industry best practices.
- We will provide and maintain a safe and healthy work environment.
- We will strive to eliminate any foreseeable hazards which may result in damage to property and personal injuries or illnesses to our Employees, Contractors, Delivery Persons, and Visitors.
- All Managers will comply with legislative requirements and our Health and Safety Program requirements.
- All Supervisors will comply with legislated requirements, our Health and Safety Program requirements, and will ensure that safe and healthy work conditions are maintained within their assigned work area(s).
- Every Employee is required to report all unsafe and unhealthy conditions.
- Employees will comply with legislated requirements, our Health and Safety Program requirements, as well as our Safe Work Procedures and Practices.

It is in the best interest of all workplace parties to consider health and safety in every activity. Commitment to health and safety must form an integral part of this Company, from top to bottom.

In addition, it is also the responsibility of all Contractors and Sub-Contractors and their associated Employees / Representatives to implement safe working practices in accordance with their own Health and Safety Policies and that of **Saturn Power Inc.**

As an Employer Saturn Power Inc. is ultimately responsible for employee health and safety. As President and Vice President/General Manager, we are committed to taking every reasonable precaution to protect Employees and colleagues from harm.

Sincerely,

Doug Wagner,
President

Ray Roth,
Vice President and General Manager

Jeremy Goertz
Vice President Construction/
Business Development



SUBSTANCE ABUSE POLICY & PROGRAM

Title: SUBSTANCE ABUSE POLICY & PROGRAM		Issue Date: September 2016
Project Safety Program Section: 1.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

SUBSTANCE ABUSE POLICY & PROGRAM

As a responsible Employer, **Saturn Power Inc.** has a compelling interest to establish programs and to promote and enhance safety in the workplace. **Saturn Power Inc.** has implemented this policy, directed at protecting the workplace environment and the health and safety of Employees, Contractors, Delivery Persons, Visitors and the general public. This policy combines drug and alcohol testing with education, supervisor training and access to assistance.

All **Saturn Power Inc.** Employees are expected to be fit for duty when reporting to work and must remain fit for the duration of the workday. This means that Employees must not be impaired by alcohol or illegal drugs. In the occurrence that an Employee is taking prescription drugs prescribed by their doctor, the drugs must not inhibit their ability to perform their job functions.

Furthermore, Employees may not have alcohol (except where permitted by this policy), illegal drugs or have drug paraphernalia in the workplace. One objective of this policy for our Employees is to minimize the risks associated with work performance in safety sensitive positions.

This policy requires drug and alcohol testing under certain conditions and restrictions regarding the use and / or possession of alcohol, drugs and prescription or over-the-counter medications, while on company sites.

If an Employee is in need of treatment, **Saturn Power Inc.** will assist in setting up a treatment plan in collaboration with the substance abusers family doctor and such local substance abuse clinics as Addiction Research Foundation (1-800-463-6273), or Ontario Drug and Alcohol Registry of Treatment (1-800-565-8603).

(For the purposes of this policy, "Employee" is defined as: anyone employed by **Saturn Power Inc.**, its subsidiaries, or affiliates (whether full-time, part-time or limited term). "Company Property" is defined as: any building, grounds or structures owned, leased or rented to **Saturn Power Inc.**, including company vehicles and / or vehicles leased or rented for business purposes).

Sincerely,

Doug Wagner,
President

Ray Roth,
Vice President and General Manager

Jeremy Goertz
Vice President Construction/
Business Development

Testing Options (Drug and Alcohol)

This policy allows for drug and / or alcohol testing as follows:

1. *Post-Accident* – Drug and alcohol testing may be required after an accident or incident. If testing is required pursuant to this clause, drug testing shall be conducted within 32 hours of the accident or incident and alcohol testing within 2 hours with attempts to test for up to 8 hours. If unable to test, reasons will be documented.
2. *Reasonable Cause Testing* – With the consent and approval of Management, an Employee in a safety sensitive position will be tested for alcohol and / or drug use where a company Supervisor or other official makes observations which form a reasonable basis for suspecting that the Employee is in breach of this policy.

Such observations must be documented, specific and clearly recorded concerning the appearance, speech or body odours of the Employee. The observations may include indications of chronic and withdrawal effects of drug and / or alcohol use. Observations which may lead to reasonable cause testing may include, but are not limited to, one or more of the following:

- Odour of alcoholic beverage on breath;
 - Slurred speech;
 - Glassy eyes;
 - Unsteadiness in walking, standing;
 - Flushed face;
 - Disoriented and / or drowsy;
 - Accidents, injuries, serious near misses;
 - Repeated errors in job performance; and / or,
 - Excessive absenteeism or lateness.
3. *Return to Duty* – Before returning to duty, an Employee who is returning to work after an assessment by a Substance Abuse Professional, herein referred to as Professional, must successfully pass a drug and / or alcohol test.
 4. *Follow up Testing* - As part of **Saturn Power Inc.** accommodation and rehabilitation efforts, and when a Professional identifies the need, an Employee will be required to submit to follow-up drug and / or alcohol testing. The Professional will determine the frequency of testing and the time period involved.

Collections of Specimens and Analysis

A designated drug testing company will collect and process urine specimens for drug testing. All testing must meet or exceed the accepted industry guidelines and standards. The drugs tested for include: marijuana, cocaine, amphetamines, opiates and phencyclidine.

Following proper chain of custody procedures, the drug testing company will forward the sample to an accredited laboratory. The laboratory will perform required testing with test results forwarded to a Medical Review Officer.



SUBSTANCE ABUSE POLICY & PROGRAM

Alcohol screen testing may be conducted using an approved saliva tester or breath test. Alcohol breath tests will be confirmed with an approved Evidential Breath Testing Device.

Prohibitions

Alcohol Use

1. *Alcohol Concentration* - No Employee shall report for duty or remain on duty for a safety sensitive function, while having a confirmed alcohol concentration. No Supervisor who knows, or has reasonable grounds (based on observation) to believe that an Employee has a confirmed alcohol concentration, shall permit the person to perform or continue to perform his or her duties.
2. *On Duty Use* - No Employee shall consume alcohol while performing any safety sensitive function. No Supervisor having actual knowledge that an Employee is consuming alcohol, while performing a safety sensitive function, shall permit that person to perform his or her duties.
3. *Pre-Duty Consumption* - No Employee, having a blood alcohol level of any amount, shall perform a safety sensitive function. No Supervisor having actual knowledge that an Employee has consumed alcohol and has or is likely to have a blood alcohol level and is performing a safety sensitive function shall permit that Employee to perform or continue to perform a safety sensitive function.
4. *Use Following an Accident* - No Employee required to take a post-accident alcohol test shall use alcohol for eight hours following an accident, or until he or she undergoes a post-accident alcohol test, whichever occurs first

Drug Use

1. *Drug Use on Duty* - No Employee shall report for duty or remain on duty for a safety sensitive function having used any drug, except when the use of the drug is pursuant to the instructions of a licensed Medical Practitioner. The Medical Practitioner must have confirmed that the drug will not adversely affect the Employee's ability to work safely at the job site. If a licensed Medical Practitioner advises the Employee that the substance will affect his or her ability to work in a safety sensitive position, the Employee will notify his or her Supervisor.
2. *Supervisor Having Knowledge* - No Supervisor having actual knowledge or a reasonable belief that an Employee has used a drug, shall permit the person to perform or continue to perform a safety sensitive function, except when the use is pursuant to the instructions of a licensed Medical Practitioner. The licensed Medical Practitioner must have advised the Employee that the substance will not adversely affect the Employee's ability to work at the job site.
3. *Prescription Medication* - No Employee will intentionally misuse prescription or over-the-counter medications in such a manner as to render him or her unfit to safely perform their duties.

Refusal to Test

No Employee shall refuse to submit to a test as required by this policy. No Supervisor shall permit an Employee who refuses to submit for required testing to perform or continue to perform safety sensitive functions.

An Employee who refuses to submit to a required test will be relieved of his or her duties; and may be referred to a substance abuse program for assessment and may face disciplinary action. Any Employee, who tampers or attempts to tamper with a test sample or obstructs the testing process, will face disciplinary action.

Possession or Use of Drugs and / or Alcohol

Possession, use or offering for sale of alcohol, drugs or drug paraphernalia on company property, or in company vehicles, is prohibited.

Fitness for duty standards require that an Employee be capable of performing work functions in a safe and efficient manner.

Positive Test Procedures

1. *Alcohol Concentration* - Employees with a confirmed alcohol concentration of any amount will be removed from duty immediately and will not be allowed to return to work until the following shift. The Employee may be subject to disciplinary action.
2. *Positive Drug Test or Alcohol Concentration* - Employees who test positive on drug tests or who have a confirmed alcohol concentration, will be removed immediately from duty and suspended with pay for up to three business days.

Within the three business days, the Employee will be required to attend a meeting with their Supervisors and appropriate Management representative. Each case will be reviewed and Employees may be provided with written correspondence of the resources available in evaluating and resolving problems associated with the misuse of alcohol and / or drugs, including the names, addresses and telephone numbers of Professionals and Employee Assistance Program (EAP) providers, based on the outcome of the investigation.

Where practical, Management will endeavour to meet or contact the Employee the next working day and provide direction regarding the suspension and return to work choices.

Any Employee who is removed / suspended from duty having a positive drug test result and / or a confirmed alcohol concentration shall be evaluated by a Professional who shall determine what assistance, if any, the Employee needs in resolving substance abuse issues.

3. *No Dependencies Identified* - Where the Professional determines that there is not an alcohol or drug dependency problem, the Employee may return to work but will still be subject to disciplinary actions, which may include suspension or termination.

4. *Disciplinary Actions* - In order for this policy to be effective in ensuring that Employees perform their safety sensitive functions unimpaired by alcohol or drugs, the provisions of this policy must be enforced. Accordingly, when an Employee violates any provision(s) of this policy, the Employee may be subject to disciplinary action, as appropriate, up to and including discharge.
5. *Supervisors* - All supervisory personnel are required to take appropriate action to enforce this policy where they believe a violation has occurred. Failure to do so will result in disciplinary action up to and including termination.

Return To Work After a Positive Test

An Employee cannot be returned to safety sensitive duties until he or she has been evaluated by a Professional, complied with recommended rehabilitation and has a negative result on a return to duty test and / or a breath alcohol concentration.

The Professional must provide a written report verifying the evaluation and any required treatment or provide a release document for the required information. The Employee will present this report to Management for confidential filing as part of the requirement to return to duty.

Follow-up testing will be conducted to monitor the returning Employee for no less than one year. The frequency of testing will be determined by **Saturn Power Inc.** in consultation with the Professional and will be designed to assist the Employee in remaining alcohol and / or drug free at the work site.

Confidentiality and Record Keeping

All drug test results are confidential and are released by the testing company to **Saturn Power Inc.**

Confidential information from a Professional will be handled in a similar manner. All records will be maintained in a locked and secured manner and will be maintained in the Employee's medical record files. Records will be kept separate from personnel files. Negative test results will be maintained for no less than two years with positive test results and Professional assessments maintained for a five-year period.

Definitions

Accredited Laboratory – Meets guidelines and standards of the Substance Abuse and Mental Health Services Administration, which is the certifying agency for forensic urine drug testing laboratories in Canada.

Alcohol – The intoxicating agent in beverage alcohol, ethyl alcohol or other low molecular weight alcohols including methyl or isopropyl alcohol. Results of a breath alcohol analysis are expressed in terms of weight to volume, weight of alcohol (expressed in grams) per volume of breath (210 liters). Evidential breath alcohol-testing devices screen at the 0.02 level.

Chain of Custody – The process of documenting the handling of a specimen from the time a donor gives the specimen to the collector, during the testing at the laboratory and until the results are reported by the laboratory.

Collector – Non-medical and medical personnel contracted by an agency who have received training in collecting urine samples in accordance with guidelines that would be acceptable to the regulatory agencies.

Drug – Any substance other than food, which is taken to change the way the body or mind functions.

Evidential Breath Testing Device (EBT) – Is capable of measuring the alcohol content of deep lung breath samples, with sufficient accuracy, for evidential purposes.

Safety Sensitive Position / Function - A position or function where safety is a bona fide occupational requirement of the job i.e. Where safety is necessary to ensure the efficient and economical performance of the job without endangering the Employee, fellow Employees or the general public. Includes positions or functions where there is limited or no supervision to provide frequent operational checks.

The Health and Safety Representative and / or Management shall develop a list of “**Safety Sensitive**” and “**Non Safety Sensitive**” positions / functions.

Examples of Safety Sensitive positions / functions may include, but are not limited to, when an Employee:

- Works at heights;
- Works in or around confined spaces;
- Operating mobile equipment;
- Works with or around hazardous materials as defined in WHMIS; and / or
- Works in, on or around machinery, equipment or vehicles.

Significant Incident – Incidents involving a fatality, disabling injury, significant property damage or an event or near miss that could have given rise to a significant incident.

Substance Abuse Professional – A licensed Physician (Medical Doctor or Doctor of Osteopathy), licensed or certified Psychologist, Social Worker, EAP, or an Addictions Counsellor. All must have knowledge of and clinical experience in the diagnosis and treatment of alcohol, drugs and related disorders.



AODA POLICY

Title: AODA POLICY	Issue Date: September 2016
Project Safety Program Section: 1.3	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

AODA POLICY

In accordance with the Accessibility for Ontarians with Disabilities Act (AODA), **Saturn Power Inc.** is committed to working to improve access and opportunities for customers with disabilities.

In fulfilling this commitment, we will strive to identify, remove and prevent barriers that might interfere with our ability to serve all customers, including those with disabilities.

We endeavor to serve our customers in a manner that reflects the principles of dignity, independence, integration and equal opportunity. Our commitment is to provide all customers including those living with disabilities the same opportunity to benefit from our goods and services.

All Management (including Senior Managers and Supervisors) functions will comply with **Saturn Power Inc.'s** Accessibility of Ontarians with Disability Program requirements.

This policy responds to the needs of all who require our services and also applies to all Employees of **Saturn Power Inc.**

Sincerely,

Doug Wagner,
President

Ray Roth,
Vice President and General Manager

Jeremy Goertz
Vice President Construction/
Business Development



WORKPLACE HARASSMENT POLICY

Title: WORKPLACE HARASSMENT POLICY	Issue Date: September 2016
Project Safety Program Section: 2.2	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

WORKPLACE HARASSMENT POLICY

The management of **Saturn Power Inc.** is committed to providing a workplace free of harassment, including sexual harassment where all individuals are treated with respect and dignity.

Workplace harassment will not be tolerated from any person in the workplace. Everyone in the workplace must be dedicated to preventing workplace harassment. Managers, Supervisors, and Employees are expected to uphold this policy, and will be held accountable by the Employer.

Workplace harassment means engaging in a course of vexatious comment or conduct against a worker, in a workplace, that is known or ought reasonably to be known to be unwelcome. Harassment may also relate to a form of discrimination as set out in the *Ontario Human Rights Code*, but it does not have to.

This policy is not intended to limit or constrain the reasonable exercise of Management functions in the workplace.

Employees are encouraged to report any incidents of workplace harassment. Management will investigate and deal with all concerns, complaints, or incidents of workplace harassment in a timely and fair manner while respecting Employees' privacy, to the extent possible.

Nothing in this policy prevents or discourages a worker from filing an application with the *Ontario Human Rights Tribunal* on a matter related to the *Ontario Human Rights Code* within one year of the last alleged incident. An Employee also retains the right to exercise any other legal avenues available.

Sincerely,

Doug Wagner,
President

Ray Roth,
Vice President and General Manager

Jeremy Goertz
Vice President Construction/
Business Development

The workplace violence policy should be consulted whenever there are concerns about violence in the workplace.



WORKPLACE VIOLENCE & HARASSMENT PROCEDURE

Title: WORKPLACE VIOLENCE & HARASSMENT PROCEDURE		Issue Date: September 2016
Project Safety Program Section: 2.3		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

WORKPLACE VIOLENCE & HARASSMENT PROCEDURE

1.0 PURPOSE

To address the awareness, prevention and investigation of workplace violence and workplace harassment.

2.0 SCOPE

This procedure applies to all **Saturn Power Inc.** Employees, Contractors, Delivery Persons and Visitors. It applies to activities on Company premises, as well as activities off of Company premises but for **Saturn Power Inc.** business.

3.0 DEFINITIONS

Workplace Harassment – Means engaging in a course of vexatious comment or conduct against a Worker in a workplace, as well as behaviour that is known or ought reasonably to be known to be unwelcome.

Harassment on the following basis is prohibited: Race, Ancestry, place of origin, colour, ethnic origin, citizenship, disability, creed, sex, sexual orientation, marital status, family status, age, or record of offence. Harassment in any form – physical, psychological, verbal or sexual – is prohibited.

Behaviour which can constitute harassment includes, but is not limited to, the following:

- Written or verbal insults;
- Physical or verbal abuse;
- Derogatory or inappropriate jokes, teasing, insults, taunting or slurs;
- Unwanted remarks or comments on a person's mannerisms or body;
- Practical jokes that cause embarrassment or endanger an Employee's safety;
- Behaviour that undermines or sabotages the Employee's job performance;
- Behaviour that threatens the livelihood of the Employee; and / or,
- Behaviour, conduct, comments or activities not directed specifically at an individual, but which nonetheless create a degrading, offensive, "poisoned" work environment. It may include, but is not limited to:
 - Circulating or displaying sexually explicit, racist or derogatory pictures, graffiti or other offensive materials; and / or,
 - Patronizing behaviour, language or terminology that reinforces stereotypes and undermines self-respect or adversely affects work performance or conditions.

Workplace harassment does not include legitimate, reasonable management actions that are part of the normal work functions, which may include, but is not limited to:

- Appropriate direction, delegation or discipline administered by a member of Management or a Management designate;
- Relationship of mutual consent or mutual flirtation;
- Stressful events encountered in the performance of legitimate job duties; and / or,
- Occasional disagreements or personality conflicts.

Workplace Violence – Means attempting to, or exercising, physical force by a person against an Employee in a workplace that causes or could cause physical injury; or a statement or behaviour that is reasonably interpreted as a threat to exercise physical force that could cause physical injury to an Employee.

Workplace Sexual Harassment – Means engaging in a course of vexatious comment or conduct against a worker in a workplace because of sex, sexual orientation, gender identity or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome. It also includes making a sexual solicitation or advance where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the worker and the person knows or ought reasonably to know that the solicitation or advance is unwelcome.

Behaviour which can constitute harassment includes, but is not limited to, the following:

- Inappropriate physical contact;
- Suggestive looks (leering or staring) or suggestive gestures;
- Display or circulation of any inappropriate written materials or pictures;
- Unwelcome and unsolicited sexual advances; and / or,
- A sexual solicitation or advance or threat for rejection of a sexual solicitation or advance used as a condition of employment or affecting any decisions, such as hiring, promotion, transfer, performance appraisal, training and / or compensation.

Domestic Violence - Includes a person who has a personal relationship with an Employee - such as a spouse or former spouse, current or former intimate partner or a family member - who may physically harm, threaten or attempt to physically harm, that Employee while at work.

Workplace - Includes the working environment and any place employment-related activities are conducted including business travel, work-related social gatherings or any other location that may have a subsequent impact on the workplace. It also includes company cafeterias, washrooms, locker rooms, and on-road vehicles.

Harassment which occurs outside the workplace, but which may adversely affect Employee relationships may also be defined as workplace harassment.

4.0 STANDARDS / PROCEDURES

Prohibited Conduct

No individual affiliated with **Saturn Power Inc.** shall subject any other person to workplace violence or harassment, or allow or create conditions that support workplace violence or harassment. Any Employee or Contractor of **Saturn Power Inc.** may be subject to disciplinary action, commensurate with the incident, up to and including dismissal.

If an Employee feels that he or she is experiencing inappropriate behaviour, or would like to discuss what constitutes workplace violence or workplace harassment, are encouraged to talk with someone with whom they feel comfortable discussing the matter. This might be their Supervisor, Department Manager or Company Principals.

Confidentiality

Any individual who becomes aware of an incident of violence should not disclose the details of the incident to any third party without prior consultation with the Complainant. Proper investigation requires strict confidentiality.

Complaint Procedure

An Employee who feels that he/she is experiencing harassment in the workplace is encouraged to:

- Make it known to the offender that the behaviour is offensive and unwelcome, unless that confrontation will put the Complainant at personal risk; and / or,
- Keep a written record of date(s), time(s), unacceptable behaviour and witnesses to the incident(s), if any.

In the event the behaviour continues, the Employee should make a formal complaint immediately to his/her department manager or to the senior management.

The individual receiving the complaint will notify the Company Principals, who in turn will be responsible for the investigation.

Investigation

The exact nature of the investigation will depend on the circumstances of the allegation. During the course of the investigation, senior management may take whatever interim steps they may deem appropriate, which may include the involvement of legal counsel. All investigations will involve getting full information from the Complainant, Responder, and other relevant individuals. To the extent possible, the investigation will be conducted in a timely manner and resolution will be implemented, if necessary, as soon as possible.

1. Upon receipt to a formal complaint, senior management will determine whether an investigation needs to be pursued, and will:
 - Advise the Respondent in writing of the investigation and nature of the Complaint;
 - Advise the Complainant in writing of the investigation; and,
 - Assign the investigation to an internal or external person to investigate.

2. The investigator will:
 - Advise all parties to the investigation that they may have representation;
 - Conduct the investigation in accordance with principals of natural justice (notice, right to be heard); and,
 - Explore all allegations by interviewing the Complainant, Respondent, and others who may have first-hand knowledge of the incident(s) or circumstances that led to the complaint, or are responsible for the workplace.

3. The investigator may find:
 - Sufficient evidence that the *Workplace Violence Policy* and / or the *Workplace Harassment Policy* was violated;
 - Insufficient evidence that the *Workplace Violence Policy* and / or the *Workplace Harassment Policy* was violated; or,
 - No violation of the *Workplace Violence Policy* and / or the *Workplace Harassment Policy*.

Complaint Resolution

After the investigation is completed, the Complainant and Responder will be advised of the decision. If it is determined that an allegation of violence and / or harassment against an employee is valid, appropriate corrective action will be taken.

Corrective Action and Discipline

Senior management must consider the following when deciding to act upon the investigation outcome:

1. The impact of the incident on the Complainant;
2. The nature of the incident;
3. The degree of aggressiveness or physical contact;
4. The period of time and frequency of the incidents; and,
5. The vulnerability of the Complainant.

With regard to the five (5) factors above, senior management must consider the most appropriate of the following corrective actions:

1. A formal apology;
2. Counseling an Employee about inappropriate behaviour;
3. Written warning placed in the Employee's personnel file;
4. transfer;
5. Change of reporting line;
6. Suspension;
7. Dismissal; and / or,
8. Other legal action, including criminal charges.

Retaliation

Retaliation in any form against any person involved in a complaint, or in an investigation of a complaint, is in itself a violation of the *Workplace Violence Policy* and / or the *Workplace Harassment Policy*, and will result in disciplinary action, up to and including termination.

Unfounded Complaint

Where a complaint is found to be vexatious or made in bad faith, disciplinary action will be taken, up to and including termination of the Complainant.

Time for Filing a Complaint

Any complaint must be filed within a reasonable time from when the last incident occurred. **Saturn Power Inc.** reserves the right not to deal with any complaint based on facts that occurred more than six (6) months prior to the date of the last incident.

Record Keeping

The documents from the investigation will be kept on file and secured for at least two (2) years from the date of the incident and available for inspection by individuals directly affected by the incident, and / or Health and Safety Personnel.

5.0 ROLES / RESPONSIBILITIES

Human Resources Department:

- Maintain records of any complaints of workplace violence or harassment, and any relevant investigation outcomes in a secure location for at least two (2) years from the date of the incident.; and,
- Make available upon request by Health and Safety Personnel or individuals involved in the incident, the relevant documents pertaining to the formal complaint and / or investigation records.

Supervisors:

- Act respectfully towards other individuals while at work or participating in work-related activity;
- Do not engage in any inappropriate behaviours;
- Develop workplace procedures that minimize risk of workplace violence;
- Promote a non-violent and harassment-free workplace;
- Ensure that Employees understand who to contact regarding concerns about the policy or when reporting an incident;
- Take prompt, corrective action, in consultation with senior management, upon witnessing or becoming aware of any form of workplace violence or harassment, even if no formal complaint is made;
- Ensure own immediate safety in the event of workplace violence, and then report any criminal behaviour to the appropriate law enforcement agency; and,
- Ensure the safety and security of all parties involved during an investigation of an incident of workplace violence.

Employees:

- Act respectfully towards other individuals while at work or participating in work-related activity;
- Do not engage in any inappropriate behaviours;
- Ensure own immediate safety in the event of workplace violence, then immediately report the incident to the appropriate person;
- Report any incident of workplace violence or harassment, that you have witnessed or become aware of, immediately to the appropriate person;
- Co-operate with any efforts to investigate and resolve matters arising under this policy; and,
- Support all safe workplace initiatives.

Worker Health and Safety Representative(s) / Joint Health and Safety Committee:

- Identify the risk of workplace violence in the course of carrying out regular workplace inspection; and,
- Make recommendations to Management regarding workplace violence, as they regularly do, for other occupational health & safety hazards under the *Occupational Health and Safety Act*.

6.0 COMMUNICATION

Supervisors and Workers will be provided with information regarding the *Workplace Violence and Harassment Procedure* during orientation. Information will also be posted on communication boards.

Regular reports of trends and statistical information will be made at regular intervals to Management and the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

7.0 TRAINING

Training will be provided to Supervisors and Employees during orientation. Formal training on the *Workplace Violence and Harassment Procedure* will be done within a reasonable time of hire or appointment / promotion.

8.0 EVALUATION / REVIEW

Worker compliance with this procedure is monitored regularly. The procedure will be reviewed annually for its effectiveness by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Workplace Violence and Harassment Assessment

10.0 REFERENCE MATERIALS

- I. Ontario Legislation – Occupation Health and Safety Act section 32.0.1 – 32.0.7
- II. Workplace Violence Policy
- III. Workplace Harassment Policy
- IV. Ontario Human Rights Code



WORKPLACE VIOLENCE RISK ASSESSMENT

Title: WORKPLACE VIOLENCE RISK ASSESSMENT		Issue Date: September 2016
Project Safety Program Section: 2.4		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

WORKPLACE VIOLENCE RISK ASSESSMENT

This assessment focuses on the nature of the workplace. It takes you through a survey of your workplace's physical environment and its security measures. There are spaces for you to note the controls that are already in place, and to identify what additional controls may be suitable for your workplace.

Job / Department / Location:	Completed by:	Date:
-------------------------------------	----------------------	--------------

Shading indicates elevated risk

General Physical Environment Assessment (GA)						
Physical Environment	Yes	No	N/A	Examples of Controls	Existing Controls	Recommended Controls (identify person(s) responsible and expected completion dates, if possible)
Have you assessed the following?						
Outside building and parking lot				<ul style="list-style-type: none"> ▪ Bolted entries / locks ▪ Designated public entry doors ▪ Clear sightlines (look at landscaping, layout, and bushes) ▪ Good lighting ▪ Motion/movement detectors 		
Entry control and security system				<ul style="list-style-type: none"> ▪ Coded doors / security doors ▪ Employee ID cards and guest passes with sign-in/out ▪ Clearly labelled staff areas ▪ Closed-circuit video system ▪ Metal detectors ▪ Alarms (silent or sounding) 		

General Physical Environment Assessment (GA)						
Physical Environment	Yes	No	N/A	Examples of Controls	Existing Controls	Recommended Controls (identify person(s) responsible and expected completion dates, if possible)
				<ul style="list-style-type: none"> Mirrors 		
Interior design, hidden areas (utility rooms, etc.), and lighting				<ul style="list-style-type: none"> Restricted public access Clear sightlines Locked doors Mirrors Angled corners 		
Stairwells and exits				<ul style="list-style-type: none"> Exit signs Good lighting No obstructions Requirements of <i>Fire Code</i> and <i>Building Code</i> 		
Elevators and washrooms				<ul style="list-style-type: none"> Clear sight lines Restricted public access Communication devices or alarms Locks that can be accessed by security 		
Isolated areas				<ul style="list-style-type: none"> Clear sight lines Means of communication Mirrors Angled corners Restricted access 		
Location of cash, goods, and tools				<ul style="list-style-type: none"> Locked and hidden storage 		
Workplace location				<ul style="list-style-type: none"> Cameras Secured grounds 		
Are individual security devices necessary to protect workers?				Individual security devices include: <ul style="list-style-type: none"> Cell phones 		

General Physical Environment Assessment (GA)						
Physical Environment	Yes	No	N/A	Examples of Controls	Existing Controls	Recommended Controls (identify person(s) responsible and expected completion dates, if possible)
If used in your workplace, are security systems and individual security devices tested?				If used in your workplace: <ul style="list-style-type: none"> ▪ Test the security systems regularly ▪ Test individual security devices prior to use and regularly while in use ▪ Keep records of tests 		
Is there a designated safe area where workers can go during a workplace violence incident?				For emergency purposes, a safe area If using a safe room, it should: <ul style="list-style-type: none"> ▪ Have clear entry ▪ Have a lock that can be used from the inside, but which can also be accessed by security ▪ Have a means of summoning immediate assistance 		
If your workplace has workplace security measures or individual security devices, are workers trained in their use?				Provide workers training on workplace security measures and in the proper use and testing of individual security devices.		
Are workers and supervisors trained in all relevant measures and procedures that will protect them from violence associated with the workplace's physical environment?				Information, instruction, or training could include: <ul style="list-style-type: none"> ▪ Risks of workplace violence arising from their job or location ▪ Other relevant measures and procedures 		

Adapted from *Developing Workplace Violence and Harassment Policies and Programs: A Toolbox*
 Occupational Health and Safety Council of Ontario (OHSCO)
 April 2010



CONSTRUCTOR RESPONSIBILITIES

Title: CONSTRUCTOR RESPONSIBILITIES	Issue Date: September 2016
Project Safety Program Section: 3.1	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

CONSTRUCTOR RESPONSIBILITIES

1.0 PURPOSE

To ensure **Saturn Power Inc.** Management understands and complies with their specific requirements within the health and safety program, as well as the constructor duties of the OSHA and Regulations.

2.0 SCOPE

These responsibilities reflect the Constructor's requirements from the Occupational Health and Safety Act (OSHA Section 23), which are applied when **Saturn Power Inc.** is the Constructor of a *Project*.

3.0 DEFINITIONS

Construction – Includes erection, alteration, repair, dismantling, demolition, structural maintenance, painting, land clearing, earth moving, grading, excavating, trenching, digging, boring, drilling, blasting, or concreting, the installation of any machinery or plant, and any work or undertaking in connection with a project but does not include any work or undertaking underground in a mine.

Constructor – Means a person who undertakes a project for an owner and includes an owner who undertakes all or part of a project by himself or by more than one Employer.

Project – Planned set of interrelated tasks to be executed over a fixed period and within certain cost and other limitations.

OSHA – Occupational Health & Safety Act

4.0 STANDARDS / PROCEDURES

Constructors have the following key responsibilities, on the projects that they undertake:

- Ensure that the measures and procedures prescribed by the Act and its regulations are carried out on the project;
- Ensure that every employer and every worker performing work on the project complies with the Act and its regulations;
- Ensure that the health and safety of workers on the project is protected;
- Ensure that a health and safety representative or a joint health and safety committee is selected or established, when and as required;

- Ensure that the Ministry of Labour is notified of an accident or occurrence, when and as required;
- Ensure that every contractor receives a list of all designated substances present at the project before the prospective contractor or subcontractor enters into a binding contract for the supply of work on the project;
- Ensure that written emergency procedures are established for the project posted; and,
- Appoint a supervisor for every project at which five or more workers will work at the same time.

5.0 ROLES / RESPONSIBILITIES

The Constructor is responsible to:

- Take out the *Notice of Project* for Projects having a total expected cost of more than [REDACTED], submitting it to the [REDACTED] and posting a copy in a visible location on the site;
- Complete the [REDACTED] submitting it to the [REDACTED] and posting a copy in a visible location on the site;
 - Require the same from all Contractors.
- Pre-Qualify all Contractors using the *Contractor Qualification Package*;
- Establish and maintain a health and safety program for the duration of the project;
- Provide health and safety orientation, information, and instruction to every person on the project;
- Implement all requirements as listed in section 4.0 STANDARDS / PROCEDURES; and,
- Comply with Constructor responsibilities, as found in section 23 of the OHS Act and Sections 13-19 of the Construction Regulations (213/91).

Duties of constructor (OHS Act, Section 23):

23. (1) A constructor shall ensure, on a project undertaken by the constructor that,

- (a) The measures and procedures prescribed by this Act and the regulations are carried out on the project;
- (b) Every employer and every worker performing work on the project complies with this Act and the regulations; and,
- (c) The health and safety of workers on the project is protected.

23. (2) Notice of project,

Where so prescribed, a constructor shall, before commencing any work on a project, give to a Director notice in writing of the project containing such information as may be prescribed.

In addition to OHSA, Section 23:

Constructors (General Contractors) are responsible for the protection of every worker's health and safety on a construction project by:

1. Ensure that all employers and subcontractors comply with OHSA legislation and applicable Regulations;
2. Ensure workers are qualified for the work being performed;
3. Ensure that all required documentation (i.e.: MSDS) is available at the workplace, electronically or paper;
4. Ensure that WSIB clearance Certificates are requested and obtained;
5. Must embrace the same responsibilities as an employer (see below);
6. Develop a plan for safe public access and egress;
7. Provide for securing/protection of site when not occupied with workers;
8. Provide appropriate location for equipment setup and delivery of materials; and,
9. Perform Workplace Inspections;
 - Will annually review and write a Health & Safety Policy;
 - Will distribute and post the Policy Statement; and,
 - Will follow ALL Policies and Procedures contained within this Manual.

Duties of a Constructor (Ont. Reg. 213/91):

- 13. (1)** A constructor shall post in a conspicuous place at a project and keep posted while work is done at the project a notice setting out,
- (a) The constructor's name and if the constructor carries on business in a different name, the business name;
 - (b) The address and telephone number of the constructor's head office or principal place of business in Ontario; and
 - (c) The address and telephone number of the nearest office of the Ministry.
O. Reg. 213/91, s. 13 (1); O. Reg. 145/00, s. 9.

13. (2) Within forty-eight hours after a health and safety representative or joint health and safety committee members are selected for a project, a constructor shall add to the notice the name, trade and employer of the health and safety representative or of each of the committee members. O. Reg. 213/91, s. 13 (2).

14. (1) A constructor shall appoint a supervisor for every project at which five or more workers will work at the same time. O. Reg. 213/91, s. 14 (1).

14. (2) The supervisor shall supervise the work at all times either personally or by having an assistant, who is a competent person, do so personally. O. Reg. 213/91, s. 14 (2).

14. (3) A supervisor or a competent person appointed by the supervisor shall inspect all machinery and equipment, including fire extinguishing equipment, magazines, electrical installations, communication systems, sanitation and medical

facilities, buildings and other structures, temporary supports and means of access and egress at the project to ensure that they do not endanger any worker. O. Reg. 213/91, s. 14 (3).

14. (4) An inspection shall be made at least once a week or more frequently as the supervisor determines is necessary in order to ensure that the machinery and equipment referred to in subsection (3) do not endanger any worker. O. Reg. 213/91, s. 14 (4).

14. (5) A competent person shall perform tests and observations necessary for the detection of hazardous conditions on a project. O. Reg. 213/91, s. 14 (5).

15. (1) An employer of five or more workers on a project shall appoint a supervisor for the workers. O. Reg. 213/91, s. 15.

15. (2) The supervisor shall supervise the work at all times either personally or by having an assistant, who is a competent person, do so personally. O. Reg. 145/00, s. 10.

16. At a project, no person younger than 16 years of age shall,
(a) Be employed in or about the workplace; or
(b) Be permitted to be present in or about the workplace while work is being performed. O. Reg. 145/00, s. 11.

17. (1) A constructor shall establish for a project written procedures to be followed in the event of an emergency and shall ensure that the procedures are followed at the project. O. Reg. 145/00, s. 11.

17. (2) The constructor shall review the emergency procedures with the joint health and safety committee or the health and safety representative for the project, if any. O. Reg. 145/00, s. 11.

17. (3) The constructor shall ensure that the emergency procedures are posted in a conspicuous place at the project. O. Reg. 145/00, s. 11.

18. The constructor shall ensure that every worker at the project has ready access to a telephone, two-way radio or other system of two-way communication in the event of an emergency. O. Reg. 145/00, s. 11.

19. If, under this Regulation, a record is required to be kept available for inspection at a project, the constructor or employer, as the case may be, shall keep the record for at least one year after the project is finished. O. Reg. 213/91, s. 19.

6.0 COMMUNICATION

Health and safety responsibilities will be communicated to all Supervisors during orientation, one-on-one, or other formats.

Supervisors are responsible to communicate any revisions of the health & safety program (policies, procedures, and forms) to their Workers.

7.0 TRAINING

All Managers / Supervisors require training on their legislative and internal health and safety responsibilities.

Each Supervisor must sign the training record at the completion of the management health and safety training session.

All records of any health and safety training must be kept with head office.

8.0 EVALUATION / REVIEW

A review of all the Constructor responsibilities will be done on an annual basis by Senior Management.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

- I. Ontario Legislation – Occupational Health & Safety Act section 23
- II. Ontario Regulation 213/91 – Construction Projects

Title: FORM 1000		Issue Date: September 2016
Project Safety Program Section: 3.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	



Registration of Constructors and Employers Engaged in Construction

Pursuant to section 5 of the Regulation for Construction Projects made under the Occupational Health and Safety Act, "Before beginning work at a project, each constructor and employer engaged in construction shall complete an approved registration form. The constructor shall ensure that each employer at the project provides to the constructor a completed approved registration form; and a copy of the employer's completed form is kept at the project while the employer is working there."

Nature of Business (check one)		
<input type="checkbox"/> Individual	<input type="checkbox"/> Sole Proprietor	<input type="checkbox"/> Corporation
<input type="checkbox"/> Partnership	<input type="checkbox"/> Joint Venture	
Individual (Legal Name)		
Last Name	First Name	Middle Initial
Sole Proprietor or Corporation Name		
Operating Name		Business Number
Legal Name		Corporation Number
Partnership Partner or Joint Venture Party 1		
<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	
Individual Legal Name		
Last Name	First Name	Middle Initial
Corporation Information		
Operating Name		Business Number
Legal Name		Corporation Number
Director Name or Principal Officer Name	Title	Date Appointed (yyyy/mm/dd)
Partnership Partner or Joint Venture Party 2		
<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	
Individual Legal Name		
Last Name	First Name	Middle Initial
Corporation Information		
Operating Name		Business Number
Legal Name		Corporation Number
Director Name or Principal Officer Name	Title	Date Appointed (yyyy/mm/dd)

Business Address				
Unit Number	Street Number	Street Name	Street Type	Street Direction
PO Box	Rural Route	City/Town	Province	Postal Code
Telephone Number		Fax Number	Email Address (if available)	

Business Registration Information		
Harmonized Sales Tax Number	WSIB Firm Number	WSIB Rate Number
Do you have a clearance certificate? <input type="checkbox"/> Yes <input type="checkbox"/> No		Certificate Number

Project Information				
Average number of employees employed by your firm on the project				
<input type="checkbox"/> 1 - 5	<input type="checkbox"/> 6 - 19	<input type="checkbox"/> 20 - 49	<input type="checkbox"/> 50+	

Project Location	
Does the project have a street address? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Location - street address				
Unit Number	Street Number	Street Name	Street Type	Street Direction
City/Town		Province	Postal Code	Workplace Telephone Number
		ON		

Location - not a street address				
Directions to the workplace:				

Lot and plan				
--------------	--	--	--	--

Acknowledgement

I confirm that I am authorized to complete this form.
 I hereby certify that the information provided is true and correct to the best of my knowledge.

Last name of the person completing this form		First name of the person completing this form		
--	--	---	--	--

Title			Date (yyyy/mm/dd)	
-------	--	--	-------------------	--

Email Address				
---------------	--	--	--	--

[Print Form](#)



PROJECT MANAGER RESPONSIBILITIES

Title: PROJECT MANAGER RESPONSIBILITIES		Issue Date: September 2016
Project Safety Program Section: 3.3		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

PROJECT MANAGER RESPONSIBILITIES

1.0 PURPOSE

To ensure all Project Managers understand and comply with their specific requirements within the health and safety program, and the OSHA and Regulations.

2.0 SCOPE

These responsibilities reflect the Employer's requirements from the Occupational Health and Safety Act (OSHA sections 25 and 26), which are applied to Project Managers. 3.1 *Constructor Responsibilities* also apply to Project Manager when **Saturn Power Inc.** is the Constructor of a project.

3.0 DEFINITIONS

Construction – Includes erection, alteration, repair, dismantling, demolition, structural maintenance, painting, land clearing, earth moving, grading, excavating, trenching, digging, boring, drilling, blasting, or concreting, the installation of any machinery or plant, and any work or undertaking in connection with a project but does not include any work or undertaking underground in a mine.

Constructor – Means a person who undertakes a project for an owner and includes an owner who undertakes all or part of a project by himself or by more than one employer.

Project – Planned set of interrelated tasks to be executed over a fixed period and within certain cost and other limitations.

OSHA – Occupational Health & Safety Act.

4.0 STANDARDS / PROCEDURES

Review the program on an annual basis to ensure your understanding and its implementation. Ensure that any changes are understood by Supervision and staff under your authority.

5.0 ROLES / RESPONSIBILITIES

Project Manager is responsible to:

- In cooperation with Human Resources, provide health and safety resources for the project as may be required;
- Review and complete the *Project Manager Checklist*;

- Appoint competent Supervisor(s) for the project;
- Ensure a *Project Safety Program* has been developed and implemented on the project;
- Ensure all contractors have been pre-qualified using the *Contractor Qualification Package*;
- Review incident investigations;
- Ensure employee training is delivered;
- Perform informal employee safety observations on an ongoing basis;
- Ensure Supervisor(s), or their designate perform weekly site safety inspections; and,
- Comply with Employer responsibilities, as found in sections 25, 26 of the OHSA.

Duties of an Employer/Project Manager (OHSA, Section 25 and 26):

25. (1) An employer shall ensure that,

- (a) The equipment, materials and protective devices as prescribed are provided;
- (b) The equipment, materials and protective devices provided by the employer are maintained in good condition;
- (c) The measures and procedures prescribed are carried out in the workplace;
- (d) The equipment, materials and protective devices provided by the employer are used as prescribed; and
- (e) A floor, roof, wall, pillar, support or other part of a workplace is capable of supporting all loads to which it may be subjected without causing the materials therein to be stressed beyond the allowable unit stresses established under the *Building Code Act*. R.S.O. 1990, c. O.1, s. 25 (1).

25. (2) Without limiting the strict duty imposed by subsection (1), an employer shall,

- (a) Provide information, instruction and supervision to a worker to protect the health or safety of the worker;
- (b) In a medical emergency for the purpose of diagnosis or treatment, provide, upon request, information in the possession of the employer, including confidential business information, to a legally qualified medical practitioner and to such other persons as may be prescribed;
- (c) When appointing a supervisor, appoint a competent person;
- (d) Acquaint a worker or a person in authority over a worker with any hazard in the work and in the handling, storage, use, disposal and transport of any article, device, equipment or a biological, chemical or physical agent;
- (e) Afford assistance and co-operation to a committee and a health and safety representative in the carrying out by the committee and the health and safety representative of any of their functions;
- (f) Only employ in or about a workplace a person over such age as may be prescribed;
- (g) Not knowingly permit a person who is under such age as may be prescribed to be in or about a workplace;
- (h) Take every precaution reasonable in the circumstances for the protection of a worker;
- (i) Post, in the workplace, a copy of this Act and any explanatory material prepared by the Ministry, both in English and the majority language of the workplace, outlining the rights, responsibilities and duties of workers;

- (j) Prepare and review at least annually a written occupational health and safety policy and develop and maintain a program to implement that policy;
- (k) Post at a conspicuous location in the workplace a copy of the occupational health and safety policy;
- (l) Provide to the committee or to a health and safety representative the results of a report respecting occupational health and safety that is in the employer's possession and, if that report is in writing, a copy of the portions of the report that concern occupational health and safety; and,
- (m) Advise workers of the results of a report referred to in clause (l) and, if the report is in writing, make available to them on request copies of the portions of the report that concern occupational health and safety. R.S.O. 1990, c. O.1, s. 25 (2).

25. (3) For the purposes of clause (2)(c), an employer may appoint himself or herself as a supervisor where the employer is a competent person. R.S.O. 1990, c. O.1, s. 25 (3).

26. (1) In addition to the duties imposed by section 25, an employer shall,

- (a) Establish an occupational health service for workers as prescribed;
- (b) Where an occupational health service is established as prescribed, maintain the same according to the standards prescribed;
- (c) Keep and maintain accurate records of the handling, storage, use and disposal of biological, chemical or physical agents as prescribed;
- (d) Accurately keep and maintain and make available to the worker affected such records of the exposure of a worker to biological, chemical or physical agents as may be prescribed;
- (e) Notify a Director of the use or introduction into a workplace of such biological, chemical or physical agents as may be prescribed;
- (f) Monitor at such time or times or at such interval or intervals the levels of biological, chemical or physical agents in a workplace and keep and post accurate records thereof as prescribed;
- (g) Comply with a standard limiting the exposure of a worker to biological, chemical or physical agents as prescribed;
- (h) Establish a medical surveillance program for the benefit of workers as prescribed;
- (i) Provide for safety-related medical examinations and tests for workers as prescribed;
- (j) Where so prescribed, only permit a worker to work or be in a workplace who has undergone such medical examinations, tests or x-rays as prescribed and who is found to be physically fit to do the work in the workplace;
- (k) Where so prescribed, provide a worker with written instructions as to the measures and procedures to be taken for the protection of a worker; and,
- (l) Carry out such training programs for workers, supervisors and committee members as may be prescribed.

26. (2) For the purposes of clause (1)(a), a group of employers, with the approval of a Director, may act as an employer. R.S.O. 1990, c. O.1, s. 26 (1, 2).

26. (3) If a worker participates in a prescribed medical surveillance program or undergoes prescribed medical examinations or tests, his or her employer shall pay,

- (a) The worker's costs for medical examinations or tests required by the medical surveillance program or required by regulation;
- (b) The worker's reasonable travel costs respecting the examinations or tests; and,
- (c) The time the worker spends to undergo the examinations or tests, including travel time, which shall be deemed to be work time for which the worker shall be paid at his or her regular or premium rate as may be proper. R.S.O. 1990, c. O.1, s. 26 (3); 1994, c. 27, s. 120 (3).

6.0 COMMUNICATION

Health & Safety responsibilities will be communicated to Project Managers during orientation, one-on-one talks, or other formats.

Each Project Manager is responsible to communicate any revisions of the Project Safety Program (policies, procedures, and forms) to their staff at the beginning of each staff meeting.

7.0 TRAINING

All Project Managers require training on their legislative and internal health and safety responsibilities.

Each Project Manager must sign the training record at the completion of the management health and safety training session.

All records of any health and safety training must be kept with Human Resources.

8.0 EVALUATION / REVIEW

A review of all the Project Manager responsibilities will be done on an annual basis by Human Resources.

9.0 FORMS / RECORDS

Project Manager Checklist

Training Record

10.0 REFERENCE MATERIALS

- I. Ontario Legislation – Occupational Health & Safety Act sections 25 and 26
- II. Ontario Regulation 213/91 – Construction Projects
- III. Contractor Qualification Package



PROJECT MANAGER CHECKLIST

Title: PROJECT MANAGER CHECKLIST		Issue Date: September 2016
Project Safety Program Section: 3.4		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

What is a project manager?

A project manager is the company’s main representative on a jobsite, with authority over the progression of the project and site supervision. A project manager is the primary link between field supervisors and company management for critical aspects of the job. Ensuring health and safety is a critical aspect of any job.

According to Ontario’s *Occupational Health and Safety Act*, the major workplace parties with health and safety responsibilities are the constructor, employer, supervisor, and worker. Because project managers represent management on the project, they are not exempt from responsibilities or liability for health and safety.

By playing a clear and proactive role in injury and illness prevention, a project manager can ensure that scheduling, costs, productivity, quality, and health and safety are all managed for success.

What should a project manager do?

Emphasize the rules in the bid package...

Include detailed descriptions of your health and safety requirements in the bid package for subcontractors. You should especially include those requirements that exceed the demands of the Construction Regulation, such as mandatory use of safety glasses. Including the requirements in the bid package will ensure that the contractor is aware of them, and will show that you’re serious about them. The signed contract will also give your supervisors support to enforce the requirements.

Ensure workers have all mandatory training...

Ensure that everyone working on site has—at the very least—the minimum mandatory training necessary. By “everyone,” we don’t mean only your company’s employees. As a constructor, your company has the responsibility of ensuring the health and safety of all workers on site, including subcontracted employees. You, or your site supervisors, will have to ask for records of training (ROTs) or other proof from subcontractors.

Assist site supervisors...

Tight schedules, unique project designs, multiple employers, and an often transient workforce make a site supervisor’s job difficult. Provide them with resources, assist them with their health and safety responsibilities, and help them ensure or enforce workers’ compliance with the health and safety policy. When necessary, you may have to take on the role of site supervisor for a period of time.

PROJECT MANAGER CHECKLIST

Pre-bid documents should include...

- Requests for clearance certificates, liability insurance, WSIB records.
- Written confirmation from subcontractors that they will comply with your safety program.
- Copies of subcontractors' health and safety programs.
- Designation of competent supervision.
- Request to conduct inspections, investigations, orientations (specified times).
- Description of the lines of communication.
- Penalties for non-compliance.
- Statement that attendance is required at project meetings and training sessions.

Before or at the beginning of the project ensure that . . .

- The following are posted:
 - Notice of Project.*
 - Occupational Health and Safety Act and Regulations for Construction Projects.*
 - First Aid Requirements Regulation (Regulation 1101).
 - WSIB form 82 ("In case of injury" poster).
 - Company's health and safety policy.
 - Names of Health and Safety Representative, JHSC members, and Worker Trades Committee members (where applicable).
 - MOL orders.
 - Warning signs (Danger-Due-To).
 - Material Safety Data Sheets (MSDS).
- Form 1000s are completed by each subcontractor.
- Locates for overhead power lines or underground utilities are completed.
- The layout of the site has designated areas for storage, trailers, first-aid stations, fire extinguishers, bathrooms, potable (drinkable) water, and parking.
- There are clear emergency routes (designated and maintained).
- Emergency equipment is selected and in place:
 - First Aid Kit(s) / Station.
 - Eye Wash Station(s).
 - Spill Kit(s).
 - Fire Extinguisher(s).
 - Air Horn(s).
 - Two-Way Portable Radios or Phones.
 - Rescue Equipment as required (Confined Space, Fall Arrest, Etc.).
- The general public is protected from the site's hazards.
- Work areas have adequate lighting.

- Workers have all gone through site orientation sessions.
- Workers have easy access to necessary documents, e.g.
 - Manuals.
 - Manufacturers' instructions.
 - Engineering reports.
 - Safe operation procedures.
 - Hazard assessments.
 - Site-specific procedures.

As the project proceeds...

- Be a good role model for supervisors and workers.
- Attend and assist with orientations and safety meetings.
- Ask for up-to-date WSIB and insurance certificates to be included with subcontractors' progress draws.
- Conduct both scheduled and unannounced inspections.
- Review MOL orders to ensure follow-up.
- Review accident/incident investigation reports.
- Ensure corrective action is taken for any problems.
- Monitor and measure both progress and results.

When the project is finished...

- Review safety program components to verify if they are adequate for the next project.
- Evaluate site performance by reviewing:
 - Accident/incident reports.
 - Inspection reports.
 - Training records.
 - MOL orders.
 - Sub-contractor compliance.
- Recognize good performance of both individuals and contractors.

Title: SUPERVISOR RESPONSIBILITIES		Issue Date: September 2016
Project Safety Program Section: 3.5		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

SUPERVISOR RESPONSIBILITIES

1.0 PURPOSE

To ensure all Supervisors understand and comply with their specific responsibilities within the Health and Safety Program.

2.0 SCOPE

This standard applies to all Supervisors. These responsibilities reflect the requirements of the *Occupational Health and Safety Act* (OHSA section 27) and the Company specific responsibilities for Supervisors.

3.0 DEFINITIONS

OHSA – Occupational Health and Safety Act.

Project – Planned set of interrelated tasks to be executed over a fixed period and within certain cost and other limitations.

Supervisor – A person who has charge of a workplace or authority over a Worker.

4.0 STANDARDS / PROCEDURES

Review the program on an annual basis to ensure your understanding and its implementation. Ensure that any changes are communicated to and understood by staff under their authority.

5.0 ROLES / RESPONSIBILITIES

Supervisors are responsible to:

- Perform workplace inspections as per the *Inspections and Audit Procedure*;
- Conduct information sessions (safety talks, staff meetings);
- Immediately inform Management of workplace hazards and unsafe behaviours;
- Conduct incident investigations as per the *Incident Investigation Procedure*;
- Determine a safe gathering area for emergencies (i.e. fire/explosion, natural gas leak, chemical spill, power failure, tornado);
- Sound the air horn according to the *Emergency Response Plan*;
- Ensure employee training is delivered;
- Correct / follow up on reported Hazards;

- Communicate to all workers designated to be “on-call” the requirement to abide by the Health & Safety Program policies and procedures, specifically the Substance Abuse Policy and Program, and the requirement to make themselves available and able to respond within a reasonable time; and,
- Comply with Supervisor responsibilities, as found in section 27 of the OHSA.

Duties of supervisor:

27. (1) A supervisor shall ensure that a worker:

- (a) Works in the manner and with the protective devices, measures and procedures required by this Act and the regulations; and,
- (b) Uses or wears the equipment, protective devices or clothing that the worker’s employer requires to be used or worn.

Additional duties of supervisor:

27. (2) Without limiting the duty imposed by subsection (1), a supervisor shall;

- (a) Advise a worker of the existence of any potential or actual danger to the health or safety of the worker of which the supervisor is aware;
- (b) Where so prescribed, provide a worker with written instructions as to the measures and procedures to be taken for protection of the worker; and,
- (c) Take every precaution reasonable in the circumstances for the protection of a worker. R.S.O. 1990, c. O.1, s. 27.

6.0 COMMUNICATION

Health and safety responsibilities will be communicated to all Supervisors during their orientation.

Each Supervisor is responsible to communicate any revisions to their Workers.

7.0 TRAINING

All Supervisors require training on their legislated duties and their internal health and safety responsibilities.

Each Supervisor must sign the training record at the completion of the Supervisor Health and Safety Training Session.

8.0 EVALUATION / REVIEW

A review of the Supervisor responsibilities will be done on an annual basis. This evaluation will measure compliance of each health and safety responsibility.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

- I. Ontario Legislation – Occupational Health and Safety Act section 27

Title: WORKER RESPONSIBILITIES		Issue Date: September 2016
Project Safety Program Section: 3.6		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

WORKER RESPONSIBILITIES

1.0 PURPOSE

To ensure all Workers are aware of and comply with their specific responsibilities within the Health and Safety Program.

2.0 SCOPE

These responsibilities reflect the requirements of Section 28 of the *Occupational Health and Safety Act*, as well as the specific Company responsibilities. This applies to all Employees.

3.0 DEFINITIONS

OHSA – Occupational Health and Safety Act

Worker – Means any of the following:

- A person who performs work or supplies services for monetary compensation;
- A secondary school student who performs work or supplies services for no monetary compensation under a work experience program authorized by the school board that operates the school in which the student is enrolled;
- A person who performs work or supplies services for no monetary compensation under a program approved by a college of applied arts and technology, university or other post-secondary institution;
- A person who receives training from an employer, but who, under the Employment Standards Act, 2000, is not an employee for the purposes of that Act because the conditions set out in subsection 1(2) of that Act have been met; and,
- Such other persons as may be prescribed who perform work or supply services to an employer for no monetary compensation.

Enclosed Workplace – The inside of any place, building, structure, vehicle, conveyance, or a part of any of them:

- That is covered by a roof; and / or,
- A space that employees work in or frequent during the course of their employment whether or not they are acting in the course of their employment at the time, and that is not primarily a private dwelling, or a prescribed place.

4.0 STANDARDS / PROCEDURES

All Workers will demonstrate their knowledge of the company Health and Safety Program and are required to work within its scope, as well as the requirements of section 28 of the *Occupational Health and Safety Act* and applicable regulations.

An Employee's failure to comply with their safety responsibilities will result in the application of the *Progressive Disciplinary Procedure*.

5.0 ROLES / RESPONSIBILITIES

- Do not smoke in any **enclosed workplace** - smoking is only permitted in designated areas or at least three meters away from any opening to an **enclosed workplace**;
- Do not operate any equipment / machinery unless properly trained and authorized to do so;
- All Workers have the right to refuse work which he / she feels is unsafe to perform and may be refused permission to work by Management if he / she fails to perform safely and in accordance to the *Occupational Health and Safety Act* and its Regulations;
- Immediately report any near miss, unsafe act or condition, property damage, fire, spill, injury or illness to the Supervisor;
- Horseplay and running will not be tolerated at any time;
- All personal protective equipment will be properly worn at all times, where required;
 - At a minimum, CSA approved footwear, CSA approved safety glasses, and hearing protection as required.
- Long hair shall be suitably confined to prevent entanglement with any rotating shaft, spindle, gear, belt or other source of entanglement;
- Jewellery or clothing that is loose or dangling, or rings, shall not be worn near any rotating shaft, spindle, gear, belt or other source of entanglement;
- Always follow instructions from your Supervisor(s), and comply with Safe Operating Procedures where required;
- Do not remove or disable any safety equipment from any machinery or equipment;
- Do not store pallets, ladders, or other equipment or materials angled against the walls;
- Adhere to all safety and warning signs;
- Participate in the **Saturn Power Inc.** Return to Work and Modified Duties Program;
- Follow the Policies and Procedures of the Health and Safety Program, **as well as** any new or additional requirements that may be communicated;
- All workers designated to be "on-call" will abide by the Health & Safety Program policies and procedures, specifically the Substance Abuse Policy and Program, and will make themselves available and able to respond within a reasonable time; and,
- Worker responsibilities, as found in section 28 of the OHSA.

Duties of workers

28. (1) A worker shall:

- (a) Work in compliance with the provisions of this Act and the regulations;
- (b) Use or wear the equipment, protective devices and / or clothing that is required by the worker's employer;
- (c) Report to his or her employer or supervisor the absence of or defect in any equipment or protective device of which the worker is aware and which may endanger himself, herself or another worker; and
- (d) Report to his or her employer or supervisor any contravention of this Act or the regulations or the existence of any hazard of which he or she knows.

28. (2) No worker shall:

- (a) Remove or make ineffective any protective device required by the regulations or by his or her employer, without providing an adequate temporary protective device and when the need for removing or making ineffective the protective device has ceased, the protective device shall be replaced immediately;
- (b) Use or operate any equipment, machine, device or thing or work in a manner that may endanger himself, herself or any other worker; and
- (c) Engage in any prank, contest, feat of strength, unnecessary running or rough and boisterous conduct.

Consent to medical surveillance

28. (3) A worker is not required to participate in a prescribed medical surveillance program unless the worker consents to do so. R.S.O. 1990, c. O.1, s. 28

6.0 COMMUNICATION

Workers will receive their responsibilities during orientation before they commence work. The person conducting the orientation will ensure any training documentation is forwarded to the Employee's personnel file.

7.0 TRAINING

All Workers require training on their legislative and their internal health and safety responsibilities.

Each Worker must sign the Training Record at the completion of the health and safety training session.

8.0 EVALUATION / REVIEW

This procedure will be reviewed annually by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

- I. Ontario Legislation – Occupational Health and Safety Act section 28
- II. Ontario Legislation – Ontario Smoke Free Act



CORRECTIVE COUNSELLING POLICY

Title: CORRECTIVE COUNSELLING POLICY	Issue Date: September 2016
Project Safety Program Section: 3.7	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

CORRECTIVE COUNSELLING POLICY

1.0 PURPOSE

To encourage individual self-discipline and guide corrective action in the event of unacceptable conduct, behaviors, or violations of policies, procedures or standard practices.

To promote a system of progressive and corrective counselling which is not punitive in nature and permits Employees to learn from their mistakes and improve their performance.

2.0 SCOPE

This policy applies to all Employees, Supervisors and Managers.

3.0 DEFINITIONS

OHSA – Occupational Health and Safety Act

4.0 STANDARDS / PROCEDURES

We all need to ensure that we all meet the commitments we make in our employment. It is the responsibility of Management to provide you with an understanding of the conditions of your employment and it is an Employee's responsibility to commit to those conditions.

Unfortunately, if an Employee does not follow standards of conduct or performance requirements, then corrective counseling will be used to improve poor performance, behavior or attitude. The more serious actions by an Employee may result in skipping one or more of the steps.

Please refer to the *Saturn Power Policy Handbook* for an overview of company rules and standards of conduct.

It is our desire to help each Employee to correct employment concerns because this improves our relationship and the value of the Employee to the Company.

In all cases, when corrective counselling is needed, depending on the severity of the concern and the number of past occurrences, corrective action may call for any of the following corrective steps: Coaching, First Written Counselling Letter, Second Written Counselling Letter, Suspension from Work or Suspension on Record, or Dismissal. During this process, all conversations and fact-finding interviews will be documented on the Corrective Counselling Form.

The procedure is designed to establish the facts quickly and to deal consistently with disciplinary issues. No corrective action will be taken until the matter has been fully investigated. At every stage Employees will have the opportunity to state their case and be represented or accompanied by a work colleague (as applicable).

No corrective counselling policy can be expected to address each and every situation requiring corrective action that may arise in the workplace. Therefore, it takes a comprehensive approach regarding discipline and will consider all relevant factors before making decisions regarding discipline.

Step One: Coaching

As the first step in the Corrective Counselling Policy, coaching is meant to alert the Employee that a problem exists or that one has been identified, which must be addressed.

If an Employee is not meeting their obligations at work, or engaging in problematic behaviour, then the Supervisor will have a discussion with the Employee to discuss the problem and provide coaching. In all cases the following steps will be utilized:

- a) The Employee and Supervisor meet in private, to talk over the problem and how it effects the employment requirements;
- b) The Employee will be asked to make a corrective action plan or the Supervisor will explain what the Employee must do to correct the problem;
- c) The coaching meeting will be recorded in writing and filed in the Employee's personnel file; and,
- d) If necessary, a meeting will be held again to follow up on the improvement that is required.

Step Two: First Written Counselling Letter

Written Counselling Letters are considered a severe corrective action and are usually issued after coaching has failed to correct a concern; should the situation warrant further corrective action or counselling.

If an Employee has not improved their performance, or if the situation has not been resolved, the Employee will receive a Written Counseling Letter. The following steps will be utilized:

- a) The Supervisor will investigate and document all pertinent facts related to the incident, including speaking to any persons that are involved in, or know about the situation;
- b) The Supervisor will review the facts with Senior Management to decide what action should be taken;
- c) A meeting will take place with the Employee, Supervisor and a Senior Management representative. The meeting will cover:
 - i. A review of why the performance is being counselled and what Company Rules have been broken;

- ii. A description of the facts of the situation; and,
 - iii. What the Employee must do to meet the performance or behavior required.
- d) If it is shown that the Employee has not met their responsibility, then a First Written Counseling Letter will be given to the Employee. The letter will contain the following:
- i. A summary of the discussion;
 - ii. A description of the facts that gave rise to the warning;
 - iii. The improvements that the Employee will make; and,
 - iv. A notice of further action if the improvements are not made.
- e) A written record of the meeting and a copy of the letter with the Employee's signature will be placed into the Employee's personnel file.

Step Three: Second Written Counselling Letter

If an Employee fails to correct their performance after receiving the First Written Counselling Letter, a Second Written Counselling Letter will be given, following the same procedure completed in Step Two: First Written Counselling Letter.

Step Four: Suspension from Work or Suspension on Record

In cases where a Second Written Counseling Letter has been given, and the Employee has not improved or corrected their behaviour or conduct, or when an Employee commits a serious offense, the Employee may be suspended from work either immediately or after an investigation into the situation. If the investigation determines that the Employee is not to blame, then the lost time will be paid.

The Supervisor will again use the above proceedings, and in addition, Senior Management will review the matter before a final decision is made and the Employee notified.

The Employee will be given a written notice that will state the event, what will happen if improvements are not made, which includes termination from employment, and what the Employee agrees he/she will do to improve and the type of suspension.

A suspension from work will normally be one work day, but that is subject to Senior Management's decision. A written record of the meeting with the Employee, and a copy of the letter with the Employee's signature, will be filed in the Employee's personnel file.

Step Five: Dismissal

Our corrective counseling gives each Employee up to 4 opportunities, with assistance, to maintain a good work record and good relations. If there is no improvement or continuing difficulties then dismissal from the employment may occur. Again, in some very serious cases, automatic dismissal may occur. In all cases, the following procedure will be used to ensure a fair decision based on the facts:

- a) The Supervisor will proceed as stated above with steps for investigating;
- b) Before any decision is made for dismissal for cause, Senior Management will

- review the case;
- c) A full investigation and record must be made of all facts regarding any major violation, to support the decision;
- d) Dismissal because of repeated minor offenses must have gone through the full counseling process before the dismissal is considered; and,
- e) If the decision is to dismiss the Employee, a termination letter containing the reason, including the facts and discussions must be reviewed by the Company Principals, prior to being issued.

This may occur only after the formal discipline steps have been exhausted or upon the investigation of serious misconduct deemed to warrant such action.

PROBATIONARY EMPLOYEES

Probationary Employees are held to the highest standards for behavior and job performance. Progressive discipline is the exception rather than the rule for probationary Employees.

The severity of the violation will determine the step that is applied to the Worker.

In all cases the *Discipline Acknowledgement Form* will be signed by the Worker and Supervisor and will be placed in the Worker's personnel file. The form will be removed from the personnel file after 18 months.

VOIDING CORRECTIVE COUNSELLING RECORDS

Corrective Counseling is used to make sure that all Employees receive fair treatment when improvements in the employment relationship are needed. We also realize that once an improvement has been made, an Employee shall be given a chance to have that counseling record voided from his/her personnel file:

- a) If after 12 months from having a First Written Counseling letter and no new counseling is given; the First Counseling letter will be voided. Or,
- b) If after 24 months from having a Second Counseling letter and no new counseling is given; the Second Written Counseling letter will be void.

5.0 ROLES / RESPONSIBILITIES

Management:

Responsible for ensuring this policy is applied objectively, promptly, and consistently to all Employees and throughout all operations; and to provide advice and assistance to Supervisors throughout the discipline process and in the application of the procedures outlined herein.

Supervisors:

Supervisors are responsible for training Employees to understand the expectations and the improvements that are necessary to achieve the desired level of performance and / or behaviour.

Responsible for ensuring Employees are treated fairly, with dignity and respect and for ensuring those Employees have been provided with appropriate training and assistance throughout the discipline process.

Employees:

Employees are responsible for performing their work in a competent manner and displaying conduct and behaviour that is consistent with our policies and practices, as those practices that are generally regarded as standard in a business enterprise.

All Workers shall abide by their health and safety responsibilities as outlined in the Health & Safety Program. Failure to comply will result in the application of the *Corrective Counselling Policy*.

6.0 COMMUNICATION

This policy and procedure will be communicated to all Employees, Supervisors and Management during orientation.

7.0 TRAINING

Management and Supervisors will receive training in the application of this policy and procedure.

8.0 EVALUATION / REVIEW

This policy and procedure will be evaluated by Management annually and on an ongoing basis to ensure its application and effectiveness.

9.0 FORMS / RECORDS

Discipline Acknowledgement Form

10.0 REFERENCE MATERIALS

- I. Ontario Legislation – Occupational Health and Safety Act
- II. Workplace Violence Policy
- III. Workplace Harassment Policy
- IV. Workplace Violence and Harassment Procedure
- V. Substance Abuse Policy and Program
- VI. Health & Safety Program and Policies
- VII. Saturn Power Policy Handbook



CORRECTIVE COUNSELLING FORM

Title: CORRECTIVE COUNSELLING FORM		Issue Date: September 2016
Project Safety Program Section: 3.8		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

CORRECTIVE COUNSELLING FORM

Employee: _____ Date: _____

You are hereby notified that if you repeat the offence described below, or permit the condition described to continue or be repeated, your employment relationship with **Saturn Power Inc.** may / shall be terminated.

Description of Violation / Offence:

Corrective Action(s) Required:

Discipline Taken: Coaching
 First Written Counselling Letter
 Second Written Counselling Letter
 Suspension: _____ Days Other: _____

From: _____ to _____
(DD/MM/YYYY) (DD/MM/YYYY)

Dismissal

Employee Signature: _____

Supervisor Signature: _____

Copies to: Management and Employee Personnel File

Title: CONTRACTOR QUALIFICATION		Issue Date: September 2016
Project Safety Program Section: 4.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: <i>SEE ORIGINAL FOR SIGNATURE</i>	
Approved by: Ray Roth, Vice President and General Manager	Signature: <i>SEE ORIGINAL FOR SIGNATURE</i>	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: <i>SEE ORIGINAL FOR SIGNATURE</i>	

CONTRACTOR QUALIFICATION

1.0 PURPOSE

To ensure Contractors follow the minimum guidelines in order to provide and maintain a safe and healthy work environment.

All Contractors are responsible for complying with the requirements of the Ontario *Occupational Health and Safety Act* and its Regulations.

2.0 SCOPE

All Contractors must be pre-qualified before the commencement of any work at any facility, property, or client location.

3.0 DEFINITIONS

OHSA – Occupational Health and Safety Act.

Representative - Persons who have the authority to issue purchase orders to hire a Contractor.

Contractor - A Contractor is any person, Consultant, or Company that provides an on-site service to the Company for monetary compensation. This could include but not be limited to; Electricians, Plumbers, Lawn Cutting or Snow Removal.

Subcontractor - A Subcontractor is any person or Company that provides an on-site service to the Contractor or Client that is hired by and working for a Contractor.

Supplier - Any person who supplies a machine, device, tool or equipment under any rental, leasing or similar arrangement for use in or about a workplace.

Visitor - A person temporarily entering the workplace and may be admitted to areas generally off limits to the public. A visitor usually is on business but is not under contract.

4.0 STANDARDS / PROCEDURES

The Representative shall forward two (2) copies of the Contractor Qualification Package to the Contractor for signature.

The Contractor shall keep one copy for their records and forward the second copy back to the Representative.

The Representative shall ensure that all of the required documentation is completed and returned before the commencement of the work.

The Representative shall ensure the Contractor's legal name and Trade Name, as well as the authorized signing officer's title is correct on the *Contractor Declaration* page of the *Contractor Qualification Package*.

Delivery persons are not required to endorse a Contractor Declaration; however, they shall not perform any services, other than delivery or receiving, while on company premises.

5.0 ROLES / RESPONSIBILITIES

The Representative shall ensure that the signed Contractor Declaration, along with a copy of the Contractor's WSIB Clearance Certificate, WSIB Injury Summary Report, liability insurance, licenses, certificates and MSDS(s), etc. are on file.

The Representative shall forward a copy of relevant company safety policies and / or procedures to the Contractor.

The company shall maintain a list of pre-qualified Contractors.

6.0 COMMUNICATION

This procedure will be communicated to representative(s) who are authorized to issue a purchase order and to hire a Contractor.

7.0 TRAINING

The authorized Representative(s) will receive training in this procedure.

8.0 EVALUATION / REVIEW

Evaluation of this procedure will be done on an annual basis by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee OR if corrective action is identified due to an injury / illness or incident as a result of a Contractor issue.

9.0 FORMS / RECORDS

Contractor Qualification Package – Includes Contractor Declaration

10.0 REFERENCE MATERIALS

I. Ontario Legislation - Occupational Health and Safety Act and Regulations



CONTRACTOR QUALIFICATION PACKAGE

Title: CONTRACTOR QUALIFICATION PACKAGE	Issue Date: September 2016
Project Safety Program Section: 4.2	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

CONTRACTOR QUALIFICATION PACKAGE

1.0 PURPOSE

It is a requirement that all Contractors performing work at our facilities, on our property, do so in accordance with all safety rules and regulations.

2.0 SCOPE

This procedure applies to all Contractors.

3.0 DEFINITIONS

Contractor – A Contractor is any Person, Consultant, or Company that provides an on-site service to the Company for monetary compensation. This could include but not be limited to; Electricians, Plumbers, Roofers, Lawn Cutting or Snow Removal.

Subcontractor – A Sub-Contractor is any Person or Company that provides an on-site service to the Contractor or Client that is hired by and working for a Contractor.

4.0 STANDARDS / PROCEDURES

As more fully described herein, Contractor shall abide by all Saturn Power's health & safety requirements with respect to its Employees and Subcontractors, and shall be solely liable for any breach of its contractual or legal responsibilities to its Employees, Agents, Suppliers or Subcontractors.

Contractor shall be responsible to provide its Employees (and all Subcontractors) with written communication of the specific risks involved in their work and the preventative measures to be adopted, and at Saturn Power's request Contractor shall provide Saturn Power with a copy of the same, signed by all relevant Employees. Contractors / Subcontractors may be involved in pre-job meetings and/or hazard assessments as may be required.

The rules listed below are for your protection and guidance and are to be a condition of your contracted services with **Saturn Power Inc.** Misconduct or disobeying the following rules or responsibilities may lead to removal from the property relating to the project and / or suspension or termination of the contract. Post-job performance reviews may be conducted for subcontractors.

The following responsibilities have been prepared for performing work. **Saturn Power Inc.** expects that as a Contractor performing work for our Company, all work and conduct will be performed in a safe and healthy manner.

This document is designed to provide Contractors with our minimum requirements for health and safety performance. They are by no means all-inclusive of the requirements specified by the *Occupational Health and Safety Act* and pertinent Regulations.

The Contractor is also required to ensure that their Workers are made aware of and abide by the requirements detailed in our company's Health & Safety Policies and Procedures, Safe Work Practices, and Emergency Response Procedures.

No Contractor is permitted to perform work on any project after hours or on weekends unless they assume full responsibility for the location; supervision, first aid, emergencies, reporting, inspections, etc.

The Contractor shall provide the following:

- Copy of their Health & Safety Program (*If no Health & Safety Program can be provided, contractor will be responsible to provide, at minimum, policies and procedures that apply to the work they are performing as may be required*);
- Any Engineered (stamped and signed) design drawings and specifications of equipment of structures (as may be required);
- Appropriate insurance coverage has been obtained and maintained as outlined in the contract (i.e. liability insurance and current Workplace Safety and Insurance Board "Certificate of Clearance");
- A WSIB Injury Summary report;
- Proof of training, certifications, and / or licenses for the type of work they will perform and / or type of equipment, machine, or vehicle they will be operating shall be provided to **Saturn Power Inc.**; and,
- Safety Data Sheets (SDS) for WHMIS controlled products are provided to **Saturn Power Inc.** electronically in advance of bringing any controlled products into the facilities or onto the property and have a copy on site at all times.

Contractors must ensure the following:

- Workers have the appropriate training to perform their work safely (maintain documentation);
- Workers are equipped with the proper Personal Protective Equipment to conduct the work and use it as required;
- Workers know the requirements for the use, limitations and maintenance of the Personal Protective Equipment;
- Workers know how to report unsafe conditions, injuries and accidents to the Company Contact Person;
- Workers become familiar with the site emergency response plan as well as know the location of emergency systems (i.e. phones, first-aid kits, emergency numbers, safety stations, etc.);
- Workers are encouraged to participate in site safety;
- Workers are instructed to cooperate with Company Management, Supervision, as well as governing authorities (e.g. Ministry of Labour, WSIB);
- A safe and clean work area is maintained at all times;

- Workers attend Safety Orientation as may be required;
- An Early Safe Return to Work Program is implemented and take all necessary measures to accommodate injured Workers on the project;
- A competent person is assigned to act as a Supervisor for their Workers;
- All equipment, tools, and machinery are maintained in a safe working order and have records of pre-use inspection and / or maintenance available for review;
- Contractors are permitted to enter only those areas where their work is being performed;
- The operator's manuals are available on site for the workers to review; and,
- **MAY NOT SUBCONTRACT ANY WORK WITHOUT PRIOR WRITTEN APPROVAL FROM THEIR SATURN POWER INC. CONTACT PERSON.**

Training and Certification Requirements

- WHMIS
- Control of Hazardous Energy (Lockout & Tagout)
- Confined Space
- Working at Heights
- CSA Z462
- First Aid / CPR
- Ontario Health & Safety Awareness in 4 Steps (Workers)

5.0 Contractor Specific Safety Roles and Responsibilities:

- All work performed by Contractors will be done in a safe and professional manner and work areas will be kept clean and tidy;
- All Workers operating a vehicle must have a current and valid Driver's License;
- Failure to comply with these safety rules may result in an Infraction Form being completed; including suspension or cancellation of the contract and / or exclusion from future contract bids;
- All Workers must wear the required Personal Protective Equipment;
- Hearing protection must additionally be worn at all times in designated areas or when performing any related operation that may cause harmful noise;
- Contractors performing work during Company operational working hours are subject to additional safety rules to protect the safety of all Employees, and to maintain output at expected levels. As a minimum, the designated contractor and the Area Supervisor(s) will discuss the work in advance;
- Every effort will be made to avoid risk to Employees or impact on production and / or work activities. As necessary, area Employees will be advised of the risks, precautions or temporary arrangements to be followed during the performance of the Contractors work. The Contractor designated contact and the Supervisor(s) will update arrangements as necessary.
- The Contractors work performance, in regards to compliance with safety policies and the protection of Employees, will be monitored by **Saturn Power Inc.**;
- Concerns will be communicated to the Contractor's Supervisor. Concerns are to be investigated and resolved promptly, and may involve Management as necessary;
- Immediately report all accidents and incidents. The Contractor's Supervisor shall report all accidents to the **Saturn Power Inc.** contact person;

- The Contractor shall investigate all accidents and incidents and must provide a copy of their investigation report and all supporting evidence / materials to their contact person;
- The Contractor is responsible for providing first aid and medical attention to their own personnel;
- Reporting to WSIB of accidents involving personal injury to Contractor's staff, WSIB claims management and WSIB claims financial responsibility is the responsibility of the Contractor;
- Accidents that occur on Company property that involve Ministry of Labour reporting responsibilities will be reported. The Contractor is expected to fully cooperate with any report and subsequent investigation; and,
- **Violence in the Workplace:** the Contractor will ensure compliance with the requirements of the *Occupational Health and Safety Act*.

6.0 General Conduct

- Anyone under the influence of illegal drugs or alcohol or having the same in their possession will be immediately terminated from site;
- Anyone using prescribed medication, that could affect the safety of their work, are not allowed to perform their duties;
- Horseplay of any kind will not be tolerated;
- Individual portable music devices are not allowed;
- Defacing of company property will not be tolerated; and,
- Unauthorized removal of Company property is cause for immediate termination from site.

7.0 Personal Protection Clothing

- Every Contractor Employee shall wear at a minimum the Personal Protective Equipment required by **Saturn Power Inc.**, as per the *Contractor PPE List*; and,
- Other Personal Protective Equipment adequate in the circumstances for the protection of their Employee.

8.0 Use of Equipment

- On certain occasions, Contractors may be permitted to operate Company equipment. This must first be approved in writing by the contact person;
- The Contractor shall ensure their Workers are adequately trained or qualified to use such equipment, and is required to provide documentation of training and licenses; and,
- Demonstration of the ability to safely operate the required equipment may also be required.

9.0 Fire Hazards and Hot Work

- Any operations, which by nature constitute a fire or safety hazard, shall be conducted in such a manner as to minimize such hazards;
- All canvas and tarpaulins, must meet CSA or Underwriters standards for fire resistance;
- All flammables and combustibles must be stored as required by Code or Regulations; and,
- Hot work such as cutting, welding, or grinding require a hot work permit;
 - This will also require a person for fire watch;
 - This will also require a fully charged and inspected fire extinguisher suitable for the application; and,
 - Use and store compressed gas cylinders to accepted safe practices and regulations.

10.0 Barricades

- Where surface work is being done such as concrete scarifying, excavating, trenching or activities involving spillage of water or slippery substances, or where overhead work is being done, then sufficient barricades, warning signs or barrier tape must be used;
- Barricades must be rigid and complete. Barricade tape must be brightly colored and clearly visible; and,
- Overhead work must be clearly indicated below with barricades or warning tape.

11.0 Guardrails

- A guardrail is required when a worker is exposed to a fall of 2.4 meters, or more than 7 feet 10 inches to a fall of 1.2 meters (4 feet) into a path/equipment of a work area; and,
- The guardrail shall consist of a top / intermediate rail and a toe board and be constructed to withstand loads when applied. Refer to Section 26.3 in the *Occupational Health and Safety Act*.

12.0 Housekeeping & Chemicals

- All reasonable precautions shall be taken to prevent generated dust from contaminating adjacent work areas, machinery or equipment;
- All rubbish shall be accumulated and removed from the worksite at the end of each day at Contractor's expense;
- All salvageable material, which belongs to **Saturn Power Inc.**, will be disposed of through the contact person;
- It is the responsibility of the Contractor to ensure all toxic and hazardous substance brought onto the property relating to the project is disposed of in compliance with environmental regulations; and,
- Chemicals may not be brought onto **Saturn Power Inc.** property nor inside its facilities without prior written consent and approval.

13.0 Utility Shutdown / Startup

- Before shutting down or starting up any utility, the designated contact person must be notified in writing 24 hours in advance; and,
- Adequate warning must be provided in advance including the reason for shutdown or start up and what equipment, areas, or processes may be affected.

14.0 Lockout and Confined Space

- Lockout Procedures shall be used when working on any equipment to ensure a “Zero Energy State” as per C.S.A. Standards and Legislated Requirements before work proceeds;
- The Contractor shall ensure affected persons are trained, qualified and follow applicable standards and regulations; and,
- Confined Space Procedures must be followed prior to and during entry of any space where the accumulation of a hazardous gas, vapor, dust, fume or the creation of an oxygen deficient atmosphere may occur.

15.0 Roof Work and Protection

- When working on the roof, the roof surface, flashing, sumps, drains, copings and gutters must be protected from damage and be fully protected from risk of accidental chemical discharge;
- All safety precautions must be taken to ensure the safety of workers on the roof to prevent falls; and,
- Permission must be obtained from the contact person prior to going onto the roof or performing roof work.

16.0 Emergencies

- In case of an emergency (fire, chemical spill, and / or site evacuation) Contractors and their Workers will safely stop what they are doing and proceed to the emergency gathering area as outlined in the site specific emergency response plan;
- Contractors must remain in the gathering area to be accounted for by the spotter or receptionist; and,
- All communications to public / media concerning an emergency will be made through the Head Office.

17.0 Smoking

- Smoking is not permitted in the buildings or any enclosed workplace;
- Smoking is strictly prohibited near flammable or combustible gases and materials and all storage areas. Obey all signage in areas forbidding smoking; and,
- Smoking is only permitted in designated areas outside of the buildings.

18.0 General Transportation and Parking

- Contractor's vehicles will be parked as directed by the designated contact person;
- Parking lot speed limit for all vehicles is 15 kilometers per hour, unless otherwise posted; and,
- No one is permitted to ride on the outside of any moving vehicle or mobile equipment.

19.0 Ladders

Maintenance and Inspection

- Ladders must be visually inspected daily / prior to use;
- Any ladder found to be defective shall be taken out of service immediately and tagged; and,
- Once tagged, the ladder must not be used. The tag shall read "DO NOT USE".

Proper Use of Ladders

- Ladders must be C.S.A. approved and rated for their use and application;
- Ladders should not be placed against flexible or moveable surfaces;
- All portable ladders must have non-slip feet or be set-up so that the feet will not slip;
- Metal and reinforced ladders must not be used near energized electrical conductors;
- The ladder must be set up on firm level surface and secured against accidental movement. Use a ladder equipped with non-slip feet appropriate for the situation. If its base is to rest on soft, un-compacted or rough soil, a mud sill should be used;
- The top of the ladder should be tied off or otherwise secured to prevent any movement. If this is not possible, given the type of ladder or circumstances of its use, one worker should hold the base of the ladder while it is being used;
- Ladders should not be erected on boxes, carts, tables, scaffold, or man lift platforms or on vehicles;
- Areas surrounding the base and top of the ladder should be clear of trash, materials and other obstructions;
- If the ladders are vertical and there is a risk of falling more than three (3) metres (10 feet), a body harness and lifeline, or body harness and channel lock device, shall be used by workers climbing up and down or working from the ladders;
- When climbing up or down, Workers should always face the ladder;
- Workers should not straddle the space between the ladder and another object;
- Maintain 3-point contact when climbing up or down a ladder. That means two hands and one foot or two feet and one hand on the ladder at all times. This is especially important when you get on or off a ladder at heights;
- Under no circumstances should a Worker attempt to hand carry materials or equipment, while climbing or descending a ladder. Tools, equipment and materials should be placed in a container and raised and lowered by a rope or hoist if necessary;
- Never rest a ladder on its rungs, ladders must rest on their side rails only;
- If a ladder is used for access from one work level to another, the side rails should extend a minimum of 900 millimeters (3 feet) above the landing;

- Ladders should not be used horizontally as substitutes for scaffold planks, runways or any other service for which they have not been designed;
- If work to be performed on a ladder will cause heavy exertion by the worker or cause the worker to overextend to the sides, it is best to utilize a scaffold platform;
- Check all overhead areas for such things as power lines, etc.; and,
- According to regulatory requirements, there must be a minimum clearance of six inches between ladder rungs and any surface. This will ensure the Worker obtains a firm footing.

20.0 Elevated Work Platforms

- Elevating Work Platforms (EWP's) must be circle checked prior to each day's use by each Operator. EWP's must be operated in a safe manner as per the manufacturers operating manual as well as in accordance with the *Occupational Health and Safety Act* and relevant regulations.

21.0 Know Your Limits

- Never work at heights if you are afraid to do so, or if you are ill or subject to dizzy spells. Make this known to your Supervisor and he / she will assign you to other suitable work.

22.0 Asbestos (Where Applicable)

- Contractors who are required to perform Asbestos Abatement / Removal must do so in accordance with the Occupational Health and Safety act and Asbestos Regulations; and,
- Such Subcontractors must have current and valid Asbestos Abatement training.

NON-COMPLIANCE

1. The Contractor shall not hold harmless the Owner and their respective Officers, Employees and Agents for any failure by the Contractor to comply with the requirements of these guidelines or their statutory responsibilities. The Contractor shall be responsible, financially and otherwise, for non-compliance;
2. The following penalties may be levied without recourse, at the discretion of **Saturn Power Inc.**, against the Contractor for non-compliance:
 - a) Suspension or termination of the contract where the Contractor refuses and / or fails to fulfill their duties and responsibilities; and
 - b) Immediate ejection from the site of any offending person(s).
3. The Contractor shall be responsible for and shall fully indemnify **Saturn Power Inc.** and their Officers, Employees and Agents for:
 - a) Any and all costs incurred due to charges, fines and convictions resulting from the Contractor's failure to comply with these procedures or their statutory responsibilities which may cause delays to production or work activities;
 - b) Any and all costs incurred to defend any action resulting from the Contractor's failure to comply with these guidelines or their statutory responsibilities; and
 - c) Contractor's failure to comply with these guidelines or their statutory responsibilities resulting from their failure to comply with these guidelines or their statutory responsibilities.
4. Where the responsibilities of the Contractor are not carried out in a timely manner, for any reason, others will perform the work and costs shall be back-charged to the initial Contractor.

FORMS CHECKLIST

Return to Saturn Power Inc. → Forms, Checklist & Documents

For your convenience we are providing you with a checklist of the required forms.

The qualification process requires the contractor to provide the following:

- Copy of Workplace Safety and Insurance Board (WSIB) Injury Summary Report.
- Copy of Workplace Safety and Insurance Board (WSIB) *Clearance Certificate*. Please note: to comply with WSIB please send us your updated Clearance Certificate every 90 days. Independent Contractors must submit a current *WSIB Independent Status Letter* written to **Saturn Power Inc.** at the beginning of every new project.
- Copy of Certificate of Insurance for General Liability and Damage Insurance.

Please note: Your Insurance certificate requires at least the minimum amount of liability coverage as required, with **Saturn Power Inc.** recorded on the certificate as additionally insured.

- Copy of Material Safety Data Sheets (MSDS's) (required for all controlled products to be used on the premises).
- Signed and completed Contractor Declaration.
- Copy of the Contractor's Health & Safety Policy and Program (required if Contractor employs five or more persons).
- Copy of the Ministry of Labour Registration of Constructors and Employers Engaged in Construction (Form 1000 – required for construction projects only).
- Copy of all vehicle insurance certificates.



CONTRACTOR QUALIFICATION PACKAGE

CONTRACTOR DECLARATION

Company Name (Legal and Trade Name):		
Address:		
City:	Province:	Postal Code:
Contact Person:		Title:
Phone:	Fax:	
Email:		

By providing my signature below, I declare that the information provided in the *Contractor Qualification Package* is truthful, complete and correct.

I understand that any statement or concealment of fact(s) may result in the removal of the Contractor from any facility and / or property relating to the project.

In addition, I acknowledge and recognize that in accepting the contract our Company shall abide by the rules and procedures set out by **Saturn Power Inc.**, and in the *Ontario Health and Safety Act and Regulations*, and any other governing legislative bodies.

I acknowledge that any violation will be cause for suspension or termination of the contract with **Saturn Power Inc.**, immediate ejection or termination of any offender from the site, and/or back charges levied.

Signing Authority (print name): _____

Title: _____

Signing Authority Signature: _____
I have the legal authority to bind the company

Dated: _____
(MM/DD/YYYY)



CONTRACTOR PPE LIST

Title: CONTRACTOR PPE LIST	Issue Date: September 2016
Project Safety Program Section: 4.3	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

CONTRACTOR PPE LIST – Gesner Wind Farm

This is a complete PPE list and work instructions and RCV documentation should be reviewed prior to the start of work to determine what PPE is required for that specific task.

- PPE.WF.USA.001 Emergency Decent Device MRG-9
- PPE.WF.USA.002 Emergency Decent Device AG10K
- PPE.WF.USA.003 Emergency Decent/Rescue Device DBI Sala Rollgliss
- PPE.WF.USA.004 Fall Arrest Device DBI Sala
- PPE.WF.USA.005 Harness DBI Sala ExoFit
- PPE.WF.USA.006 Harness Petzl Navaho
- PPE.WF.USA.007 Lanyard DBI Sala
- PPE.WF.USA.008 Hard Hat Petzl
- PPE.WF.USA.009 Hard Hat Fibre-Metal
- PPE.WF.USA.010 Work Footwear - Climbing
- PPE.WF.USA.011 Work Footwear - Ground Applications
- PPE.WF.USA.012 Carabineer DBI Sala
- PPE.WF.USA.013 Decender Petzl ID-20
- PPE.WF.USA.014 Protective Safety Glasses
- PPE.WF.USA.015 Protective Safety Goggles
- PPE.WF.USA.016 Dielectric Gloves
- PPE.WF.USA.017 Full Face Respirator
- PPE.WF.USA.018 Particle Mask
- PPE.WF.USA.019 Respirator - 1/4 face
- PPE.WF.USA.020 Respirator - 1/2 face
- PPE.WF.USA.021 Glove - Yellow
- PPE.WF.USA.022 Glove - Nitrile
- PPE.WF.USA.023 Glove Nitrex with Nitril
- PPE.WF.USA.024 Glove - Nitrile
- PPE.WF.USA.025 Glove - Disposable Nitrile Glove
- PPE.WF.USA.026 Glove - Nylon
- PPE.WF.USA.027 Glove - Thermal
- PPE.WF.USA.028 Glove - Welding
- PPE.WF.USA.029 Retractable Belt - DBI Sala
- PPE.WF.USA.030 Hearing Protection - Helmet
- PPE.WF.USA.031 Hearing Protection - Ear Plugs
- PPE.WF.USA.032 Coverall - Tyvex
- PPE.WF.USA.033 Voltage Insulating Mat - Salisbury
- PPE.WF.USA.034 Voltage Insulating Pole - Salisbury
- PPE.WF.USA.035 Electrical Grounding Cables - Salisbury

PPE.WF.USA.036 Voltage Tester - Salisbury
PPE.WF.USA.037 Face Protection - Shield
PPE.WF.USA.038 Electrical Work Hard Hat & Face Shield
PPE.WF.USA.039 High Visibility Vest
PPE.WF.USA.040 Face Protection - Welding Shield
PPE.WF.USA.041 Welding Clothing
PPE.WF.USA.042 Knee Protectors
PPE.WF.USA.043 Lanyard - Horizontal
PPE.WF.USA.044 Fall Arrest Device - Rope Access
PPE.WF.USA.045 Acender
PPE.WF.USA.046 Suspension Trauma Strap
ASSEMBLY AND MAINTENANCE H&S PLAN Version 02: 01/02/08

PPE DATA SHEET

PPE.WF.USA.047 Glove – Butyl
PPE.WF.USA.048 Snow/Ice Cleats
PPE.WF.USA.049 Welding jacket
PPE.WF.USA.050 Chemical Apron / Sleeves
PPE.WF.USA.051 Flame Resistant Balaclava (Per Document “Equipment Data Sheet, Version 4”)
EQ.WF.USA.001 Locking Devices
EQ.WF.USA.002 Headlamp
EQ.WF.USA.003 Outside Hoisting/Lowering
EQ.WF.USA.004 Inside Hoisting/Lowering
EQ.WF.USA.005 Lifelines for Work in Basket
EQ.WF.USA.006 Multi Gas Meter
EQ.WF.USA.007 Single Gas Meter
EQ.WF.USA.008 AC Voltage Detector
EQ.WF.USA.009 Vehicle First Aid Kit
EQ.WF.USA.010 Wind Farm Office First Aid Kit
EQ.WF.USA.011 Radio Communications
EQ.WF.USA.012 Fire Extinguisher - Vehicle
EQ.WF.USA.014 Wind Turbine Door Safety Sign
EQ.WF.USA.015 Signage for Lifting Zone
EQ.WF.USA.016 Rescue Triangle
EQ.WF.USA.017 Lockout Tagout Tags
EQ.WF.USA.018 Vehicle Warning Device
EQ.WF.USA.019 Plug Lockout - Service Lift



VISITOR RESPONSIBILITIES

Title: VISITOR RESPONSIBILITIES		Issue Date: September 2016
Project Safety Program Section: 5.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

VISITOR RESPONSIBILITIES

Each visitor must read, understand, and acknowledge their responsibilities. It is the responsibility of the Company's contact to know when the visitor leaves.

Responsibilities:

1. Sign in on the Visitor Log, after reading and understanding their responsibilities.
2. Sign out on the Visitor Log when leaving the premises.
3. Remain with their designated host when possible / ensure the host knows of their whereabouts at all times.
4. Wear the appropriate Personal Protective Equipment, where required.
5. Smoking is not permitted anywhere on the Company premises except in designated area(s).
6. Be aware of moving vehicles and equipment, as well as overhead hazards.
7. Do not touch any tools equipment or machinery.
8. Report immediately to your contact, any injury / illness or hazard, no matter how minor.
9. Follow all posted signs and rules.
10. In the event of an emergency, follow the instructions of your contact and report to and remain at the gathering area until given further instruction.
11. Harassment, violence, profanity and inappropriate comments or conduct will not be tolerated. You must adhere to the company *Workplace Violence and Harassment Policy*.

We thank you for your commitment and assistance in making our workplace a healthy, safe and productive environment!

Sincerely,

Doug Wagner,
President

Ray Roth,
Vice President and General Manager

Jeremy Goertz
Vice President Construction/
Business Development

Title: HAZARD REPORTING		Issue Date: September 2016
Project Safety Program Section: 6.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

HAZARD REPORTING

1.0 PURPOSE

To outline the procedure to follow when reporting hazards.

2.0 SCOPE

This procedure applies to all Employees and Contractors and is to be used when a potential or actual hazardous act or condition is identified.

3.0 DEFINITIONS

Unsafe Act - Behaviours which could lead to an accident / incident.

Examples of unsafe acts can include using equipment in an unsafe or careless manner or not using Personal Protective Equipment as required.

Unsafe Condition - Circumstances which could allow an accident to occur.

Examples of unsafe conditions can include inadequate, improper or lack of safety devices; slippery work surfaces; and containers that are not labelled.

4.0 STANDARDS / PROCEDURES

An observed hazardous condition / act must be reported immediately to a Supervisor. Using the *Hazard Report Form*, detail the hazard(s), what actions will be initiated, by whom and when to correct the hazard(s).

All actions (responses) must be followed up to ensure they are completed.

5.0 ROLES / RESPONSIBILITIES

Management:

- Act as a resource to supervisors and workers; and,
- Review completed *Hazard Report Forms* to identify any other improvements, corrective action or proactive initiatives.

Supervisor:

- Fill in the *Hazard Report Form* with the assistance of the employee/worker reporting the hazardous condition / act;

- Rate all hazards using the *Hazard and Risk Assessment Form*;
- Ensure that any hazardous conditions or acts are followed up on a timely basis;
- Ensure that all the action(s) are completed; and,
- Ensure that copies of the *Hazard Report Form* are distributed to Senior Management and the Worker Health and Safety Representative / Joint Health and Safety Committee.

Employee:

- Report immediately to his / her supervisor, the existence of any hazard of which he or she is aware; and,
- Assist the supervisor with completing the Hazard Report Form.

6.0 COMMUNICATION

This procedure is communicated to all Employees, Supervisors and Management through:

- Staff meetings;
- Orientation of new employee; and / or,
- Coaching of employees found to have contravened this procedure.

7.0 TRAINING

Management will monitor the use of the Hazard Report Form and, if needed, training in its use will be provided to all Supervisors and Employees.

8.0 EVALUATION / REVIEW

Evaluation of this procedure and the Hazard Report form will be done by Management on an annual basis in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Hazard Report Form

Hazard and Risk Assessment Form

10.0 REFERENCE MATERIALS

I.Ontario Legislation - Occupational Health and Safety Act



HAZARD REPORT FORM

Title: HAZARD REPORT FORM		Issue Date: September 2016
Project Safety Program Section: 6.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

HAZARD REPORTING FORM

Reported by: _____ Reported to: _____

Work Location: _____ Date of Report: _____

Location of hazard: _____

WORKER: Please describe the hazard:

WORKER Please describe the safety issue:

SUPERVISOR: Rate Hazard using the *Hazard Assessment Form* and attach it to this sheet.

If this is a repeat issue, whom have you reported it to before: _____

Recommendations (what needs to be done, who is doing it, time frames):

Actions taken / Responses given:

Original to: Management when all the recommendations are completed

Copies to: Supervisor, Worker Health and Safety Representative(s) / Joint Health & Safety Committee.

Title: HAZARD ASSESSMENT GUIDELINES		Issue Date: September 2016
Project Safety Program Section: 6.3		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

HAZARD ASSESSMENT GUIDELINES

1.0 PURPOSE

To assist in the identification, rating and control of existing or potential hazards in the workplace.

2.0 SCOPE

This procedure applies to all Employees, Supervisors and Management.

3.0 DEFINITIONS

Engineering Controls - Engineering controls help reduce the risk to potential hazards either by isolating the hazard or removing it from the work place. Engineering controls include mechanical ventilations and process enclosures. They are important because they are included in the work process.

Engineering controls are usually preferred to other control measures such as the use of personal protective equipment. Substitution of a less hazardous material or industrial process is the best way to reduce a hazard and is often considered to be a type of engineering control.

Administrative Controls - Administrative controls deal with the directing of people and include policy, procedures, and training. Administrative controls reduce or limit the amount of risk that an employee has to a specific hazard through rotation, job assignment, or time periods away from a contaminant or hazard.

Personal Protective Equipment - Personal protective equipment is the final line of defense against hazards in the work place. It is implemented only after other reasonably practicable means of eliminating a hazard have been attempted.

Consequence - Consequence is a description of the outcome of the occurrence of an incident including an evaluation of the loss as it affects people, property and equipment, environment and the company image.

Probability - Probability is the likelihood that the identified hazard will result in a consequence within a specified period of time.

Chemical Hazards - Chemicals that come into contact with the human body causing harm are known as chemical hazards. These chemicals may exist in different forms of mists, vapours, fumes, gases, dusts or liquids.

Biological Hazards - Mold, viruses, bacteria, fungi, insects, animals, bodily fluids and plants that may cause adverse effects to the human body are classified as biological hazards.

Ergonomic Hazards - Physical disorders and stresses that cause harm to the human body resulting from poor work conditions, posture, improper material handling, poor seating support, fatigue and improper work / rest cycles are considered ergonomic hazards.

Electrical Hazards - A dangerous condition such that contact or equipment failure can result in electric shock, arc-flash burn, thermal burn or blast.

Unsafe Act - Are behaviors, which could lead to an accident / incident.

Examples of unsafe acts: can include using equipment in an unsafe or careless manner or not using personal protective equipment as required.

Unsafe Condition - Are circumstances, which could allow an accident to occur. Examples of unsafe conditions can include: inadequate, improper or lack of safety devices, slippery work surfaces, electrical grounding requirements not observed, and containers that are not labeled.

4.0 STANDARDS / PROCEDURES

Hazard identification and control are the key components in maintaining a safe and healthy workplace. Hazards, occupational factors or illnesses arising from the workplace, which may cause affected health and negative wellbeing, sickness or significant inefficiency must be identified and controlled.

Hazard Assessment results can include:

- Increased knowledge of the dangers inherent in the tasks of employees;
- Enhanced safety awareness and improved safety dialogue and communication amongst employees;
- Improved focus for workplace safety inspections;
- Improved risk management leading to increased accident prevention; and / or,
- Compliance with the *Occupational Health and Safety Act*.

Recognizing and assessing hazards is the first step to controlling or eliminating risk. Methods of doing this include observation and reporting, inspection, task analysis, and trend identification.

Factors that contribute to making a job hazardous are identified as:

- People (training / competency);
- Equipment;
- Materials;
- Environment; and,
- Process (the way the work is done).

The degree of hazard or risk can be estimated using knowledge of the potential for a major injury (severity) and knowledge of probability of occurrence (For example: an inexperienced worker or a new job).

Assessment:

The assessment process contains four basic components, including:

- Identifying the source;
- Recognizing the hazard;
- Evaluating the potential loss; and,
- Controlling the risk.

Hazard Categories:

Hazards are divided into many categories, which may include the following:

- Chemical hazards;
- Biological hazards;
- Physical hazards;
- Ergonomic hazards (Repetition, Posture, Force);
- Electrical hazards;
- Compression hazards; and / or,
- Thermal hazards.

You must conduct a hazard assessment when you are taking on a new scope of work, the environment changes, new hazards are identified or when new hazards cannot be eliminated. When conducting a hazard assessment, ensure you include the following:

- The identified step / task;
- The health, safety and ergonomic criteria;
- The identification of the hazard and the potential injury(s);
- The risk assessment (rating number to identify the low, medium or high risk); and,
- The controls to help eliminate or mitigate the risk to protect the worker.

5.0 ROLES / RESPONSIBILITIES

Management:

- Act as a resource to supervisors on the hazard assessment development process; and.
- Facilitate the training of supervisors on the hazard assessment process.

Supervisor:

- Conduct hazard assessments when required;
- Review hazard assessments for accurate risk rating and controls; and.
- Ensure hazards and their controls are communicated to affected staff.

Worker:

- Participate in the hazard assessment process where required; and.
- Follow all control measures identified in their scope of work.

6.0 COMMUNICATION

This procedure will be communicated to all staff through orientation.

7.0 TRAINING

Training Requirements:

Personnel who conduct hazard assessments will be trained on the identification, assessment and control of hazards. All training will be documented and records filed with Management.

Type of Training:

The training will include classroom theory (legislative requirements, internal procedure, and specific procedures).

8.0 EVALUATION / REVIEW

Management will review the procedure annually for its effectiveness in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

HAZARD ASSESSMENT REVIEW PROCESS

Hazard assessments will be reviewed by Management in cooperation with the Worker Health and Safety Representative / Joint Health and Safety Committee:

- Every 3 years; or,
- When a new process / equipment is introduced to the workplace; or,
- When a process / equipment has changed or been relocated; or,
- When an incident has occurred and is associated with worker activities/ the work environment.

9.0 FORMS / RECORDS

Hazard and Risk Assessment Form

10.0 REFERENCE MATERIALS

I.Ontario Legislation - Occupational Health and Safety Act



EMERGENCY RESPONSE PLAN – PROJECT SITES

Title: EMERGENCY RESPONSE PLAN – PROJECT SITES		Issue Date: September 2016
Project Safety Program Section: 7.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

EMERGENCY RESPONSE PLAN – PROJECT SITES

1.0 PURPOSE

To provide projects with a generic plan that will assist in a safe and orderly response and / or evacuation in the event of emergency.

2.0 SCOPE

This procedure applies to all Employees, Contractors, and Visitors on the project.

3.0 DEFINITIONS

Emergency - is generally defined as any event causing medical emergency, critical injury, fire or explosion, natural gas leak, chemical spill, power failure, severe weather or natural disaster, etc.

4.0 STANDARDS / PROCEDURES

SITE-SPECIFIC PLANS: All wind, solar and construction projects require a Site-Specific Emergency Response Plan to be developed (to be inserted into Site-Specific H&S Program).

In the case of Fire or Explosion: COMMUNICATION DEVICE TO BE DETERMINED

1. If safe and if trained, use a fire extinguisher to put out the fire. If the fire is out of control, immediately evacuate.
2. Proceed out of the building via the nearest safe exit and call 9-1-1 from a cell phone or nearby business.
3. Gather at the pre-determined gathering area for the project site.
4. Remain at the gathering area for a role call and report any missing persons to your Supervisor. If there is inclement weather, the Supervisor will advise what to do.
5. Once the Supervisor has given the all clear, proceed back into the building / area.

Always follow instructions from emergency response personnel.

In the case of Natural Gas Leak: COMMUNICATION DEVICE TO BE DETERMINED

1. Immediately evacuate the building / area - DO NOT turn on or off any electrically powered equipment and DO NOT use any personal mobile devices while in the affected area.
2. Proceed out of the building / area via the nearest safe exit and call 9-1-1 from a cell phone or nearby business.
3. Gather at the pre-determined gathering area for the project site.
4. Remain at the gathering area for a role call and report any missing persons to your Supervisor. If there is inclement weather, the Supervisor will advise what to do.
5. Once the Supervisor has given the all clear, proceed back into the building / area.

Always follow instructions from emergency response personnel.

In the case of a Chemical Spill:

Determine the type and size of the spill:

1. Liquid spill: refer to MSDS sheet
2. Liquid spill – gasoline / racing fuel: initiate evacuation procedure (see **Evacuation** procedure)
3. Powder spill: clean up using the following steps:
 - a) Retrieve the MSDS.
 - b) Look up the chemical to determine the appropriate equipment needed to contain the spill.
 - c) Put on the required Personal Protective Equipment.
 - d) Clean up the spill following the instructions on the MSDS.

Always follow instructions from emergency response personnel.

In the case of Power Failure:

Stay calm and remain where you are. If the power does not come back on within a few minutes, then:

1. Turn off sensitive equipment to prevent power surge, if you can safely do so.
2. Proceed with caution towards a well-lit area or exit.
3. Follow instructions from management.

Always follow instructions from emergency response personnel.

In the case of Lightning, Floods, Blizzards or Inclement Weather: COMMUNICATION DEVICE TO BE DETERMINED

1. DO NOT go / stay outside, if possible.
2. Gather in the pre-determined gathering area for the project site.
3. Remain at the gathering area for a role call and report any missing persons to your Supervisor. If there the inclement weather is not expected to pass, the Supervisor will advise what whether work will resume or Workers will be sent home.
4. Once the Supervisor has given the all clear, proceed back into the building / area.

Always follow instructions from emergency response personnel.

In the case of Tornado: COMMUNICATION DEVICE TO BE DETERMINED

1. DO NOT go / stay outside, if possible.
2. Immediately proceed to the inner-most portion of the building away from exterior doors and windows.
3. Stay crouched and make sure you cover / protect your head with your hands.
4. If you become trapped save your energy. Stay calm and wait for rescue personnel to arrive. Listen for rescuers and call out to them.

Always follow instructions from emergency response personnel.

ALL CLEAR SIGNAL: COMMUNICATION DEVICE TO BE DETERMINED

5.0 ROLES / RESPONSIBILITIES

Project Managers:

- Review the plan and make any changes necessary to be project specific; and,
- Facilitate the communication and training of then plan will all levels of personnel within the organization.

Supervisors:

- Will make the decision to evacuate, when there is an immediate danger;
- Will use the Air Horn as required to signal the appropriate type of emergency – may also assign this responsibility as may be required;
- Will ensure a role call has taken place to account for employees, contractors and visitors;
- Will ensure 9-1-1 / Emergency Services / Ministry of Environment have been notified as required;
- Will ensure an individual is assigned to meet and guide emergency responders to the emergency scene, as required; and,
- Will issue the all clear to return to work / re-enter the building or affected area using the air horn.

Workers:

- Upon discovering any emergency, immediately report it to the Supervisor, and / or, go to the nearest phone or cell phone to call 9-1-1 to report the type and location of emergency;
- Inform other persons in the affected areas of the emergency;
- Know the location of emergency exits and gathering area(s);
- Know the locations of fire extinguishers and how to use extinguishers; and,
- Follow the emergency response procedures and direction from managers, supervisor, and or emergency responders.

6.0 COMMUNICATION

This procedure will be communicated to all Employees during site orientation.

7.0 TRAINING

Training will be provided to Project Managers and Supervisors on their specific responsibilities, and to all staff by means of a testing / drills.

8.0 EVALUATION

This procedure will be reviewed at least annually by the Project Manager in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

This procedure may also be reviewed after any live emergency or test.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

I.CCOHS – Canadian Centre for Occupational Health & Safety

Title: INCLEMENT WEATHER – LIGHTNING & THUNDERSTORMS		Issue Date: November 2016
Project Safety Program Section: 7.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

LIGHTNING & THUNDERSTORMS

1.0 PURPOSE

The purpose of this procedure is to ensure workers and contractors are aware of the steps and procedures to be taken in the event of lightning / thunderstorms.

2.0 SCOPE

This procedure applies to all employees and contractors of **Saturn Power Inc.** who may be exposed to lightning / thunderstorms during day-to-day activities.

3.0 DEFINITIONS

Lightning - Lightning is an electrical discharge caused when static electricity builds up between positively and negatively charged areas such as between thunderclouds, or thunderclouds and the ground. Lightning can occur from cloud-to-cloud, within a cloud, cloud-to-ground, or cloud-to-air.

4.0 STANDARDS / PROCEDURES

In the event of **lightning and thunderstorms**:

Immediately seek shelter (building or vehicle).

If you are inside a vehicle during lightning avoid parking under trees or power lines that may topple over during a storm. Be aware of downed power lines that may be touching your vehicle. You are safe inside your vehicle however; you may receive a shock if you step outside.

If outside, with no time to reach a safe shelter (building or vehicle) follow these rules:

- Do NOT stand underneath a natural lightning rod: tall, isolated trees, towers, power lines, telephone poles etc.
- AVOID all unsafe shelters: metal objects such as power poles, fences, gates, bleachers, small sheds, partial shelters, electrical equipment, mowing and road machinery.
- AVOID solitary trees, hilltops, water, open fields, high ground and caves.
- Stay away from wire fences, clotheslines, metal pipes, rails and other metallic paths that could carry lightning towards you.
- Get off of and away from motorcycles, scooters, mowing equipment, bicycles and metal machinery.

- Ensure all tools are put down. Holding something can make you the tallest object and a target for lightning.
- DO NOT stand in puddles even if you are wearing rubber boots.
- If you are with a group ensure there are several meters between individuals to avoid lightning from jumping from person to person.
- If you feel your skin tingle, your hair stand on end, and / or you hear “crackling noises” a strike may be about to happen so get into the lightning safety crouch...

Lightning Safety Crouch:

Crouch down on the balls of your feet with your feet close together. Keep your hands on your knees and lower your head. Some people may prefer to wrap their hands over their ears or cover the back of their neck. Make yourself the smallest target possible and minimize your contact with the ground – do not lie down!

30 / 30 Rule:

30 Seconds: Count the seconds between seeing the lightning flash and hearing the thunderclap. Each second represents about 300 meters. If this time is 30 seconds or less, then the lightning storm is less than 10km away and there is an 80% chance that the next strike will happen within that 10km. Seek shelter immediately, preferably in a building, all-metal vehicle (not a convertible) or in a low-lying area.

30 Minutes: After seeing the last lightning flash or thunder clap, wait 30 minutes before leaving shelter. More than half of lightning deaths occur after the thunderstorm has passed. Stay in a safe area until you are sure the threat has passed and the all clear to return to work has been given by supervision.

5.0 ROLES / RESPONSIBILITIES

Supervisors:

- Be aware of the weather forecast for the day’s work.
- Monitor weather conditions and implement this procedure as may be required.
- Identify and communicate where Inclement Weather Shelters are to affect workers and Contractors.
- Ensure this procedure is communicated to all affected workers and contractors.

Workers:

- Comply with this procedure and any other instructions from your Supervisor.
- Familiarize yourself with the closest shelters.
- Immediately report Inclement Weather conditions to your Supervisor.

6.0 COMMUNICATION

Affected workers and contractors will receive communication on this procedure during orientation and initial job instruction. It will also be re-communicated on days when there is a potential for Lighting / Thunderstorm.

7.0 TRAINING

N/A

8.0 EVALUATION

Human Resources in cooperation with the JHSC / Worker Representative(s) will evaluate the effectiveness of this procedure at least annually.

9.0 REFERENCE MATERIALS

- Environment Canada

Title: INJURY, ILLNESS & INCIDENT REPORTING		Issue Date: September 2016
Project Safety Program Section: 8.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

INJURY, ILLNESS & INCIDENT REPORTING

1.0 PURPOSE

This procedure outlines the responsibilities of reporting all occupational injuries, illnesses and incidents.

2.0 SCOPE

This procedure applies to all Employees and Contractors.

3.0 DEFINITIONS

Injury - An event that results in physical harm to an Employee.

Illness - A deviation from the normal, healthy, state of the body.

Incident - An event which occurs other than an injury or illness.

4.0 STANDARDS / PROCEDURES

The following categories of injuries, illnesses and incidents will be reported, regardless of the nature or severity of the event:

- Fatalities;
- Critical injuries;
- Lost time injuries;
- All personal injuries involving health care;
- All first aid injuries;
- Occupational Illness;
- Fires and explosions;
- Environmental releases and / or chemical spills which do or do not require the Ministry of Environment to be contacted; and / or,
- Near miss incidents (may include property damage).

5.0 ROLES / RESPONSIBILITIES

Management:

- Continuously monitor the effectiveness and compliance to this procedure;
- Collect and review all reports of injury, illness or incident;
- Complete WSIB reporting requirements as necessary (i.e. Form 7);

- Act as a resource to Workers and Supervisors; and,
- Upon receipt of a First Aid Log Book, ensure the affected kit has been inspected and restocked.

Supervisor:

- Ensure that first aid has been provided to the injured worker and that any treatment and / or advice given have been recorded by the first aid provider in the First Aid Log Book;
- Ensure the Worker has received and completed the Employee's Kit for Reporting Work Related Injuries for injuries which require health care;
- Ensure the completed kit is forwarded to Management within 24 hours of occurrence
- Ensure rescue / response teams are notified, if necessary;
- Always follow Safe Operating Procedures, where required;
- Maintain contact with the injured Worker;
- Notify Management of all serious injuries, illnesses and incidents as required; and,
- Initiate an Incident Investigation, if required.

Worker:

- A Worker who sustains an injury or becomes ill as a result of workplace conditions or work activities must report the injury or illness to their Supervisor immediately;
- Complete the Employee's Kit for Reporting Work Related Injuries for injuries which require health care - may do so with assistance from their Supervisor; and,
- All other incidents must be immediately and directly reported to their Supervisor.

First Aid Provider:

- Upon being informed of an injured or ill Worker, will go to the first aid station and administer appropriate treatment;
- Record all treatment or advice given in the First Aid Log Book and provide appropriate copies to Management and the injured Worker; and,
- As necessary and / or required, assist in ensuring that an injured or ill worker receives subsequent medical attention.

6.0 COMMUNICATION

This procedure is communicated to all Supervisors and Employees through:

- Orientation
- Postings / meetings as deemed necessary by Management

Regular reports of trends and statistical information will be made at regular intervals to Management and the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

7.0 TRAINING

Training on this procedure is provided to all Employees. Training frequency is upon initial hire or appointment, and every 3 years unless otherwise specified.

8.0 EVALUATION / REVIEW

Worker compliance with this procedure is monitored regularly. The procedure will be reviewed annually for its effectiveness by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

First Aid Log Book

Injury, Illness & Incident Report Form

Employee's Kit for Reporting Work Related Injuries

WSIB - Employer's Report of Injury / Disease (Form 7)

10.0 REFERENCE MATERIALS

- I. Ontario Legislation – Occupational Health and Safety Act sections 51 and 52
- II. WSIA - Workplace Safety & Insurance Act
- III. WSIB - Regulation 1101 for First Aid



INJURY, ILLNESS & INCIDENT REPORT FORM

Title: INJURY, ILLNESS & INCIDENT REPORT FORM		Issue Date: September 2016
Project Safety Program Section: 8.2		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

INJURY, ILLNESS & INCIDENT REPORT FORM

INCIDENT REPORT			ACCIDENT REPORT		
<input type="checkbox"/> Hazardous Situation <input type="checkbox"/> Work Refusal <input type="checkbox"/> Violence <input type="checkbox"/> Harassment <input type="checkbox"/> Other Reportable Incident	<input type="checkbox"/> Environmental Concern <input type="checkbox"/> Property Damage <input type="checkbox"/> Estimated Cost \$ _____ <input type="checkbox"/> Actual Cost \$ _____	<input type="checkbox"/> First-Aid <input type="checkbox"/> Health Care <input type="checkbox"/> Occupational Disease	<input type="checkbox"/> Lost Time Injury <input type="checkbox"/> Critical Injury <input type="checkbox"/> Other _____		
Worker's Last Name _____		Worker's First Name _____		Employee Number _____	
Supervisor _____		Person Completing this Investigation Report Form (IRF) _____			
Date Employed (D/M/Y) _____	Time on Job (months/ years) _____	Shift _____	Shift Duration _____	Start _____	Finish _____
Employment Classification <input type="checkbox"/> Full Time <input type="checkbox"/> Part Time <input type="checkbox"/> Apprentice <input type="checkbox"/> Student <input type="checkbox"/> Modified <input type="checkbox"/> Other					
Occurrence Date (D/M/Y) _____ Time _____		Date Reported (D/M/Y) _____ Time _____		Last Date Worked (D/M/Y) _____	
Occurrence Reported To _____		Occurrence Reported By _____		Date Investigated Started _____ Completed _____	
Medical Treatment Facility/ Address _____		Attending Physician _____		Phone Number _____	
Has the Injured worker had a similar disability? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Describe _____					
Do you have any reason to doubt the history of the accident? <input type="checkbox"/> Yes <input type="checkbox"/> No (if yes attach details)					
Was anyone not employed by our organization directly or indirectly responsible for the incident/ accident? <input type="checkbox"/> Yes <input type="checkbox"/> No (if yes attach detail)					
INJURY SOURCE			INCIDENT TYPE		
<input type="checkbox"/> Body motion <input type="checkbox"/> Materials handling <input type="checkbox"/> Physical agent <input type="checkbox"/> Chemical agent	<input type="checkbox"/> Electricity <input type="checkbox"/> Tools <input type="checkbox"/> Machinery <input type="checkbox"/> Other	<input type="checkbox"/> Surfaces <input type="checkbox"/> Mobile equipment <input type="checkbox"/> Environmental	<input type="checkbox"/> Struck by <input type="checkbox"/> Slip/ trip/ fall <input type="checkbox"/> Overexertion <input type="checkbox"/> Lifting/Pushing/Pulling	<input type="checkbox"/> Struck against <input type="checkbox"/> Overexposure <input type="checkbox"/> Caught in/ on/ between <input type="checkbox"/> Other	
DIRECT CAUSES What acts, failures to act and/ or conditions contributed most directly. (Check the appropriate boxes and explain)					
CONTRIBUTING CONDITIONS (PHYSICAL/ENVIRONMENTAL)			CONTRIBUTING ACTIONS (PERSONAL)		
<input type="checkbox"/> Protective guards/systems <input type="checkbox"/> Machinery/equipment/ tools <input type="checkbox"/> Access/egress <input type="checkbox"/> Workstation design <input type="checkbox"/> Environmental	<input type="checkbox"/> PPE availability <input type="checkbox"/> Housekeeping <input type="checkbox"/> Physical agent <input type="checkbox"/> Chemical agent <input type="checkbox"/> Other	<input type="checkbox"/> Unauthorized equipment use <input type="checkbox"/> Use of defective equipment/tools <input type="checkbox"/> Improper body motion <input type="checkbox"/> Incorrect use of PPE <input type="checkbox"/> Horseplay or willful misconduct	<input type="checkbox"/> Working @ unsafe speeds <input type="checkbox"/> Disabling safety devices <input type="checkbox"/> Deviating from procedures <input type="checkbox"/> Failure to warn/ secure <input type="checkbox"/> Other		
Explain: _____			Explain: _____		
BASIC CAUSES Identify the basic reasons for the existence of the contributing conditions or actions. (Check the appropriate boxes and explain).					
JOB FACTORS <input type="checkbox"/>			PERSONAL FACTORS <input type="checkbox"/>		



INJURY, ILLNESS & INCIDENT REPORT FORM

WORKER'S NAME:		DATE OF OCCURRENCE:																																									
What happened to cause the occurrence? Discuss the person with most control of object, equipment, substance, etc. <div style="text-align: right;">(Use additional sheet if necessary)</div>																																											
Describe what the worker was doing, the effort involved and the exact location of the incident, etc. Attach a diagram if relevant.																																											
Identify the size, weight and type of equipment, object, materials, etc., involved.																																											
Injury Sustained (cut, abrasion, sprain, fracture, etc.)		Specific Body Parts Involved (left/ right, upper/ lower, front/back, etc.)																																									
The worker is <input type="checkbox"/> Right Handed <input type="checkbox"/> Left Handed <input type="checkbox"/> Unknown																																											
List all witnesses or persons having knowledge (include name/company/phone, etc.)		Witness Statements are attached <input type="checkbox"/>																																									
Risk Potential <input type="checkbox"/> Major <input type="checkbox"/> Serious <input type="checkbox"/> Minor		Probability of Recurrence <input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low																																									
PREVENTION STRATEGIES What actions have or will be taken to prevent a recurrence. (Number in order of importance)																																											
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Item</th> <th style="text-align: center; border-bottom: 1px solid black;">Corrected</th> <th style="text-align: center; border-bottom: 1px solid black;">Planned</th> </tr> </thead> <tbody> <tr><td>Housekeeping</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Coordination with other trades</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Engineering controls</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Purchasing controls</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Closer supervision</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Re-instruction/ training</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> </tbody> </table>	Item	Corrected	Planned	Housekeeping	<input type="checkbox"/>	<input type="checkbox"/>	Coordination with other trades	<input type="checkbox"/>	<input type="checkbox"/>	Engineering controls	<input type="checkbox"/>	<input type="checkbox"/>	Purchasing controls	<input type="checkbox"/>	<input type="checkbox"/>	Closer supervision	<input type="checkbox"/>	<input type="checkbox"/>	Re-instruction/ training	<input type="checkbox"/>	<input type="checkbox"/>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Item</th> <th style="text-align: center; border-bottom: 1px solid black;">Corrected</th> <th style="text-align: center; border-bottom: 1px solid black;">Planned</th> </tr> </thead> <tbody> <tr><td>Equipment repair/ replacement</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Modify procedures</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Personal protective equipment</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Tool box talks</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Revise inspection requirements</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Other _____</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> </tbody> </table>	Item	Corrected	Planned	Equipment repair/ replacement	<input type="checkbox"/>	<input type="checkbox"/>	Modify procedures	<input type="checkbox"/>	<input type="checkbox"/>	Personal protective equipment	<input type="checkbox"/>	<input type="checkbox"/>	Tool box talks	<input type="checkbox"/>	<input type="checkbox"/>	Revise inspection requirements	<input type="checkbox"/>	<input type="checkbox"/>	Other _____	<input type="checkbox"/>	<input type="checkbox"/>
Item	Corrected	Planned																																									
Housekeeping	<input type="checkbox"/>	<input type="checkbox"/>																																									
Coordination with other trades	<input type="checkbox"/>	<input type="checkbox"/>																																									
Engineering controls	<input type="checkbox"/>	<input type="checkbox"/>																																									
Purchasing controls	<input type="checkbox"/>	<input type="checkbox"/>																																									
Closer supervision	<input type="checkbox"/>	<input type="checkbox"/>																																									
Re-instruction/ training	<input type="checkbox"/>	<input type="checkbox"/>																																									
Item	Corrected	Planned																																									
Equipment repair/ replacement	<input type="checkbox"/>	<input type="checkbox"/>																																									
Modify procedures	<input type="checkbox"/>	<input type="checkbox"/>																																									
Personal protective equipment	<input type="checkbox"/>	<input type="checkbox"/>																																									
Tool box talks	<input type="checkbox"/>	<input type="checkbox"/>																																									
Revise inspection requirements	<input type="checkbox"/>	<input type="checkbox"/>																																									
Other _____	<input type="checkbox"/>	<input type="checkbox"/>																																									
Listed suggested Corrective Measures or additional comments. Use additional sheet if necessary. 																																											
Follow-up Conducted By:																																											
ATTACHMENTS: <input type="checkbox"/> Statements <input type="checkbox"/> Photographs <input type="checkbox"/> Functional Abilities Form <input type="checkbox"/> Consent Form <input type="checkbox"/> Other _____																																											
EMPLOYEE'S STATUS: <input type="checkbox"/> Regular Duties <input type="checkbox"/> Modified Duties <input type="checkbox"/> Off Work <input type="checkbox"/> Referred to Modified _____ <div style="text-align: right;">Return Date _____</div>																																											
Senior Management:	Date (D/M/Y)	Supervisor:	Date(D/M/Y)																																								
Health & Safety:		Worker Involved:																																									
Other:		Other:																																									

Employee Checklist

If you are injured at work and seek health care...

- Complete the **Employee's Report of Injury** form with assistance from your Supervisor.
- Immediately forward original copy to the office, Worker keeps copy.
- Take the **Letter to Health Care Provider** and the **Functional Abilities Form Reporting**
- Return the completed **Functional Abilities Form** to the office immediately.
- Contact the office to discuss your Functional Abilities and to complete the **Return to Work Case Plan**.

If you require assistance or have any questions please contact Management immediately.

Always notify Human Resources AND your Supervisor if you are unable to attend work or experience a change in your condition.



**Employee's Kit for
Work-Related Injuries**

This Kit contains:

- ✓ Employee's Report of Injury
- ✓ Letter to Health Care Provider
- ✓ WSIB Functional Abilities Form
- ✓ Return to Work Case Plan
- ✓ Acknowledgement Form



EMPLOYEE'S REPORT OF INJURY

Title: EMPLOYEE'S REPORT OF INJURY		Issue Date: September 2016
Project Safety Program Section: 8.4		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

INJURY / ILLNESS DETAILS Personal Work Related

1. Date and hour of accident/Awareness of illness: dd mm yy AM/PM
 Date and hour reported to employer: dd mm yy AM/PM

2. Who did you report this accident/illness to? (Name & Position) _____
 Telephone: _____

3. Area of Injury (Body Part) - (Please check all that apply)

<input type="checkbox"/> Head	<input type="checkbox"/> Teeth	<input type="checkbox"/> Upper back	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
<input type="checkbox"/> Face	<input type="checkbox"/> Neck	<input type="checkbox"/> Lowerback	<input type="checkbox"/> Shoulder	<input type="checkbox"/> Arm	<input type="checkbox"/> Wrist	<input type="checkbox"/> Hand	<input type="checkbox"/> Hip	<input type="checkbox"/> Thigh	<input type="checkbox"/> Knee	<input type="checkbox"/> Lower Leg	<input type="checkbox"/> Ankle	<input type="checkbox"/> Foot
<input type="checkbox"/> Eye(s)	<input type="checkbox"/> Chest	<input type="checkbox"/> Abdomen	<input type="checkbox"/> Elbow	<input type="checkbox"/> Forearm	<input type="checkbox"/> Finger(s)						<input type="checkbox"/> Toe(s)	<input type="checkbox"/>
<input type="checkbox"/> Ear(s)		<input type="checkbox"/> Pelvis										

Other: _____ Are you: Left Handed Right handed

4. Did the accident/illness happen on the employer's property or work site? yes no | Specify where it happened (shop floor, warehouse, client/customer site, parking lot, etc.): _____

5. Have you hurt this area of the body before? yes no If yes, when and how? _____

6. If you had a sudden type of injury/ illness, describe what happened to cause it: _____

7. When did you first start to have problems with this injury/condition? _____

8. If there were any witnesses please give us their names & positions.

Name	Position
1. _____	_____
2. _____	_____

HEALTH CARE INFORMATION

1. Did you get first aid or care at work? yes no If yes, when dd mm yy and by whom (Name): _____

2. Where did you go for health care, for your injury, outside of work? (Check all that apply)

Facility/Hospital (Name & Address)	Date of Visit (dd/mm/yy)	Date of Visit (dd/mm/yy)
<input type="checkbox"/> Nursing Station		<input type="checkbox"/> Ambulance
<input type="checkbox"/> Emergency Department		<input type="checkbox"/> Health Professional Office
<input type="checkbox"/> Admitted to Hospital		<input type="checkbox"/> Clinic

3. Were you prescribed any medications/drugs? yes no **4.** Were you referred for any other treatment or tests? yes no

5. Did you talk to your health professional about going back to regular or modified work? yes no If yes, were you given any work limitations? yes no

6. Did you tell your Supervisor you went for medical treatment? yes no **If no, please tell your Supervisor right away.**

If yes, when? dd mm yy and to whom? _____
 Name: _____ Position: _____

Signature: _____ **Date (dd/mm/yy)** _____



LETTER TO HEALTH CARE PROVIDER

Title: LETTER TO HEALTH CARE PROVIDER	Issue Date: September 2016
Project Safety Program Section: 8.5	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

LETTER TO HEALTH CARE PROVIDER

Dear Health Care Provider,

Saturn Power Inc. in cooperation with the Workplace Safety and Insurance Board, has established an “Early and Safe Return to Work Program” at no wage loss to the Employee.

In order to facilitate a successful return to work, **Saturn Power Inc.** wishes to accommodate any physical restrictions, limitations, or impairments that our Employee may have, short of undue hardship.

We will tailor and modify our Employee's work activity to fit their needs based on:

- Task or type of work;
- Physical environment; and / or,
- Duration of work.

Saturn Power Inc. facilitates modified or graduated hours and work-hardening activities.

- We respectfully ask you to complete and return page 3 of the Form 8 to the Employee after the initial visit. This will enable us to offer suitable work for our injured Employee.
- If this is a follow up visit, please complete and return the Functional Abilities Form to the Employee.

We thank you in advance for your completion of the attached form.

Sincerely,

Doug Wagner,
President

T: 519-748-3191
E-Mail: doug.wagner@saturnpower.com

Ray Roth,
Vice President and General Manager

T: 226-338-4870
E-Mail: ray.roth@saturnpower.com

Jeremy Goertz,
Vice President Construction/Business Development

T: 519-573-1933
E-mail: jeremy.goertz@saturnpower.com

Functional Abilities Form for Planning Early and Safe Return to Work

Health Professionals, please use this form ONLY when requested by an employer or worker.

The purpose of this form is to identify your patient's overall functional abilities and work restrictions that will assist his/her return to suitable work.

Please promptly complete and return pages 2 and 3 of this form to the worker or employer to assist the workplace parties in planning an early and safe return to work.

PLEASE ENSURE YOUR BILLING INFORMATION IS NOT GIVEN TO THE WORKER OR EMPLOYER.

Authority to Release Information

Section 37(3) of the *Workplace Safety and Insurance Act, 1997* provides the legal authority for health professionals to give the Workplace Safety and Insurance Board (WSIB), the injured worker and the employer such information as may be prescribed concerning the worker's functional abilities.

When completing this report, please **print in black ink.**

Worker and/or employer should complete Sections A and B of this report. If your patient needs assistance, please help. Please submit this report even if Section A is not fully completed.

Information about your responsibilities can be found on **Page 4.**

The WSIB will pay health professionals for completing this form.

Mail to:

Workplace Safety and Insurance Board
200 Front Street West
Toronto, ON M5V 3J1

OR

Fax to:

416-344-4684
or 1-888-313-7373



A guide to completing this form is available at www.wsib.on.ca

Claim No. _____

Please PRINT in black ink

A. Section A to be completed by the employer and/or worker.

Worker's Last Name	First Name	Telephone
Address (no., street, apt.)	City/Town	Province Postal Code
Employer's Name	Date of Birth (dd/mm/yyyy)	Date of Accident/ Awareness of Illness (dd/mm/yyyy)
Full Address (No., Street, Apt.)	Employer Telephone	
City/Town	Prov.	Postal Code
		Employer Fax No.

1. Type of job at time of accident (where available, please attach description of job activities)	Area(s) of injury(ies)/illness(es)
2. Have the worker and the employer discussed Return To Work <input type="checkbox"/> yes <input type="checkbox"/> no	If no, will be discussed on dd mm yyyy
3. Employer contact name	Position

B. Worker's Signature

By signing below, I am authorizing any health professional who treats me to provide me, my employer and the Workplace Safety and Insurance Board (WSIB) with information about my functional abilities on the WSIB's "Functional Abilities for Planning Early and Safe Return to Work" form.

Signature _____ Date dd mm yyyy

C. Health Professional's Billing Information

For billing purposes fax or mail pages 2 and 3 to the WSIB.

Health Professional's Designation
 Chiropractor Physician Physiotherapist Registered Nurse (Extended Class) Other

PROVIDER BILLING INFORMATION IN THE BOLDDED AREA OF SECTION C SHOULD NOT BE PROVIDED TO THE WORKER OR EMPLOYER.

Are you registered with the WSIB? yes Please enter the **WSIB Provider ID** in the box provided no Please call **1 - 800-569-7919** to register

WSIB Provider ID.

Health Professional's Name (please print)

Your Invoice Number

Address (No. Street, Apt.)

Service Code

FAF

City/Town Province Postal Code

Fax

I hereby declare that the information being submitted in Sections C, D, E and F of this form is true and complete. It is an offense to knowingly make a false or misleading statement or representation to the WSIB.

Health Professional's Signature _____ Telephone _____ Date dd mm yyyy

Please PRINT in black ink

Worker's Last Name	First Name	Claim No.
--------------------	------------	-----------

D. The following information should be completed by the Health Professional to identify the patient's overall abilities and restrictions.

1. Date of Assessment dd mm yyyy	2. Please check one: <input type="checkbox"/> Patient is capable of returning to work with no restrictions. <input type="checkbox"/> Patient is capable of returning to work with restrictions. Complete sections E and F. <input type="checkbox"/> Patient is physically unable to return to work at this time. Complete section F.
--	--

E. Abilities and/or Restrictions

1. Please indicate Abilities that apply. Include additional details in section 3

Walking: <input type="checkbox"/> Full abilities <input type="checkbox"/> Up to 100 metres <input type="checkbox"/> 100 - 200 metres <input type="checkbox"/> Other (please specify)	Standing: <input type="checkbox"/> Full abilities <input type="checkbox"/> Up to 15 minutes <input type="checkbox"/> 15 - 30 minutes <input type="checkbox"/> Other (please specify)	Sitting: <input type="checkbox"/> Full abilities <input type="checkbox"/> Up to 30 minutes <input type="checkbox"/> 30 minutes - 1 hour <input type="checkbox"/> Other (please specify)	Lifting from floor to waist: <input type="checkbox"/> Full abilities <input type="checkbox"/> Up to 5 kilograms <input type="checkbox"/> 5 - 10 kilograms <input type="checkbox"/> Other (please specify)
Lifting from waist to shoulder: <input type="checkbox"/> Full abilities <input type="checkbox"/> Up to 5 kilograms <input type="checkbox"/> 5 - 10 kilograms <input type="checkbox"/> Other (please specify)	Stair climbing: <input type="checkbox"/> Full abilities <input type="checkbox"/> Up to 5 steps <input type="checkbox"/> 5 - 10 steps <input type="checkbox"/> Other (please specify)	Ladder climbing: <input type="checkbox"/> Full abilities <input type="checkbox"/> 1 - 3 steps <input type="checkbox"/> 4 - 8 steps <input type="checkbox"/> Other (please specify)	Travel to work: Ability to use public transit: <input type="checkbox"/> yes <input type="checkbox"/> no Ability to drive a car: <input type="checkbox"/> yes <input type="checkbox"/> no

2. Please indicate Restrictions that apply. Include additional details in section 3

<input type="checkbox"/> Bending/twisting repetitive movement of (please specify)	<input type="checkbox"/> Work at or above shoulder activity:	<input type="checkbox"/> Chemical exposure to:	<input type="checkbox"/> Environmental exposure to: (e.g. heat, cold, noise or scents)	<input type="checkbox"/> Limited use of hand(s): Left: <input type="checkbox"/> Gripping <input type="checkbox"/> Pinching <input type="checkbox"/> Other (please specify) Right: <input type="checkbox"/>
<input type="checkbox"/> Limited pushing/pulling with: <input type="checkbox"/> Left arm <input type="checkbox"/> Right arm <input type="checkbox"/> Other (please specify)	<input type="checkbox"/> Operating motorized equipment: (e.g. forklift)	<input type="checkbox"/> Potential side effects from medications (please specify) Do not include names of medications.	<input type="checkbox"/> Exposure to vibration: <input type="checkbox"/> Whole body <input type="checkbox"/> Hand/Arm	

3. Additional Comments on Abilities and/or Restrictions.

4. From the date of this assessment, the above will apply for approximately: <input type="checkbox"/> 1 - 2 days <input type="checkbox"/> 3 - 7 days <input type="checkbox"/> 8 - 14 days <input type="checkbox"/> 14 + days	5. Have you discussed return to work with your patient? <input type="checkbox"/> yes <input type="checkbox"/> no
6. Recommendations for work hours and start date: <input type="checkbox"/> Regular full-time hours <input type="checkbox"/> Modified hours <input type="checkbox"/> Graduated hours	Start Date dd mm yyyy

F. Date of Next Appointment

Recommended date of next appointment to review **Abilities and/or Restrictions.** dd mm yyyy

I have provided this completed Functional Abilities Form to: Worker and/or Employer

Important Information

To receive benefits, the worker must apply for benefits within six months of the date of a work-related injury or illness. When filing a claim for benefits, the worker must also consent to the disclosure of functional abilities information provided by a health professional to his or her employer for the purpose of facilitating an early and safe return to work. Failure to file a claim or provide consent for the release of the functional abilities information can result in no benefits.

If you have questions about the completion of this form please call 1-800-387-0750.

Worker's Responsibilities

- This form is to be completed by a treating health professional, who will discuss the information with you.
- Once completed, contact your employer **immediately** to review the information on the completed form. Together, you and your employer will begin to plan an early and safe return to work.

Employer's Responsibilities

- This form provides general information about this worker's functional abilities and restrictions to help you plan an early and safe return to work.
- When you provide this form to the treating health professional, ensure that you have the worker's signed consent (Section B) for the release of functional abilities information.
- Where available, also attach a description of the worker's job activities to assist the health professional in completing the form.
- The prescribed form that is available from the WSIB is a generic form developed to assist with general functional abilities information.
- The WSIB will pay the health professional to complete the prescribed WSIB form only. A charge will appear on your Accident Cost statement or Schedule 2 Invoice which reflects the cost of payment for each form completed.
- If you have a form that is specific to your workplace and have the cooperation of the worker in providing consent for the release of information on your form, you may use your own form. If you create your own form, you must reimburse the health professional directly.
- Do not send a copy of the completed Functional Abilities Form for Planning Early and Safe Return to Work to the WSIB. The health professional is responsible for submission of the form.

Health Professional's Responsibilities

- The employer and worker will use this information to plan the worker's early and safe return to work.
- Their return to work plans will reflect the functional abilities and restrictions you have noted and presume that no clinical contraindications exist for other work activities, therefore it is crucial that all sections be completed in full.
- The completion of this form is based on your examination of the worker and does not require a specialized functional abilities evaluation.
- Diagnostic or confidential information **must not** be included.
- Please add specific information on the duration of temporary restrictions or maximum times or weights to be considered, in section **E3** under **abilities and/or restrictions**. If necessary, attach an additional page to this completed form to describe abilities and restrictions.
- **Completion of this form does not replace clinical reporting requirements to the WSIB.**
- **Once you have received this form, promptly complete it and give it to the worker and/or employer.**
- **For billing purposes fax or mail pages 2 and 3 to the WSIB. When faxing, do not mail a copy.**

The WSIB will pay the health professional for the completed form when pages 2 and 3 are received.

Workplace Safety and Insurance Board
200 Front Street West
Toronto ON M5V 3J1

WSIB Fax 416-344-4684
or 1-888-313-7373



RETURN TO WORK CASE PLAN

Title: RETURN TO WORK CASE PLAN		Issue Date: September 2016
Project Safety Program Section: 8.7		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

RETURN TO WORK CASE PLAN

Date:	WSIB Claim #:
This plan covers the time period From: _____ To: _____	WSIB Adjudicator name & number:
Employee:	Phone #:
Position:	
Manager:	Phone #:

Health Recovery

a) Anticipated recovery time:	
b) Treatment (scheduled or proposed):	
c) Next appointment date(s):	

Accommodations

This plan is intended for (check one):	Objectives (select one):
<input type="checkbox"/> Stay at Work (SAW) <input type="checkbox"/> Return to Work (RTW)	<input type="checkbox"/> Pre-injury job <input type="checkbox"/> Pre-injured job accommodation <input type="checkbox"/> Work Comparable <input type="checkbox"/> Alternative Work

	Yes	No	Not Known
1. Are the physical demands of the job within the Employee's Functional Abilities?			
2. Are the essential duties of the job within the Employee's Functional Abilities?			
3. Does the employee have the knowledge and skills required to do the job, where applicable?			
4. Does the job description accurately reflect the job being done?			

List the job tasks: (attach additional pages, if needed)

Outline required modifications to work duties: For example: technical aids, furniture, hours, and productivity/quotes).

Functional Abilities

1) Identify source(s) of functional abilities and date(s):

2) Has a Functional Abilities Form been completed?

Yes, date: _____ If no, date expected: _____

3) List the precautions, if any

Temporary	Duration	Permanent

Comments:

Develop Outcomes			
-------------------------	--	--	--

Actions: List the steps required to achieve the outcome(s)	Anticipated outcome	Assigned to	Follow-up date

Outline frequency of contact and by whom, if necessary, in addition to the specific follow-up dates:

Work Schedule

Week with dates	Days of week	Hours per day	Duties
Sample: Week 1: Feb 11	Monday, Thursday	3 hours (9am to 12pm)	General Clean-up
1.			
2.			
3.			
4.			
5.			

Signature or acknowledgement of receipt:

Employee: _____ Date: _____

Supervisor: _____ Date: _____

Original copy is sent to Management



ACKNOWLEDGEMENT FORM

Title: ACKNOWLEDGEMENT FORM		Issue Date: September 2016
Project Safety Program Section: 8.8		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

ACKNOWLEDGEMENT FORM

By signing and dating this page, you are acknowledging that you have received the entire contents of the *Employee’s Kit for Reporting Work-Related Injuries*, have received clarification on any questions or concerns that you may have had, and understand the following responsibilities:

- To maintain regular contact with the Supervisor.
- To take an active role in developing the *Return to Work Case Plan*.
- To communicate any concerns to the Supervisor and Management.
- To obtain the necessary forms from the treating agencies as may be required by the Employer.
- Submit all health care documentation to Management within 24 hours of treatment.
- To obtain and submit page 3 of Form 8 (this page provides functional abilities and return to work information) from their Health Professional and return to Supervisor/Manager.
- To obtain and submit a Functional Abilities Form from the Health Professional, if required from the Supervisor after a subsequent visit.
- To ensure that other scheduled rehabilitation activities such as physical therapy or doctor's appointments are continued while on modified duty. These appointments are to be arranged whenever possible during non-work hours.
- To co-operate with all requests for documentation as required by the WSIB and the Employer.
- To attend all scheduled Early and Safe Return to Work Meetings.
- Must work within their functional abilities and / or restrictions as per the Return to Work Plan.

Employee’s Name (Please Print)

Employee’s Signature

Date (MM/DD/YYYY)



MODIFIED DUTIES OFFER LETTER

Title: MODIFIED DUTIES OFFER LETTER		Issue Date: September 2016
Project Safety Program Section: 8.9		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

MODIFIED DUTIES OFFER LETTER

Date: _____ Employee: _____

Dear _____;

This letter serves to confirm that modified duties have been offered to you by **Saturn Power Inc.** since _____. [Date of Injury]

The Workplace Safety and Insurance Board (WSIB) places an obligation on both you and **Saturn Power Inc.** to co-operate in your early and safe return to work. **Saturn Power Inc.** is committed to your rehabilitation through our early and safe return to work program.

Below is a description of the modified duties which have been offered to you that are within the specific limitations/restrictions as outlined by your health care provider on your Functional Abilities Form (FAF):

-
-
-
-
-

This offer of modified work is available to you at your regular pre-accident earnings and remains available to you as offered today.

These duties are expected to be in effect until (date) _____ as indicated on your FAF. We will require an updated FAF on (date) _____. At that time, your functional abilities will be re-evaluated and your modified duties may be adjusted accordingly.

You will report to: _____

Sincerely,

SUPERVISOR'S SIGNATURE

PRINT SUPERVISOR'S NAME

Please indicate by signing below that you have been offered temporary modified duties.

You are: Accepting Declining: _____
Reason

Employee's Signature

Date

Claim Number

Please PRINT in black ink

A. Worker Information					
Last Name		First Name		Social Insurance Number	
Address (number, street, apt., suite, unit)				Telephone	
City/Town		Province	Postal Code	Alternate/Cell Phone	
Job Title/Occupation (at the time you were hurt)			Date you started with employer	dd	mm yy
Only check if you are one of the following: <input type="checkbox"/> executive <input type="checkbox"/> elected official <input type="checkbox"/> owner <input type="checkbox"/> spouse or relative of the employer				How long have you been doing this job for this employer?	
Sex: <input type="checkbox"/> M <input type="checkbox"/> F Your Preferred Language: <input type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> Other				Date of Birth: dd mm yy	
Are you a member of a union? <input type="checkbox"/> yes <input type="checkbox"/> no Do you authorize your union to represent you in this claim? <input type="checkbox"/> yes <input type="checkbox"/> no				If yes , do you consent to the disclosure of verbal claim file status information to your union representative? <input type="checkbox"/> yes <input type="checkbox"/> no	
Provide your Union Name and Local					

B. Employer Information		
Company/Employer Name		
Address		
City/Town		Province
Your Immediate Supervisor's Name		Postal Code
		Company Telephone

C. Accident/Illness Dates & Details			
1. Date and hour of accident/Awareness of illness: dd mm yy <input type="checkbox"/> AM <input type="checkbox"/> PM		2. Who did you report this accident/illness to? (Name & Position)	
Date and hour reported to employer: dd mm yy <input type="checkbox"/> AM <input type="checkbox"/> PM		Telephone	
3. Area of Injury (Body Part) - (Please check all that apply)			
<input type="checkbox"/> Head <input type="checkbox"/> Face <input type="checkbox"/> Eye(s) <input type="checkbox"/> Ear(s)	<input type="checkbox"/> Teeth <input type="checkbox"/> Neck <input type="checkbox"/> Chest	<input type="checkbox"/> Upper back <input type="checkbox"/> Lower back <input type="checkbox"/> Abdomen <input type="checkbox"/> Pelvis	Left Shoulder Right Shoulder Left Arm Right Arm Left Elbow Right Elbow Left Forearm Right Forearm
<input type="checkbox"/> Other:		Left Wrist Right Wrist Left Hand Right Hand Left Finger(s) Right Finger(s)	Left Hip Right Hip Left Thigh Right Thigh Left Knee Right Knee Left Lower Leg Right Lower Leg
4. Did the accident/illness happen on the employer's property or work site? <input type="checkbox"/> yes <input type="checkbox"/> no		Specify where it happened (shop floor, warehouse, client/customer site, parking lot, etc.):	
5. Did it happen outside the Province of Ontario? <input type="checkbox"/> yes <input type="checkbox"/> no		If yes , indicate where (city, province/state, country):	
6. Have you hurt this area(s) of your body before? <input type="checkbox"/> yes <input type="checkbox"/> no		7. Do you have any prior related WSIB/WCB claims? <input type="checkbox"/> no <input type="checkbox"/> yes - in Ontario <input type="checkbox"/> yes - Outside Ontario	

A guide to complete this form is available at www.wsib.on.ca

Claim Number

Please PRINT in black ink

Worker Name - Last Name	First Name	Social Insurance Number
-------------------------	------------	-------------------------

C. Accident/Illness Dates & Details (continued)

8. If you had a sudden type of accident/illness, describe your injury and what happened to cause it (e.g. hurt lower back while lifting a 50 pound box, sprained left ankle when I slipped on a wet floor, used a new cleaner and immediately got a rash). Please indicate the size, weights and names of any objects involved.
or
If you had a gradual onset type of injury, describe your injury, the work that you do and what you believe caused your injury/condition.

9. When did you first start to have problems with this injury/condition?

10. If you did not report this to your employer right away, please tell us the reason why.

11. If there were any witnesses to your accident, or if you mentioned your pain or problems to your supervisor or any of your co-workers, give us their names & positions.

Name	Position
1.	
2.	

12. The Workplace Safety and Insurance Act requires your employer to give you a copy of the Employer's Report of Injury/Disease (Form 7).
Did you receive a copy of the Form 7? yes no

**The Workplace Safety and Insurance Act requires you to give a copy of this report
(Worker's Report of Injury/Disease - Form 6) to your employer.**

D. Health Care Information

Give your Health Professional your WSIB Claim number.

1. Did you get first aid or care at work? yes no If yes, when dd mm yy and by whom (Name):

2. Where did you go for health care, for your injury, outside of work? (Check all that apply)

	Facility/Hospital (Name & Address)	Date of Visit (dd/mm/yy)		Date of Visit (dd/mm/yy)
<input type="checkbox"/> Nursing Station			<input type="checkbox"/> Ambulance	
<input type="checkbox"/> Emergency Department			<input type="checkbox"/> Health Professional Office	
<input type="checkbox"/> Admitted to Hospital			<input type="checkbox"/> Clinic	

3. Were you prescribed any medications/drugs? yes no

4. Were you referred for any other treatment or tests? yes no

5. Did you talk to your health professional about going back to regular or modified work? yes no

- If yes, were you given any work limitations? yes no

6. Did you tell your employer you went for medical treatment? yes no

If no, please tell your employer right away.

dd mm yy Name
If yes, when? and to whom? Position

Claim Number

Please PRINT in black ink

Worker Name - Last Name	First Name	Social Insurance Number
-------------------------	------------	-------------------------

E. Lost Time & Return to Work

1. After the day of accident/illness:

- I returned to work to my **regular job** and **did not** lose any time or pay.
- I returned to **modified duties** and **did not** lose any time or pay.
- I **lost time and/or pay** (e.g. regular pay, shift differential, bonuses, premiums, etc.).

→ Date you first lost time and/or pay dd mm yy

2. If you lost time, have you returned to work? yes no

If **yes** → Date of your return to work dd mm yy regular work modified work

If **no** → Did you discuss return to work with your employer? yes no Does your employer have modified work? yes no

F. Earnings (Do not include overtime here)

1. Rate of pay: \$ _____ per hour week other: _____

2. Usual number of pay hours: _____ per week other: _____

3. If you lost time from work after the day of accident/illness, did your employer continue to pay you? yes no

4. Have you applied for, or did you receive, any other benefits (money) while off work (e.g. EI benefits, sick benefits, social services, insurance, etc.)? yes no

5. At the time of the accident/illness did you work for more than one employer? yes no

G. Declarations and Signature

By signing below, I am claiming benefits under the Workplace Safety and Insurance Act, 1997, for a work-related injury or disease. I am also authorizing any health professional who treats me to provide me, my employer and the Workplace Safety and Insurance Board with information about my functional abilities on the WSIB's "Functional Abilities Form for Planning Early and Safe Return to Work".

It is an offence to deliberately make false statements to the Workplace Safety and Insurance Board. I declare that all of the information provided on pages 1, 2, and 3 is true.

Signature _____ Date (dd/mm/yy) _____

If you are under the age of 16, your parent or guardian, must authorize the release of the functional abilities information.

Signature _____ Relationship: _____ Date (dd/mm/yy) _____ Telephone () _____

Personal information about you will be collected throughout your claim under the authority of the Freedom of Information and Protection of Privacy Act and will be used to administer the Workplace Safety and Insurance Act, 1997, your claim(s) and programs of the Board. Medical and non-medical information is collected from health care providers, vocational agencies, labour market service providers, employers, witnesses, Canada Revenue Agency (CRA), and others as required. Your Social Insurance Number is used to register claims, identify workers and to issue income tax receipts and is collected under the authority of the Income Tax Act. Information may only be disclosed to the employer, external medical, vocational, and safety agencies, external payment and service providers, researchers, and others as authorized by the Workplace Safety and Insurance Act and the Freedom of Information and Protection of Privacy Act. Your name and telephone number may be disclosed to third party researchers conducting satisfaction surveys and focus groups. Questions should be directed to the decision maker responsible for your file or toll free at 1-800-387-5540.

A more detailed **PRIVACY STATEMENT** for workers may be found at www.wsib.on.ca or by calling toll free at 1-800-387-5540.

Did you know that you can securely file Form 7 online with our eServices?

eForm7 offers a fast, effective solution for managing your Form 7 reports with the WSIB.

To submit an eForm 7, visit our eServices site. It only takes a few minutes to subscribe and you can start filing your reports right away.

If you have any questions, you can call our eServices Support Centre, Monday to Friday from 8:30am – 4:30pm, at 1-866-542-9742 to speak to an eForms Representative.

Please PRINT in black ink

Claim Number

A. Worker Information

Job Title/Occupation (at the time of accident/illness - do not use abbreviations)		Length of time in this position while working for you	Social Insurance Number
Please check if this worker is a: <input type="checkbox"/> executive <input type="checkbox"/> elected official <input type="checkbox"/> owner <input type="checkbox"/> spouse or relative of the employer			
Last Name: _____ First Name: _____ Address (number, street, apt., suite, unit): _____ City/Town: _____ Province: _____ Postal Code: _____		Is the worker covered by a Union/Collective Agreement? <input type="checkbox"/> yes <input type="checkbox"/> no	Worker Reference Number
		Worker's preferred language <input type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> Other	Date of Birth: dd mm yy Telephone: _____
		Sex: <input type="checkbox"/> M <input type="checkbox"/> F	Date of Hire: dd mm yy

B. Employer Information

Fold here for #10 envelope

Trade and Legal Name (if different provide both)		Check one: <input type="checkbox"/> Firm Number OR <input type="checkbox"/> Account Number	Provide Number
Mailing Address		Rate Group Number	Classification Unit Code
City/Town	Province	Postal Code	Telephone
Description of Business Activity		Does your firm have 20 or more workers? <input type="checkbox"/> yes <input type="checkbox"/> no	FAX Number
Branch Address where worker is based (if different from mailing address - no abbreviations)			
City/Town	Province	Postal Code	Alternate Telephone

C. Accident/Illness Dates and Details

1. Date and hour of accident/Awareness of illness: dd mm yy <input type="checkbox"/> AM <input type="checkbox"/> PM	2. Who was the accident/illness reported to? (Name & Position) Telephone: _____ Ext.: _____																																																												
Date and hour reported to employer: dd mm yy <input type="checkbox"/> AM <input type="checkbox"/> PM																																																													
3. Was the accident/illness: <input type="checkbox"/> Sudden Specific Event/Occurrence <input type="checkbox"/> Gradually Occurring Over Time <input type="checkbox"/> Occupational Disease <input type="checkbox"/> Fatality	4. Type of accident/illness: (Please check all that apply) <input type="checkbox"/> Struck/Caught <input type="checkbox"/> Fall <input type="checkbox"/> Slip/Trip <input type="checkbox"/> Overexertion <input type="checkbox"/> Harmful Substances/Environmental <input type="checkbox"/> Motor Vehicle Incident <input type="checkbox"/> Repetition <input type="checkbox"/> Assault <input type="checkbox"/> Fire/Explosion <input type="checkbox"/> Other																																																												
5. Area of Injury (Body Part) - (Please check all that apply)																																																													
<input type="checkbox"/> Head <input type="checkbox"/> Teeth <input type="checkbox"/> Upper back <input type="checkbox"/> Face <input type="checkbox"/> Neck <input type="checkbox"/> Lower back <input type="checkbox"/> Eye(s) <input type="checkbox"/> Chest <input type="checkbox"/> Abdomen <input type="checkbox"/> Ear(s) <input type="checkbox"/> Pelvis	<table border="0"> <tr> <td>Left</td><td>Right</td><td>Left</td><td>Right</td><td>Left</td><td>Right</td><td>Left</td><td>Right</td><td>Left</td><td>Right</td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td>Shoulder</td><td>Wrist</td><td>Hip</td><td>Thigh</td><td>Ankle</td><td>Foot</td><td>Toe(s)</td><td></td><td></td><td></td> </tr> <tr> <td>Arm</td><td>Hand</td><td>Thigh</td><td>Knee</td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Elbow</td><td>Finger(s)</td><td>Lower Leg</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Forearm</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	<input type="checkbox"/>	Shoulder	Wrist	Hip	Thigh	Ankle	Foot	Toe(s)				Arm	Hand	Thigh	Knee							Elbow	Finger(s)	Lower Leg								Forearm																		
Left	Right	Left	Right	Left	Right	Left	Right	Left	Right																																																				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																				
Shoulder	Wrist	Hip	Thigh	Ankle	Foot	Toe(s)																																																							
Arm	Hand	Thigh	Knee																																																										
Elbow	Finger(s)	Lower Leg																																																											
Forearm																																																													
6. Describe what happened to cause the accident/illness and what the worker was doing at the time (lifting a 50 lb. box, slipped on wet floor, repetitive movements, etc. . .). Include what the injury is and any details of equipment, materials, environmental conditions (work area, temperature, noise, chemical, gas, fumes, other person) that may have contributed. For a condition that occurred gradually over time, please attach a description of the physical activity required to do the work.																																																													

Please PRINT in black ink

Claim Number

Worker Name

Social Insurance Number

C. Accident/Illness Dates and Details (Continued)

7. Did the accident/illness happen on the employer's premises (owned, leased or maintained)? yes no Specify where (shop floor, warehouse, client/customer site, parking lot, etc.).

8. Did the accident/illness happen outside the Province of Ontario? yes no If **yes**, where (city, province/state, country).

9. Are you aware of any witnesses or other employees involved in this accident/illness? yes no If **yes**, provide name(s), position(s), and work phone number(s).
1. _____
2. _____

10. Was any individual, who does not work for your firm, partially or totally responsible for this accident/illness? yes no If **yes**, please provide name and work phone number _____

11. Are you aware of any prior similar or related problem, injury or condition? yes no If **yes**, please explain _____

12. If you have concerns about this claim, attach a written submission to this form. submission attached

D. Health Care

Did the worker receive health care for this injury? yes no If **yes**, when: dd mm yy

2. When did the employer learn that the worker received health care? dd mm yy

3. Where was the worker treated for this injury? (Please check all that apply)
 On-site health care Ambulance Emergency department Admitted to hospital Health professional office Clinic
 Other: _____

Name, address and phone number of health professional or facility who treated this worker (if known) _____

E. Lost Time - No Lost Time

1. Please choose one of the following indicators. After the day of accident/awareness of illness, this worker:
 Returned to his/her **regular job** and **has not** lost any time and/or earnings. (Complete sections G and J).
 Returned to **modified work** and **has not** lost any time and/or earnings. (Complete sections F, G, and J).
 Has lost time and/or earnings. (Complete ALL remaining sections).

Provide date worker first lost time dd mm yy Date worker returned to work (if known) dd mm yy regular work modified work

2. This Lost Time - No Lost Time - Modified Work information was confirmed by:
 Myself Other Name Telephone Ext.

F. Return To Work

1. Have you been provided with work limitations for this worker's injury? yes no

2. Has modified work been discussed with this worker? yes no

3. Has modified work been offered to this worker? yes no If **yes**, was it Accepted Declined
 If Declined please attach a copy of the written offer given to the worker.

4. Who is responsible for arranging worker's return to work
 Myself Other Name Telephone Ext.

Claim Number

Please PRINT in black ink

Worker Name _____ Social Insurance Number _____

G. Base Wage/Employment Information - (Do not include overtime here)

1. Is this worker (Please check all that apply)
- | | | | | |
|--|---|---|--|---|
| <input type="checkbox"/> Permanent Full Time | <input type="checkbox"/> Casual/Irregular | <input type="checkbox"/> Student | <input type="checkbox"/> Registered Apprentice | <input type="checkbox"/> Owner Operator or (Sub) Contractor |
| <input type="checkbox"/> Permanent Part Time | <input type="checkbox"/> Seasonal | <input type="checkbox"/> Unpaid/Trainee | <input type="checkbox"/> Optional Insurance | |
| <input type="checkbox"/> Temporary Full Time | <input type="checkbox"/> Contract | <input type="checkbox"/> Other _____ | | |
| <input type="checkbox"/> Temporary Part Time | | | | |

2. Regular rate of pay \$ _____ per hour day week other _____

H. Additional Wage Information

1. Net Claim Code or Amount Federal _____ Provincial _____

2. Vacation pay - on each cheque? yes no Provide percentage _____ %

3. Date and hour last worked dd mm yy AM PM

4. Normal working hours on last day worked From AM PM To AM PM

5. Actual earnings for last day worked \$ _____

6. Normal earnings for last day worked \$ _____

7. Advances on wages: Is the worker being paid while he/she recovers? yes no If yes, indicate: Full/Regular Other _____

8. Other Earnings (Not Regular Wages): Provide the total of additional earnings for each week for the 4 weeks before the accident/illness.

* For Rotational Shift workers - If the shift cycle exceeds 4 weeks, please attach the earnings information for the last complete shift cycle prior to the date of accident/illness.

Use these spaces for any other earnings (Indicate Commission, Differentials, Premiums, Bonus, Tips, In Lieu %, etc.)

Period	From Date (dd/mm/yy)	To Date (dd/mm/yy)	Mandatory Overtime Pay	Voluntary Overtime Pay	Commission	Commission	Commission	Commission
Week 1			\$	\$	\$	\$	\$	\$
Week 2			\$	\$	\$	\$	\$	\$
Week 3			\$	\$	\$	\$	\$	\$
Week 4			\$	\$	\$	\$	\$	\$

I. Work Schedule (Complete either A, B or C. Do not include overtime shifts)

(A.) Regular Schedule - Indicate normal work days and hours. **Example:** Monday to Friday, 40 hours

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

S	M	T	W	T	F	S
	8	8	8	8	8	

(B.) Repeating Rotational Shift Worker - Provide

NUMBER OF DAYS ON	NUMBER OF DAYS OFF	HOURS PER SHIFT(s)	NUMBER OF WEEKS IN CYCLE

(C.) Varied or Irregular Work Schedule - Provide the total number of regular hours and shifts for each week for the 4 weeks prior to the accident/illness. (Do not include overtime hours or shifts here).

	Week 1	Week 2	Week 3	Week 4
From/To Dates (dd/mm/yy)	/	/	/	/
Total Hours Worked				
Total Shifts Worked				

J. It is an offence to deliberately make false statements to the Workplace Safety and Insurance Board. I declare that all of the information provided on pages 1, 2, and 3 is true.

Name of person completing this report (please print) _____ Official title _____

Signature _____ Telephone _____ Ext. _____ Date dd mm yy _____

THE WORKPLACE SAFETY AND INSURANCE ACT REQUIRES YOU GIVE A COPY OF THIS FORM TO YOUR WORKER

Title: CRITICAL INJURY REPORTING		Issue Date: September 2016
Project Safety Program Section: 9.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

CRITICAL INJURY REPORTING

1.0 PURPOSE

To ensure that in the event of Critical Injury, Regulation 834, as defined, is in compliance.

2.0 SCOPE

This procedure applies to all Staff.

3.0 DEFINITIONS

Critical Injury: An injury of a serious nature that:

- a) Places life in jeopardy;
- b) Produces unconsciousness;
- c) Results in substantial loss of blood;
- d) Involves the fracture of a leg or arm but not a finger or toe;
- e) Involves the amputation of a leg or arm but not a finger or toe;
- f) Consists of burns to major portion of the body; and / or,
- g) Causes the loss of sight in an eye.

4.0 STANDARDS / PROCEDURES

If a critical injury occurs at the workplace, the Employer must immediately notify a Ministry of Labour Inspector and the Worker Health and Safety Representative / Joint Health and Safety Committee, where applicable using the *Critical Injury Report Form*.

Ministry of Labour: 1-877-202-0008

This notice must be by direct means, such as by telephone and facsimile.

Within 48 hours, the Employer must also notify, in writing, a director of the Ministry of Labour, giving the circumstances of the occurrence.

5.0 ROLES / RESPONSIBILITIES

Management:

- Ensure that all Management, Supervisors and Workers are trained and aware of their responsibilities as required by the Legislation;
- Ensure that the appropriate people are notified when a critical injury occurs.; and,
- **Management, or their designate**, will Notify the Ministry of Labour immediately of the critical injury using the *Critical Injury Report Form*.

Supervisor:

- Ensure that the injury /incident scene is not disturbed until it is released by the Ministry of Labour; and,
- Ensure that at no time is the scene to be entered after the rescue of the injured person has been carried out. Supervisors are also responsible for crowd control.

Worker:

- Follow the direction of Management and / or the Supervisor. Do not disturb the scene;
- Stay back and do not impede in the rescue, response, or investigation effort; and,
- Cooperate with any investigation procedures, both internal and external.

6.0 COMMUNICATION

This procedure will be communicated through orientation as well as specific awareness sessions, as deemed necessary.

7.0 TRAINING

All Management and Supervisors will be trained on the *Critical Injury Reporting Procedure* requirement as part of their health & safety responsibilities.

8.0 EVALUATION / REVIEW

This procedure and associated form will be evaluated annually by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Critical Injury Report Form

10.0 REFERENCE MATERIALS

- I. Ontario Legislation – Occupational Health & Safety Act section 62
- II. Ontario Regulation 834 – Critical Injury – Definition

Title: INSPECTION & AUDIT		Issue Date: September 2016
Project Safety Program Section: 10.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

INSPECTION & AUDIT

1.0 PURPOSE

The purpose of an inspection is to identify actual or potential hazards in the workplace that can lead to an incident.

The purpose of an audit is to evaluate the Company's Health & Safety Program against a defined standard in the industry.

2.0 SCOPE

This procedure applies to all Employees.

3.0 DEFINITIONS

Informal Inspection - A visual inspection of the work area(s).

Formal Inspection - A documented inspection of the work area(s).

Audit - An evaluation of the overall Health & Safety Program and management system. This includes such items as policies, procedures, communication, administration, documentation, education and training.

4.0 STANDARDS / PROCEDURES

Workplace Inspections:

1. Inspectors will use the following tools to conduct appropriate inspections:
 - *Workplace Inspection Checklist*,
 - Previous inspection report(s); and / or,
 - Incident / injury reports to review, if needed, corrective action that has been taken.
2. Establish an annual documented schedule for workplace inspections (see roles and responsibilities for timeframes).
3. Any hazards or unsafe conditions observed while conducting the inspection are to be corrected immediately, if possible. This includes notifying the Supervisor or Manager

of the area where the hazard was identified and recording the notification on the inspection worksheet.

4. A minimum of 2 Employee contacts or observation(s) of activities will be conducted during each workplace inspection. Results of the inspections are to be documented on the *Workplace Inspection Checklist*.
5. Those conducting the inspection must sign the original completed inspection worksheet.
6. Completed inspection reports are posted on the health and safety board within one week after the inspection has been completed.
7. The following must be completed after returning from the inspections:
 - The inspector(s) will forward the original, completed workplace inspection checklist to the Supervisor within one week of the date of inspection.
 - The Supervisor will in turn review, sign, and forward copies back to the Inspector with corrective actions for the identified items.
 - The Supervisor also establishes a timeframe to correct hazards.
 - Management receives, reviews, and returns a copy of the updated and completed workplace inspection checklist adding their comments or recommendations as may be applicable.
 - If a new hazard is created, it must be rated (Major, Moderate, Minor – using the *Hazard Assessment Form*), and recommendations for corrective action developed including assigned timeframes, documentation (who, what, when) and a follow up documented report.
 - Specific inspection schedules with dates and participants will be documented and posted.

Audits:

- The *Occupational Health and Safety Act* requires an Employer to review its Health and Safety policy and its program at least annually. This may be conducted internally or through a third party.
- An audit report must identify all gaps with recommendations for closure.

5.0 ROLES / RESPONSIBILITIES

Management:

- Coach and support staff on formal inspections of offices and customer locations where required;
- Schedule annual audits (internal or external) of the Health and Safety Program and or management system; and,
- Ensure that the inspection and audit process is being followed.

Supervisor:

- Conduct informal inspections on an ongoing basis and formal inspections of offices, warehouse and other locations monthly;
- Ensure corrective actions identified during inspections are implemented; and,
- Complete corrective action plans for audits.

Worker Health & Safety Representative(s) / Joint Health and Safety Committee:

- Conduct formal monthly workplace inspections as scheduled;
- Ensure inspection results are documented and communicated to the area Supervisor for all hazards and for the assignment of corrective actions; and,
- Ensure all hazards identified during inspections are communicated.

Worker:

- Participate in the formal inspection process when required.

6.0 COMMUNICATION

All staff will receive communication on this procedure during orientation and initial job instruction.

7.0 TRAINING

All Management, Supervisors, and Worker Health and Safety Representative(s) / Joint Health and Safety Committee members will attend Workplace Inspection training, which will include the following:

- Identification and assessment of hazards, and
- How to conduct a workplace inspection.

8.0 EVALUATION / REVIEW

Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee will evaluate the compliance and effectiveness of this procedure at least annually.

9.0 FORMS / RECORDS

Workplace Inspection Checklist (may be specific to each location or project)

NOTE: Copies of Workplace Inspections will be posted on the applicable health and safety board for one (1) month.

10.0 REFERENCE MATERIALS

I.Ontario Legislation - Occupational Health and Safety Act section 9

Title: HOUSEKEEPING		Issue Date: September 2016
Project Safety Program Section: 10.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

HOUSEKEEPING

1.0 PURPOSE

This Procedure serves as a general guideline for housekeeping at all **Saturn Power Inc.** locations. These guidelines provide housekeeping standards to better ensure a safe work environment at all times in all areas.

2.0 SCOPE

This Procedure applies to all **Saturn Power Inc.** Employees, Contractors and Delivery Persons.

3.0 DEFINITIONS

N/A – No Definitions are required for this Procedure.

4.0 STANDARDS / PROCEDURES

Poor housekeeping can be a cause of accidents, such as:

- Tripping over loose objects on floors, stairs and platforms;
- Being hit by falling objects;
- Slipping on greasy, wet or dirty surfaces;
- Striking against protruding, poorly stacked items or misplaced material; and / or,
- Cutting, puncturing, or tearing the skin of hands or other parts of the body on protruding nails, wire or steel strapping.

Lighting:

The areas in which a Worker is present and the means to and from those areas must be adequately lit. If there is a temporary lighting system then light bulbs must be enclosed by a mechanical protection device.

Waste:

Waste material must be removed to a disposal area and reusable material must be removed to a storage area at least once a day, and more often if deemed necessary.

Material Storage:

Material and equipment must be stored and moved in a manner, which does not endanger any Worker. If the material or equipment is to be piled or stacked, then it must be done in a way that prevents the material from tipping, collapsing or rolling. Flammable materials must not be stored near electrical equipment.

Floors:

Poor floor conditions are a major cause of accidents so cleaning up spilled oil and other liquids at once is important. Areas that cannot be cleaned continuously, such as entrance ways, should have anti-slip flooring. Keeping floors in good order also means replacing any worn, ripped, or damaged flooring that poses a tripping hazard.

Tools and Equipment:

Tool housekeeping is very important. Workers should regularly inspect, clean and repair all tools and take any damaged or worn tools out of service. Any equipment with defective electrical components will be immediately removed from service.

Chemical Storage:

Any combustible, corrosive or toxic substance must be stored in a suitable container. Storage cylinders for compressed gas shall be secured in an upright position. Reference should be made to the Regulatory requirements for the appropriate containers for storage and transportation of flammable liquids.

5.0 ROLES / RESPONSIBILITIES

Management:

- Provide adequate equipment and / or resources to make this procedure effective;
- Provide necessary training and information to all those affected by this procedure; and / or,
- Act as a resource to Supervisors, Managers, and Workers.

Supervisor:

- Make sure he / she is knowledgeable about the work being performed;
- Implement and maintain this procedure;
- Ensure all workers maintain a safe and orderly worksite;
- Identify areas of concern and to take proper steps to communicate these concerns in order correct the actions;
- Keep adequate documentation to any contraventions of this procedure; and,
- Ensure housekeeping at all times.

Worker:

- Report immediately to his / her Supervisor, the existence of any hazard or contravention of this procedure to which he or she is aware;
- Follow instructions from the Supervisor;
- Become familiar with this procedure and work within its scope; and,
- Maintain housekeeping at all times.

6.0 COMMUNICATION

This Procedure is communicated to all Managers, Supervisors, and Workers through:

- Orientation of new Employees;
- Staff meetings; and / or,
- Coaching of employees found to have contravened this Procedure.

7.0 TRAINING

N/A – Formal training is not required.

8.0 EVALUATION / REVIEW

This Procedure will be evaluated on an annual basis for effectiveness and completeness by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS

Training Record

Orientation Checklist

10.0 REFERENCE MATERIALS

I.Ontario Regulation 851 – Industrial Establishments sections 45-49



SITE SAFETY INSPECTION CHECKLIST

Title: SITE SAFETY INSPECTION CHECKLIST		Issue Date: September 2016
Project Safety Program Section: 10.3		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

Location: _____ Inspection Date: _____ Time: _____ Inspected by: _____

Description	S - Satisfactory	N - Not Satisfactory	N/A	Hazard Class	Corrective Action Required	By Whom?	Date Action Completed
Emergency Preparedness / Fire Safety							
Exit routes clearly marked and unobstructed							
Aisles / roadways are clear and unobstructed							
Exit lights are operational and clearly visible on exit routes							
Fire extinguisher(s) tagged, inspected (i.e. monthly), and easily accessible							
If applicable, fire hose cabinet with date checked (tag or sticker)							
First Aid Kit available and names posted of those certified in standard first aid							
Emergency evacuation/fire plan is posted on exit routes							
WHMIS							
MSDS are available, easily accessible and up to date							
Labeling is used where required							
General							
Walkways, roadways, corridors, hallways and stairs clear and unobstructed							
Walking surfaces free of tripping, slipping and falling hazards							
Lighting levels are suitable, lighting is secured / protected							
Ramps are provided and adequate where required							



SITE SAFETY INSPECTION CHECKLIST

Description	S - Satisfactory	N - Not Satisfactory	N/A	Hazard Class	Corrective Action Required	By Whom?	Date Action Completed
Equipment is secure; material is neatly stacked or stored and will not fall or tip or blow away; no overreaching will occur							
Tools and Equipment are properly stored when not in use							
General Housekeeping is maintained in good condition							
Health & Safety board is up to date, contains relevant documents and materials							
Personal Protective Equipment							
Head Protection is worn where required							
Eye Protection is worn where required							
Foot protection is worn where required							
Gloves are used where required							
Hearing Protection is used where required							
Respiratory Protection is used where required							
Electrical Safety							
Electrical equipment, power cords/plugs, no evidence of cuts, fraying or other damage. Power supply cords maintained in a safe condition.							
Power tools / portable electrical equipment used outdoors or in damp locations are equipped with ground fault circuit interrupters (GFCI)							
Electrical outlets, light switches are safe							
Guardrails							
Located where required							
Maintained in good condition							



SITE SAFETY INSPECTION CHECKLIST

Description	S - Satisfactory	N - Not Satisfactory	N/A	Hazard Class	Corrective Action Required	By Whom?	Date Action Completed
Barricades / Warning Signs							
Barricades in place where required							
Danger Due To Signs / Other Warning Signs in place as required							
Ladders							
Secured against tipping, sliding, or falling							
Set up properly and at the correct angle as required							
Adequate type and size							
Properly used							
Fully intact and undamaged							
Fall Protection							
Equipment is CSA approved							
Properly used / worn and tied to adequate anchor point							
Inspected daily by user for wear and tear, damage							
Scaffolds							
Properly erected, secured, planked, and used							
Proper access to and from working platform							
Acceptable loading (weight of persons, tools, materials and equipment)							
Inspected daily before use by qualified person							



SITE SAFETY INSPECTION CHECKLIST

Engineered where required							
Description	S - Satisfactory	N - Not Satisfactory	N/A	Hazard Class	Corrective Action Required	By Whom?	Date Action Completed
Compressed Gas							
Properly stored away from traffic and safe distance from structures							
Secured in an upright position, cap on							
Stored with compatible products / chemicals / other gases							
Properly moved and handled							
Cranes & Hoists							
Set up and used safely							
Maintenance and inspection logs available and completed (Machine and Rigging Equipment)							
Qualified operator (proof of certification available)							
Tag lines / ropes used where required							
Qualified signal persons (proof of certification available)							
Traffic Control							
Trained traffic controllers wearing appropriate attire including high-visibility clothing							
Traffic control established and maintained where required							
Proper signs being used							
Visual or radio communication established							
Hygiene Facilities							
Adequate number, type, and location							
Adequate wash up provided							
Clean and maintained in good condition							



SITE SAFETY INSPECTION CHECKLIST

HAZARD CLASSES:

- A – Major (High Risk – immediate danger to life and health) STOP WORK OR CONTROL HAZARD IMMEDIATELY**
- B – Moderate (Medium Risk – potential for non-life threatening injury)**
- C – Minor (Low Risk – long term potential for slight injury or illness)**

Worker Contact 1: Observations / Comments:

Worker Contact 2: Observations / Comments:

Supervisor / Manager Review: _____
Signature Date

Supervisor / Manager Comments / Recommendations:

Title: COLD STRESS		Issue Date: September 2016
Project Safety Program Section: 11.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

COLD STRESS

1.0 PURPOSE

To ensure all Employees understand and recognize the symptoms of cold stress / frostbite and the measures to prevent and treat cold related emergencies in the workplace.

2.0 SCOPE

Employers have a duty under section 25(2)(h) of the Occupational Health and Safety Act to take every precaution reasonable in the circumstances for the protection of a Worker.

This procedure applies to all **Saturn Power Inc.** Employees, Contractors and Delivery Persons.

3.0 DEFINITIONS

Hypothermia - Your body begins to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up your body's stored energy.

Early symptoms	Late Symptoms
Shivering	No Shivering
Fatigue	Blue Skin
Loss of coordination	Dilated pupils
Confusion and disorientation	Slowed pulse and breathing
	Loss of consciousness

Frostbite - Frostbite is an injury to the body that is caused by freezing.

Symptoms	
Reduced blood flow to hands and feet (fingers or toes can freeze)	Aching Bluish or pale, waxy skin
Numbness	Tingling or stinging

Trench Foot - Also known as immersion foot, is an injury of the feet resulting from prolonged exposure to wet and cold conditions.

Symptoms	
Reddening of the skin	Tingling pain
Numbness	Blisters or ulcers
Leg cramps	Bleeding under the skin
Swelling	Gangrene (the foot may turn dark purple, blue, or gray)

Chilblains - Caused by the repeated exposure of skin to temperatures just above freezing to as high as 60 degrees F. The cold exposure causes damage to the capillary beds (groups of small blood vessels) in the skin.

Symptoms	
Redness	Itching
Possible blistering	Inflammation
Possible ulceration in severe cases	

4.0 STANDARDS / PROCEDURES

This policy requires the full cooperation of Management, Supervisors, Worker Health and Safety Representative(s) / Joint Health and Safety Committee, and Workers.

Employees are asked to cooperate fully with this policy. All Employees of will be trained to recognize the signs and symptoms of cold stress in themselves, as well as in other Employees.

Employees experiencing symptoms of cold stress must report to first-aid personnel immediately to obtain proper medical attention.

In order to monitor the effectiveness of this policy, Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee will perform an annual review. The cold stress policy will be evaluated, improvements will be made, and acknowledgement will be given to those who make significant contributions to its success.

5.0 ROLES / RESPONSIBILITIES

Supervisor:

- Monitor and evaluate work being done in cold temperatures in order to prevent or reduce chance of illness due to cold exposure;
- Schedule jobs that need to be done in the cold in a way that limits any chance of prolonged exposure to cold temperatures;
- Reduce the physical demands of workers;
- Use relief workers or assign extra workers for long, demanding jobs;
- Provide warm liquids to workers;
- Provide warm areas for use during break periods;
- Monitor workers who are at risk; and,
- Provide cold stress training.

Worker:

- Wear appropriate clothing;
 - Layers of loose clothing provides better insulation
- Wear protective gear for ears, face, hands and feet:
 - Wearing a hat will keep body warmer;
 - Limit exposure to cold;
 - Avoid touching cold metal surfaces with bare skin; and,
 - Monitor yours and coworkers condition

6.0 COMMUNICATION

This procedure is communicated to all Supervisors and Workers through:

- Orientation, and / or,
- Postings / meetings as deemed necessary by management

7.0 TRAINING

Training on this procedure will be done annually for Employees whose work places them at risk of cold exposure.

8.0 EVALUATION / REVIEW

Worker compliance with this procedure is monitored regularly. The procedure will be reviewed annually for its effectiveness by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

Extreme Cold – Prevention Guide

10.0 REFERENCE MATERIALS

I.Ontario Legislation – Occupational Health and Safety Act

EXTREME



A Prevention Guide to Promote Your Personal Health and Safety



**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION**





For more information on cold weather conditions and health, please contact:

Centers for Disease Control and Prevention
National Center for Environmental Health, MS F52
4700 Buford Hwy, Atlanta, GA 30341-3717
1-888-232-6789; EHHEinq@cdc.gov
<http://www.bt.cdc.gov/disasters/winter/>

W

hen winter temperatures drop significantly below normal, staying warm and safe can become a challenge. Extremely cold temperatures often accompany a winter storm, so you may have to cope with power failures and

icy roads. Although staying indoors as much as possible can help reduce the risk of car crashes and falls on the ice, you may also face indoor hazards. Many homes will be too cold—either due to a power failure or because the heating system isn’t adequate for the weather. When people must use space heaters and fireplaces to stay warm, the risk of household fires increases, as well as the risk of carbon monoxide poisoning.

Exposure to cold temperatures, whether indoors or outside, can cause other serious or life-threatening health problems. Infants and the elderly are particularly at risk, but anyone can be affected. To keep yourself and your family safe, you should know how to prevent cold-related health problems and what to do if a cold-weather health emergency arises.

The emergency procedures outlined here are not a substitute for training in first aid. However, these procedures will help you to know when to seek medical care and what to do until help becomes available.



What Is Extreme Cold?

What constitutes extreme cold and its effects can vary across different areas of the country. In regions relatively unaccustomed to winter weather, near freezing temperatures are considered “extreme cold.” Whenever temperatures drop decidedly below normal and as wind speed increases, heat can leave your body more rapidly. These weather-related conditions may lead to serious health problems. Extreme cold is a dangerous situation that can bring on health emergencies in susceptible people, such as those without shelter or who are stranded, or who live in a home that is poorly insulated or without heat.

Plan Ahead

Prepare for extremely cold weather every winter—it's always a possibility. There are steps you can take in advance for greater wintertime safety in your home and in your car.

Winter Survival Kit for Your Home

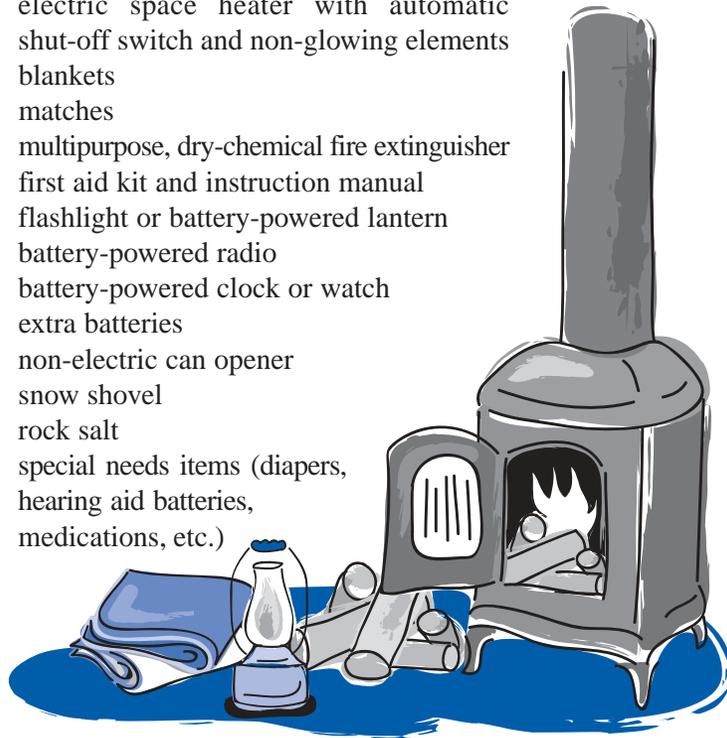
Keep several days' supply of these items:

- **Food** that needs no cooking or refrigeration, such as bread, crackers, cereal, canned foods, and dried fruits. Remember baby food and formula if you have young children.
- **Water** stored in clean containers, or purchased bottled water (5 gallons per person) in case your water pipes freeze and rupture.
- **Medicines** that any family member may need.

If your area is prone to long periods of cold temperatures, or if your home is isolated, stock additional amounts of food, water, and medicine.

Emergency Supplies List:

- an alternate way to heat your home during a power failure:
 - dry firewood for a fireplace or wood stove, or
 - kerosene for a kerosene heater
- furnace fuel (coal, propane, or oil)
- electric space heater with automatic shut-off switch and non-glowing elements
- blankets
- matches
- multipurpose, dry-chemical fire extinguisher
- first aid kit and instruction manual
- flashlight or battery-powered lantern
- battery-powered radio
- battery-powered clock or watch
- extra batteries
- non-electric can opener
- snow shovel
- rock salt
- special needs items (diapers, hearing aid batteries, medications, etc.)



Prepare Your Home for Winter

Although periods of extreme cold cannot always be predicted far in advance, weather forecasts can sometimes provide you with several days' notice. Listen to weather forecasts regularly, and check your emergency supplies whenever a period of extreme cold is predicted.

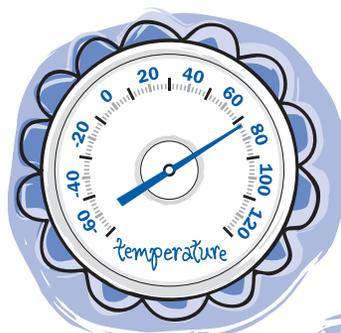
If you plan to use a fireplace or wood stove for emergency heating, have your chimney or flue inspected each year. Ask your local fire department to recommend an inspector, or find one in the yellow pages of your telephone directory under "chimney cleaning."

Also, if you'll be using a fireplace, wood stove, or kerosene heater, install a smoke detector and a battery-operated carbon monoxide detector near the area to be heated. Test them monthly, and replace batteries twice yearly.

Your ability to feel a change in temperature decreases with age, and older people are more susceptible to health problems caused by cold. If you are over 65 years old, place an easy-to-read thermometer in an indoor location where you will see it frequently, and check the temperature of your home often during the winter months.

Insulate any water lines that run along exterior walls so your water supply will be less likely to freeze. To the extent possible, weatherproof your home by adding weatherstripping, insulation, insulated doors and storm windows, or thermal-pane windows.

If you have pets, bring them indoors. If you cannot bring them inside, provide adequate shelter to keep them warm and make sure that they have access to unfrozen water.



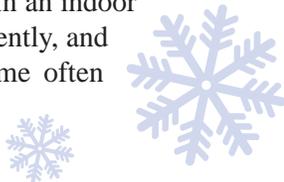
thermometer



smoke detector



carbon monoxide detector

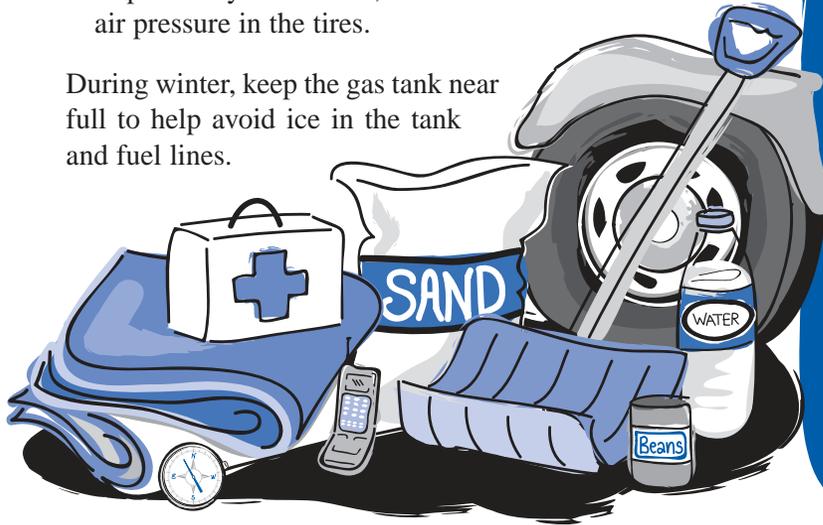


Prepare Your Car for Winter

You can avoid many dangerous winter travel problems by planning ahead. Have maintenance service on your vehicle as often as the manufacturer recommends. In addition, every fall:

- Have the radiator system serviced, or check the antifreeze level yourself with an antifreeze tester. Add antifreeze, as needed.
- Replace windshield-wiper fluid with a wintertime mixture.
- Replace any worn tires, and check the air pressure in the tires.

During winter, keep the gas tank near full to help avoid ice in the tank and fuel lines.



Winter Survival Kit for Your Car

Equip your car with these items:

- blankets
- first aid kit
- a can and waterproof matches (to melt snow for water)
- windshield scraper
- booster cables
- road maps
- mobile phone
- compass
- tool kit
- paper towels
- bag of sand or cat litter (to pour on ice or snow for added traction)
- tow rope
- tire chains (in areas with heavy snow)
- collapsible shovel
- container of water and high-calorie canned or dried foods and a can opener
- flashlight and extra batteries
- canned compressed air with sealant (for emergency tire repair)
- brightly colored cloth

Indoor Safety

Heat Your Home Safely

If you plan to use a wood stove, fireplace, or space heater, be extremely careful. Follow the manufacturer's instructions as well as the home safety measures on page 3, and remember these safety tips:

- Use fireplace, wood stoves, or other combustion heaters only if they are properly vented to the outside and do not leak flue gas into the indoor air space.
- Do not burn paper in a fireplace.
- Ensure adequate ventilation if you must use a kerosene heater.
- Use only the type of fuel your heater is designed to use—don't substitute.
- Do not place a space heater within 3 feet of anything that may catch on fire, such as drapes, furniture, or bedding, and never cover your space heater.
- Never place a space heater on top of furniture or near water.
- Never leave children unattended near a space heater.
- Make sure that the cord of an electric space heater is not a tripping hazard but do not run the cord under carpets or rugs.
- Avoid using extension cords to plug in your space heater.



- If your space heater has a damaged electrical cord or produces sparks, do not use it.
- Store a multipurpose, dry-chemical fire extinguisher near the area to be heated.
- Protect yourself from carbon monoxide (CO) poisoning by installing a battery-operated CO detector and never using generators, grills, camp stoves, or similar devices indoors.

Light and Cook Safely

If there is a power failure:

- Use battery-powered flashlights or lanterns rather than candles, if possible.
- Never leave lit candles unattended.
- Never use a charcoal or gas grill indoors—the fumes are deadly.



Never use an electric generator indoors, inside the garage, or near the air intake of your house because of the risk of carbon monoxide poisoning:

- Plug in appliances to the generator using individual heavy-duty, outdoor-rated cords.
- Do not use the generator or appliances if they are wet because of the risk of electrocution.
- Do not store gasoline indoors where the fumes could ignite.

Conserve Heat

You may need fresh air coming in for your heater or for emergency cooking arrangements. However, if you don't need extra ventilation, keep as much heat as possible inside your home. Avoid unnecessary opening of doors or windows. Close off unneeded rooms, stuff towels or rags in cracks under doors, and close draperies or cover windows with blankets at night.

Monitor Body Temperature

Infants less than one year old should never sleep in a cold room because (1) infants lose body heat more easily than adults; and (2) unlike adults, infants can't make enough body heat by shivering. Provide warm clothing for infants and try to maintain a warm indoor temperature. If the temperature cannot be maintained, make temporary arrangements to stay elsewhere. In an emergency, you can keep an infant warm using your own body heat. If you must sleep, take precautions to prevent rolling on the baby. Pillows and other soft bedding can also present a risk of smothering; remove them from the area near the baby.

Older adults often make less body heat because of a slower metabolism and less physical activity. If you are over 65

years of age, check the temperature in your home often during severely cold weather. Also, check on elderly friends and neighbors frequently to ensure that their homes are adequately heated.

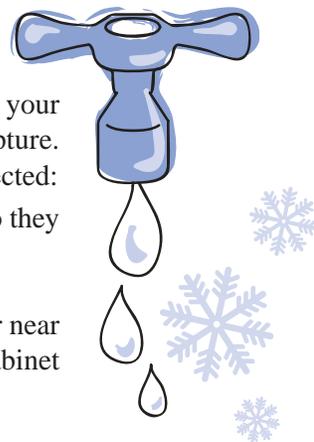
Keep a Water Supply

Extreme cold can cause water pipes in your home to freeze and sometimes rupture. When very cold temperatures are expected:

- Leave all water taps slightly open so they drip continuously.
- Keep the indoor temperature warm.
- Improve the circulation of heated air near pipes. For example, open kitchen cabinet doors beneath the kitchen sink.

If your pipes do freeze, do not thaw them with a torch. Instead, thaw them slowly by directing the warm air from an electric hair dryer onto the pipes.

If you cannot thaw your pipes, or the pipes are ruptured, use bottled water or get water from a neighbor's home. As an emergency measure—if no other water is available—snow can be melted for water. Bringing water to a rolling



boil for one minute will kill most microorganisms or parasites that may be present, but won't remove chemical pollutants sometimes found in snow.

Eat and Drink Wisely

Eating well-balanced meals will help you stay warmer. Do not drink alcoholic or caffeinated beverages—they cause your body to lose heat more rapidly. Instead, drink warm, sweet beverages or broth to help maintain your body temperature. If you have any dietary restrictions, ask your doctor.



Outdoor Safety

When the weather is extremely cold, and especially if there are high winds, try to stay indoors. Make any trips outside as brief as possible, and remember these tips to protect your health and safety:



Dress Warmly and Stay Dry

Adults and children should wear:

- a hat
- a scarf or knit mask to cover face and mouth
- sleeves that are snug at the wrist
- mittens (they are warmer than gloves)
- water-resistant coat and boots
- several layers of loose-fitting clothing



Be sure the outer layer of your clothing is tightly woven, preferably wind resistant, to reduce body-heat loss caused by wind. Wool, silk, or polypropylene inner layers of clothing will hold more body heat than cotton. Stay dry—wet clothing chills the body rapidly. Excess perspiration will increase heat loss, so remove extra layers of clothing whenever you feel too warm. Also, avoid getting gasoline or alcohol on your skin while de-icing and fueling your car or using a snow blower. These materials in contact with the skin greatly increase heat loss from the body. Do not ignore shivering. It's an important first sign that the body is losing heat. Persistent shivering is a signal to return indoors.

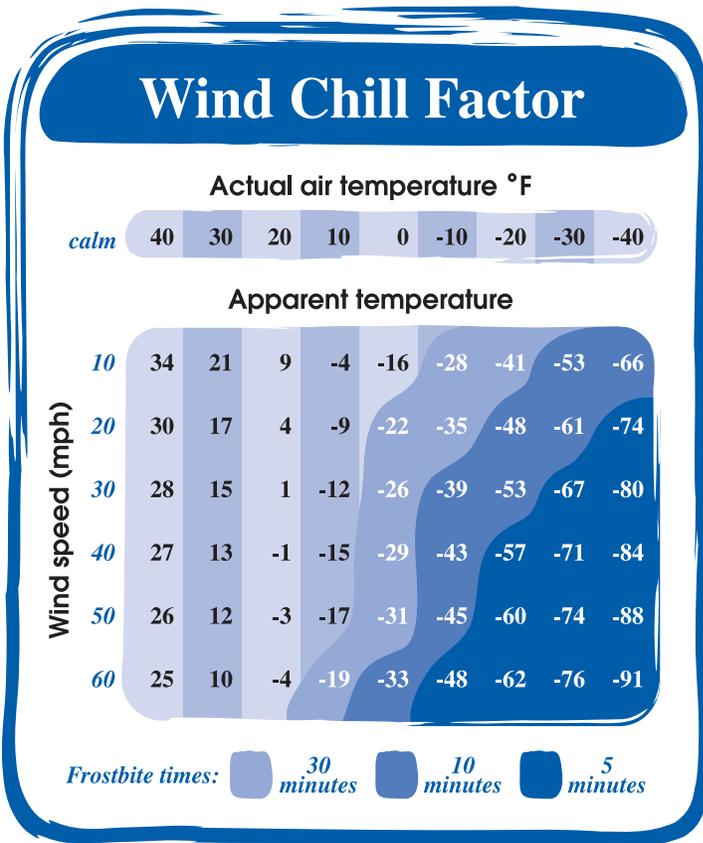
Avoid Exertion

Cold weather puts an extra strain on the heart. If you have heart disease or high blood pressure, follow your doctor's advice about shoveling snow or performing other hard work in the cold. Otherwise, if you have to do heavy outdoor chores, dress warmly and work slowly. Remember, your body is already working hard just to stay warm, so don't overdo it.

Understand Wind Chill

The Wind Chill index is the temperature your body feels when the air temperature is combined with the wind speed. It is based on the rate of heat loss from exposed skin caused by the effects of wind and cold. As the speed of the wind increases, it can carry heat away from your body much more quickly, causing skin temperature to drop. When there are high winds, serious weather-related health problems are more likely, even when temperatures are only cool.

The Wind Chill Chart to the right shows the difference between actual air temperature and perceived temperature, and amount of time until frostbite occurs.



National Weather Service (NWS) Wind Chill Chart adapted May 2004 from <http://www.nws.noaa.gov/om/windchill/>

Avoid Ice

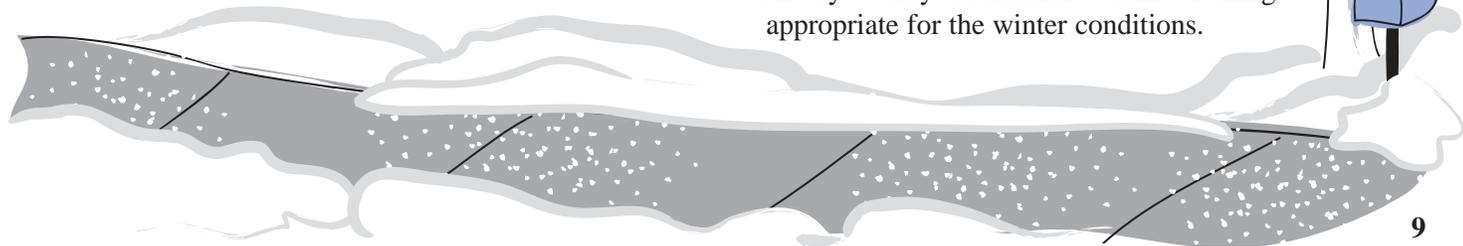
Walking on ice is extremely dangerous. Many cold-weather injuries result from falls on ice-covered sidewalks, steps, driveways, and porches. Keep your steps and walkways as free of ice as possible by using rock salt or another chemical de-icing compound. Sand may also be used on walkways to reduce the risk of slipping.

Be Safe During Recreation

Notify friends and family where you will be before you go hiking, camping, or skiing. Do not leave areas of the skin exposed to the cold. Avoid perspiring or becoming over-tired. Be prepared to take emergency shelter. Pack dry clothing, a two-wave radio, waterproof matches and paraffin fire starters with you. Do not use alcohol and other mood altering substances, and avoid caffeinated beverages. Avoid walking on ice or getting wet. Carefully watch for signs of cold-weather health problems.

Be Cautious About Travel

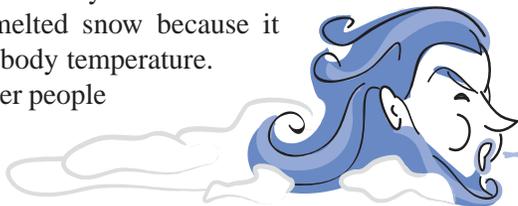
- Listen for radio or television reports of travel advisories issued by the National Weather Service.
- Do not travel in low visibility conditions.
- Avoid traveling on ice-covered roads, overpasses, and bridges if at all possible.
- If you must travel by car, use tire chains and take a mobile phone with you.
- If you must travel, let someone know your destination and when you expect to arrive. Ask them to notify authorities if you are late.
- Check and restock the winter emergency supplies in your car before you leave.
- Never pour water on your windshield to remove ice or snow; shattering may occur.
- Don't rely on a car to provide sufficient heat; the car may break down.
- Always carry additional warm clothing appropriate for the winter conditions.



What to Do if You Get Stranded

Staying in your vehicle when stranded is often the safest choice if winter storms create poor visibility or if roadways are ice covered. These steps will increase your safety when stranded:

- Tie a brightly colored cloth to the antenna as a signal to rescuers and raise the hood of the car (if it is not snowing).
- Move anything you need from the trunk into the passenger area.
- Wrap your entire body, including your head, in extra clothing, blankets, or newspapers.
- Stay awake. You will be less vulnerable to cold-related health problems.
- Run the motor (and heater) for about 10 minutes per hour, opening one window slightly to let in air. Make sure that snow is not blocking the exhaust pipe—this will reduce the risk of carbon monoxide poisoning.
- As you sit, keep moving your arms and legs to improve your circulation and stay warmer.
- Do not eat unmelted snow because it will lower your body temperature.
- Huddle with other people for warmth.



Cold-Weather Health Emergencies

Serious health problems can result from prolonged exposure to the cold. The most common cold-related problems are hypothermia and frostbite.

Hypothermia

When exposed to cold temperatures, your body begins to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up your body's stored energy. The result is hypothermia, or abnormally low body temperature. Body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know it is happening and won't be able to do anything about it.

Hypothermia is most likely at very cold temperatures, but it can occur even at cool temperatures (above 40°F) if a person becomes chilled from rain, sweat, or submersion in cold water.

Victims of hypothermia are often (1) elderly people with inadequate food, clothing, or heating; (2) babies sleeping in cold bedrooms; (3) people who remain outdoors for long periods—the homeless, hikers, hunters, etc.; and (4) people who drink alcohol or use illicit drugs.

Recognizing Hypothermia

Warnings signs of hypothermia:

Adults:

- shivering, exhaustion
- confusion, fumbling hands
- memory loss, slurred speech
- drowsiness

Infants:

- bright red, cold skin
- very low energy

What to Do

If you notice any of these signs, take the person's temperature. If it is below 95°, the situation is an emergency—get medical attention immediately.



If medical care is not available, begin warming the person, as follows:

- Get the victim into a warm room or shelter.
- If the victim has on any wet clothing, remove it.
- Warm the center of the body first—chest, neck, head, and groin—using an electric blanket, if available. Or use skin-to-skin contact under loose, dry layers of blankets, clothing, towels, or sheets.
- Warm beverages can help increase the body temperature, but do not give alcoholic beverages. Do not try to give beverages to an unconscious person.
- After body temperature has increased, keep the person dry and wrapped in a warm blanket, including the head and neck.
- Get medical attention as soon as possible.

A person with severe hypothermia may be unconscious and may not seem to have a pulse or to be breathing. In this case, handle the victim gently, and get emergency assistance immediately. Even if the victim appears dead, CPR should be provided. CPR should continue while the victim is being warmed, until the victim responds or medical aid becomes available. In some cases, hypothermia victims who appear to be dead can be successfully resuscitated.

Frostbite

Frostbite is an injury to the body that is caused by freezing. Frostbite causes a loss of feeling and color in affected areas. It most often affects the nose, ears, cheeks, chin, fingers, or toes. Frostbite can permanently damage the body, and severe cases can lead to amputation. The risk of frostbite is increased in people with reduced blood circulation and among people who are not dressed properly for extremely cold temperatures.

Recognizing Frostbite

At the first signs of redness or pain in any skin area, get out of the cold or protect any exposed skin—frostbite may be beginning. Any of the following signs may indicate frostbite:

- a white or grayish-yellow skin area
- skin that feels unusually firm or waxy
- numbness

A victim is often unaware of frostbite until someone else points it out because the frozen tissues are numb.

What to Do

If you detect symptoms of frostbite, seek medical care. Because frostbite and hypothermia both result from exposure, first determine whether the victim also shows signs of hypothermia, as described previously. Hypothermia is a more serious medical condition and requires emergency medical assistance.

If (1) there is frostbite but no sign of hypothermia and (2) immediate medical care is not available, proceed as follows:

- Get into a warm room as soon as possible.
- Unless absolutely necessary, do not walk on frostbitten feet or toes—this increases the damage.
- Immerse the affected area in warm—not hot—water (the temperature should be comfortable to the touch for unaffected parts of the body).
- Or, warm the affected area using body heat. For example, the heat of an armpit can be used to warm frostbitten fingers.
- Do not rub the frostbitten area with snow or massage it at all. This can cause more damage.
- Don't use a heating pad, heat lamp, or the heat of a stove, fireplace, or radiator for warming. Affected areas are numb and can be easily burned.



These procedures are not substitutes for proper medical care. Hypothermia is a medical emergency and frostbite should be evaluated by a health care provider. It is a good idea to take a first aid and emergency resuscitation (CPR) course to prepare for cold-weather health problems. Knowing what to do is an important part of protecting your health and the health of others.



One Last Cool Tip . . .

Taking preventive action is your best defense against having to deal with extreme cold-weather conditions. By preparing your home and car in advance for winter emergencies, and by observing safety precautions during times of extremely cold weather, you can reduce the risk of weather-related health problems.

Title: HEAT STRESS		Issue Date: December 2016
Project Safety Program Section: 11.3		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

HEAT STRESS

1.0 PURPOSE

To ensure all Employees understand and recognize the symptoms of heat stress and the measures to prevent and treat heat related emergencies in the workplace.

2.0 SCOPE

Employers have a duty under the *Oregon Occupational Safety and Health Rules* to take every precaution reasonable in the circumstances for the protection of a Worker.

This procedure applies to all **Saturn Power Corporation**. Employees, Contractors and Delivery Persons.

3.0 DEFINITIONS

Heat Stress - Stress on your body's cooling system due to physical work and loss of fluids in an extreme heat.

Heat Rash - Red bumpy rash with severe itching.

Heat Cramps - Cramps occur from salt imbalance resulting from failure to replace salt lost from heavy sweating.

Fainting - Decreased blood flow to brain due to inadequate fluid intake.

Heat Exhaustion - Body's cooling system starts to break down due to inadequate salt and water intake.

Heat Stroke - Rise in body temperature when all body reserves are exhausted and worker stops sweating. May develop suddenly or following heat exhaustion.

4.0 STANDARDS / PROCEDURES

This policy requires the full cooperation of Management, Supervisors, Worker Health and Safety Representative(s) / Safety Committee, and Workers.

Employees are asked to cooperate fully with this policy. All Employees will be trained to recognize the signs and symptoms of heat stress in themselves, as well as in other Employees.

Employees experiencing symptoms of heat stress must report to first-aid personnel immediately to obtain proper medical attention. During days when heat stress procedures are in place, all Employees will follow the contingency plans. Extra water will be available and Workers will be encouraged to drink it.

In order to monitor the effectiveness of this policy, Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee will perform an annual review.

5.0 ROLES / RESPONSIBILITIES

Supervisor:

- Monitor and evaluate the heat and humidex daily in order to prevent or reduce chances of illness due to heat exhaustion;
- Advise Workers to:
 - Drink enough fluids to replace those lost through sweating and breathing;
 - Take breaks in a cool area, as needed to avoid heat exhaustion or collapse;
 - Report to their Supervisor heat stress-related symptoms in themselves or their Co-Workers;
 - Adhere to the recommended rest break schedule, established to avoid heat exhaustion or collapse;
 - Provide methods of reducing risk of heat exhaustion such as fluids and area for Workers to cool down if necessary; and,
 - On days when Heat Stress Procedures are in effect, extra water must be available for Workers.

Worker:

- Must follow safe work procedures established to prevent heat-induced illness;
- Must drink enough fluids to replace those lost through sweating and breathing;
- Must report to their Supervisors' heat-related symptoms in themselves or their Co-Workers; and,
- Must follow recommended schedule of rest breaks, as advised by Supervisors, to avoid heat exhaustion or collapse.

6.0 COMMUNICATION

This procedure is communicated to all Supervisors and Employees through:

- Orientation, and,
- Postings / meetings as deemed necessary by Management.

7.0 TRAINING

Training on this procedure will be done annually for Employees whose work places them at risk of extreme or prolonged heat exposure.

8.0 EVALUATION / REVIEW

Worker compliance with this procedure is monitored regularly. The procedure will be reviewed annually for its effectiveness by Management in cooperation with the Worker Health and Safety Representative(s) / Safety Committee.

9.0 FORMS / RECORDS

Training Record

Heat Stress Awareness Guide

Heat Stress Tool

10.0 REFERENCE MATERIALS

I. Oregon OSHA Administrative Rules, Chapter 437, DDIVISION 2 (29 CFR 1910)

Appendix A

	Cause	Symptoms	Treatment	Prevention
Heat Rash	Hot humid environment; plugged sweat glands.	Red bumpy rash with severe itching.	Change into dry clothes and avoid hot environments. Rinse skin with cool water.	Wash regularly to keep skin clean and dry.
Heat Cramps	Heavy sweating from strenuous physical activity drains a person's body of fluid and salt, which cannot be replaced just by drinking water. Heat cramps occur from salt imbalance resulting from failure to replace salt lost from heavy sweating.	Painful cramps occur commonly in the most worked muscles (arms, legs or stomach); this can happen suddenly at work or later at home. Heat cramps are serious because they can be a warning of other more dangerous heat-induced illnesses.	Move to a cool area; loosen clothing, gently massage and stretch affected muscles and drink cool salted water (1½ to 2½ mL salt in 1 litre of water) or balanced commercial fluid electrolyte replacement beverage. If the cramps are severe or don't go away after salt and fluid replacement, seek medical aid. Salt tablets are not recommended.	Reduce activity levels and/or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke.

<p>Fainting</p>	<p>Fluid loss, inadequate water intake and standing still, resulting in decreased blood flow to brain. Usually occurs in un-acclimatized persons.</p>	<p>Sudden fainting after at least two hours of work; cool moist skin; weak pulse.</p>	<p>GET MEDICAL ATTENTION. Assess need for cardiopulmonary resuscitation (CPR). Move to a cool area; loosen clothing; have the person lie down; and if the person is conscious, offer sips of cool water. Fainting may also be due to other illnesses.</p>	<p>Reduce activity levels and/or heat exposure. Drink fluids regularly. Move around and avoid standing in one place for too long. Workers should check on each other to help spot the symptoms that often precede heat stroke.</p>
<p>Heat Exhaustion</p>	<p>Fluid loss and inadequate salt and water intake causes a person's body's cooling system to start to break down.</p>	<p>Heavy sweating; cool moist skin; body temperature over 100.4°F; weak pulse; normal or low blood pressure; person is tired and weak, and has nausea and vomiting; is very thirsty; or is panting or breathing rapidly; vision may be blurred.</p>	<p>GET MEDICAL ATTENTION. This condition can lead to heat stroke, which can cause death quickly. Move the person to a cool shaded area; loosen or remove excess clothing; provide cool water to drink; fan and spray with cool water. Do not leave affected person alone.</p>	<p>Reduce activity levels and/or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke.</p>
<p>Heat Stroke</p>	<p>If a person's body has used up all its water and salt reserves, it will stop sweating. This can cause body temperature to rise. Heat stroke may develop suddenly or may follow from heat exhaustion.</p>	<p>High body temperature (over 105°F) and any one of the following: the person is weak, confused, upset or acting strangely; has hot, dry, red skin; a fast pulse; headache or dizziness. In later stages, a person may pass out and have convulsions.</p>	<p>CALL AMBULANCE. This condition can kill a person quickly. Remove excess clothing; fan and spray the person with cool water; offer sips of cool water if the person is conscious.</p>	<p>Reduce activity levels and / or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke.</p>

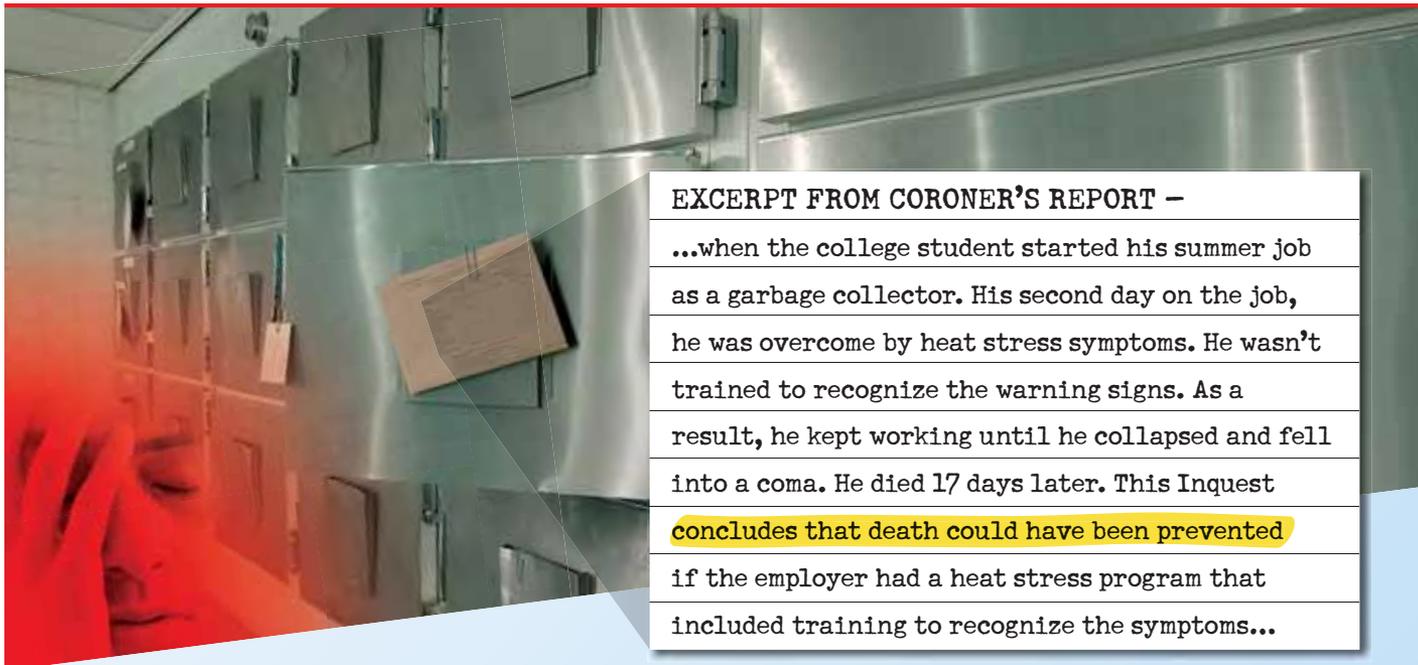
HEAT STRESS AWARENESS GUIDE



Included in this guide:
HEAT STRESS AWARENESS TOOL & POSTER

keep
your
cool!

HEAT STRESS AWARENESS GUIDE



EXCERPT FROM CORONER'S REPORT –

...when the college student started his summer job as a garbage collector. His second day on the job, he was overcome by heat stress symptoms. He wasn't trained to recognize the warning signs. As a result, he kept working until he collapsed and fell into a coma. He died 17 days later. This Inquest concludes that death could have been prevented if the employer had a heat stress program that included training to recognize the symptoms...

Heat stress can harm or even kill people working under very hot conditions.

To help employers and workers learn how to prevent heat stress, this guide

- summarizes the causes, symptoms, and treatment of heat-related illness
- presents a five-step approach for using the Humidex to assess heat stress hazards
- outlines specific actions for managing and controlling heat stress

Key information presented in this guide is summarized in the *Heat Stress Awareness Tool* (see page 7).

The appendices include:

- a self-audit checklist
- an example of a heat stress policy
- an outline of the essential elements of a heat stress program
- some useful contact information

Your **Health and Safety Association**, the **Workers Health and Safety Centre**, and the **Occupational Health Clinics for Ontario Workers** can provide you with:

- technical support
- workplace-specific information
- training on injury and illness prevention
- consulting services





About this guide

The *Heat Stress Awareness Guide* was developed by the members of the Occupational Health and Safety Council of Ontario (OHSCO)* to provide information and advice on managing and controlling heat stress in the workplace.

The audience for this Guide includes employers, managers, supervisors, workers, joint health and safety committee (JHSC) members, health and safety representatives, and workplace union representatives. Unions, employer associations, and health and safety professionals may also find the information in this Guide useful.

*For a list of OHSCO members see Appendix E.

Disclaimer

The material contained in this manual is for information and reference purposes only and not intended as legal or professional advice. The adoption of the practices described in this manual may not meet the needs, requirements, or obligations of individual workplaces.

Use, reproduction, and duplication of this manual is recommended and encouraged.

Occupational Health and Safety Council of Ontario (OHSCO)



5252A (05/09) © 2009, WSIB Ontario. Printed in Canada

Table of contents

Is heat stress a concern in your workplace?	3
The law	3
Factors influencing heat stress	4
Can you get used to heat?	4
Causes, symptoms, and treatment	5
How is heat stress measured?	6
Five steps to reduce heat stress	6
Instructions for use of the awareness tool	7
Heat stress acclimatization	8
Managing heat stress	8
Control measures:	
General, job-specific, and personal	9

Appendices

A Sample heat stress policy	11
B Heat stress reference chart	12
Two Humidex guidelines	13
C Self-audit checklist	14
D Essentials for a successful heat stress program	16
E Research and support (including website contacts)	18
F Environment Canada contacts	19



Is heat stress a concern in your workplace?

- Has anyone been affected by heat in your workplace?
- Are fans needed to keep workers cool?
- Is work done in direct sunlight?
- Are there heat-producing processes or equipment in the workplace?
- Do workers wear extra clothing/protective equipment that can make them hot (e.g., overalls, respirators, hard hats, etc.)?
- Have workers ever expressed concern about heat in the workplace?

Chances are that you answered “yes” to at least one of these questions. Actually, heat stress is something most workplaces must deal with — not just those with workers working in the hot sun or beside hot furnaces or machinery.

The purpose of this heat stress tool kit is to provide workplace parties with strategies for:

- recognizing the symptoms
- assessing the risk
- putting together an effective control program

The law

Employers have a duty under Section 25(2)(h) of the *Occupational Health and Safety Act* to take every precaution reasonable in the circumstances for the protection of a worker. This includes developing policies and procedures to protect workers in hot environments due to hot processes or hot weather. For compliance purposes, the Ministry of Labour recommends the current threshold limit value (TLV) for heat stress and heat strain, published by the American Conference of Governmental Industrial Hygienists (ACGIH). These values are based on preventing unacclimatized workers’ core temperatures from rising above 38°C. See Ministry of Labour web document “Heat stress health and safety guideline” for details.

Limitations:

This Heat Stress Awareness Guide is a translation of the ACGIH Heat Stress/Strain Threshold Limit Value (TLV®) from WBGT (wet bulb globe temperature) units into Humidex. This translation assumes unacclimatized workers doing work involving moderate physical activity, and wearing summer shirt, pants, underwear, socks and shoes. This Humidex plan can be adjusted for the radiant heat from the sun (see Step #5 on page 7). If your workplace conditions involve unusual radiant heat, or, workers are required to wear clothing which does not allow sweat to evaporate easily, the ACGIH Heat Stress/Strain TLV® should be consulted rather than this Humidex Plan.





Factors influencing heat stress

The heating and cooling balance in the body depends on the following factors:

- air temperature
- humidity (moisture in the air)
- radiant heat load (sun, furnaces, molten material, steam, etc.)
- physical activity (how hard you're working)
- cooling (by the evaporation of sweat)
- body adjustments (acclimatization)

There are two sources of heat exposure, the outside environment and internal muscle activity. (80% of muscle energy is turned into body heat.) High temperatures and high levels of physical work create heat stress. The body cools itself by evaporating sweat. High humidity hinders sweat from evaporating.

Can you get used to heat?

Yes. The body will get used to working in a hot environment gradually over time. This process of the body becoming more efficient at cooling itself down is known as "acclimatization":

- The body redirects blood to the skin's surface
- The heart becomes more efficient
- Sweating starts sooner, and there is more of it
- Sweat contains less salt

During this adjustment period, symptoms of fatigue, dizziness, heat rash, and stomach discomfort are common. Acclimatization takes time — a rule of thumb for assuming you have acclimatized is when the last five of seven days have workplace temperatures in the heat stress range. It should be noted, however, that dehydration can cancel the benefits of acclimatization. Acclimatized workers will generally be able to work longer in a hot environment than unacclimatized workers.

HEAT RASH	
CAUSES	Hot humid environment; plugged sweat glands
SYMPTOMS	Red bumpy rash with severe itching
TREATMENT	Change into dry clothes and avoid hot environments, rinse skin with cool water

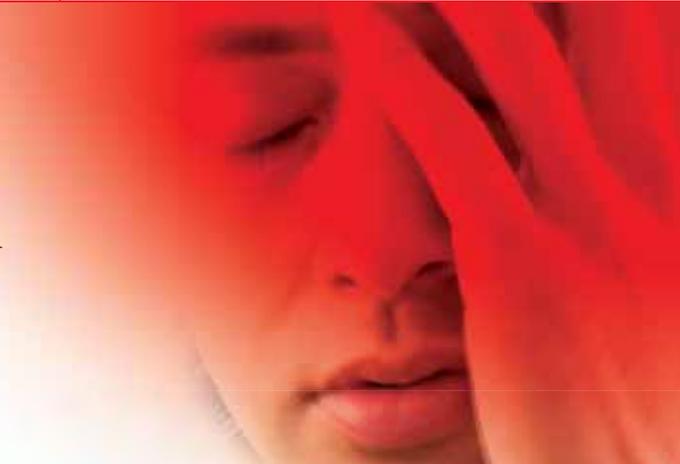
SUNBURN	
CAUSES	Too much exposure to the sun
SYMPTOMS	Red, painful, or blistering and peeling skin
TREATMENT	If the skin blisters, seek medical aid, use skin lotions (avoid topical anaesthetics) and work in the shade

HEAT CRAMPS	
CAUSES	Heavy sweating drains a person's body of salt, which cannot be replaced just by drinking water
SYMPTOMS	Painful cramps in arms, legs, or stomach that occur suddenly at work or later at home Heat cramps are serious because they can be a warning of other more dangerous heat-induced illnesses
TREATMENT	Move to a cool area; loosen clothing and drink an electrolyte-replacement beverage, if the cramps are severe or don't go away, seek medical aid



Causes, symptoms, and treatment

Heat stress symptoms are a set of natural signals telling you that something needs to be done to balance your body's heating and cooling. As your body heats up, it tries to rid itself of excess heat through the evaporation of sweat. If it is unable to cool itself this way, your body temperature will increase. When body temperature gets above 38-39°C, the brain starts to overheat, leading to a shutdown of your body's cooling system (sweating stops). Your temperature now rises even faster, leading to heat stroke and possibly death. The causes, symptoms, and treatment of various heat-related illnesses are listed below.



CAUSES	FAINTING
	Fluid loss and inadequate water intake
SYMPTOMS	Sudden fainting after at least two hours of work; cool moist skin; weak pulse
	GET MEDICAL ATTENTION Assess need for CPR; move to a cool area; loosen clothing; make person lie down; and when the person is conscious , offer sips of cool water. Fainting may also be due to other illnesses.
TREATMENT	

CAUSES	HEAT EXHAUSTION
	Fluid loss and inadequate salt and water intake causes the body's cooling system to start to break down
SYMPTOMS	Heavy sweating; cool, moist skin; body temperature above 38°C; weak pulse; normal or low blood pressure; tired and weak, nausea and vomiting; very thirsty; panting or breathing rapidly; blurred vision
	GET MEDICAL AID This condition can lead to heat stroke, which can kill; move the person to a cool shaded area; loosen or remove excess clothing; provide cool water to drink; fan and spray with cool water
TREATMENT	

CAUSES	HEAT STROKE
	If a person's body has used up all its water and salt reserves, it will stop sweating, which can cause body temperature to rise; heat stroke may develop suddenly or may follow from heat exhaustion
SYMPTOMS	High body temperature (above 41°C) and any of the following: the person is weak, confused, upset, or acting strangely; has hot, dry, red skin; a fast pulse; headache or dizziness; in later stages, a person may pass out and have convulsions
	THIS IS AN IMMEDIATE MEDICAL EMERGENCY. PROMPT ACTION MAY SAVE THE PERSON'S LIFE
TREATMENT	CALL AN AMBULANCE This condition can kill a person quickly; remove excess clothing; fan and spray the person with cool water; offer sips of cool water, if the person is conscious



How is heat stress measured?

The Ministry of Labour uses “wet bulb globe temperature” (WBGT) to measure heat stress. This calculation takes into account air temperature, radiant heat and humidity. Exposure standards are divided into categories based on physical activity and workers’ acclimatization. Adjustments are made for wearing types of clothing and personal protective equipment. Taking WBGT measurements properly requires specialized equipment and expertise. Workplaces with very hot work processes or where workers have experienced heat-related illnesses should measure the WBGT.

Most workplaces don’t have “hot processes” but hot weather can pose health risks to their workers. For these hot work environments, a *Hot Weather Plan* is appropriate. This is a simplified heat stress prevention program and should establish implementation criteria, or “triggers,” to put the plan into effect. Criteria may include:

- Humidex reaching or exceeding 35
- Environment Canada Humidex advisory (air temperature exceeding 30°C and Humidex exceeding 40) or Ontario Ministry of the Environment smog alert
- Heat waves (three or more days of temperatures of 32°C or more)

Generally, Hot weather plans should be in place between May 1 and September 30.

This tool kit provides a simplified version of the WBGT by converting it into Humidex values. It allows workplaces to measure heat stress using only workplace temperature and humidity. (See Appendix B on page 12 for more details.) The following five steps help determine actions to reduce heat stress.

5 Steps to

Step 1 Training

- Measurements by themselves cannot guarantee worker protection from heat stress. It is essential that workers learn to recognize the early signs and symptoms of heat stress and know how to prevent them! (See Appendix E on page 18 for training resources.)
- If it’s possible, workers need to be able to alter their pace of work, take rest breaks, and drink in response to early symptoms (a cup of water every 20 minutes). The ideal heat stress response plan would let workers regulate their own pace by “listening” to their bodies.

Step 2 Clothing

- The Heat stress action chart on the awareness tool (page 7) assumes workers are wearing regular summer clothes (light shirt and pants, underwear, and socks and shoes).
- If workers wear a double layer of woven clothing (e.g., cotton overalls on top of summer clothes), add 5° of Humidex to the workplace measurement (using the Heat stress reference chart in Appendix B, on page 12).
- Estimate the correction factor for other kinds of clothing/protective equipment by comparing them with cotton overalls (e.g., gloves, hard hat, apron, and protective sleeves might be equivalent to a little less than half the evaporation resistance of overalls, so add 1° or 2° of Humidex).
- If completely encapsulating suits are worn, heat stress should be managed by monitoring vital signs, as recommended by the ACGIH TLV.

Step 3 Select a measurement location

- Divide the workplace into zones that have similar heat exposures.
- Select a representative location in each zone where you can take measurements.



Reduce Heat Stress

Step 4

Measure workplace temperature and humidity

- Using a **thermal hygrometer** (usually \$20-\$60 at hardware or office-supply stores), measure the temperature and relative humidity in your workplace. Avoid placing the thermal hygrometer in direct sunlight or in contact with hot surfaces.
- Once you have the temperature and humidity, be sure to adjust for clothing (Step 2), and radiant heat (Step 5). Then use the Heat stress awareness tool (or the table on page 13 in Appendix B) to determine the appropriate heat stress prevention response.
- For more detailed calculations (e.g., for acclimatized workers), see Appendix B on page 12 or the calculator located at www.ohcow.on.ca/menuweb/heat_stress_calculator.htm.



Step 5

Adjust for radiant heat

- For outdoor work in direct sunlight between the hours of 10 a.m. and 5 p.m., add 2°-3° (prorate according to percentage cloud cover) to your Humidex measurement.
- For indoor radiant heat exposures, use your training, knowledge and experience to judge whether the exposure involves more or less radiant heat than direct sunlight and adjust the 2°-3° correction factor appropriately.

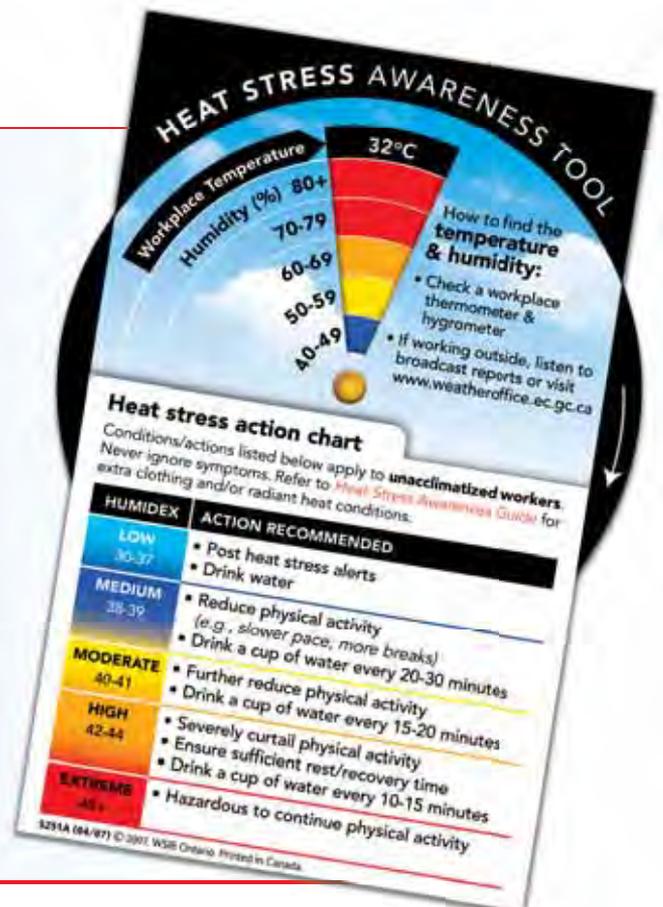
Note: The Heat stress action chart is based on workplace measurements, not weather station/media reports. (Temperatures inside buildings do not necessarily correspond with outside temperatures.)

Instructions for use of the heat stress awareness tool

1. Measure the workplace temperature and humidity.
2. Turn the wheel to display the workplace temperature. Then, find the humidity value on the left axis. Note the colour of the indicated cell.
3. Refer to the colour on the instruction chart for recommended action.

Example: If the temperature is 32°C (black ring in the window) and the relative humidity is 50%, the colour for this range is yellow. This indicates that the precautions are in the “moderate” value range. In this case, the recommended actions are:

- Further reduce physical activity
- Drink a cup of water every 15-20 minutes





Heat stress acclimatization

- Ontario summers are not hot enough for workers doing light work (sitting/standing, doing light arm work) to be considered acclimatized for WBGT purposes.
- Workers doing moderate work are only considered acclimatized in Ontario if they regularly work around heat sources (e.g., in foundries, around ovens, etc.). See Appendix B.
- Workers performing heavy work acclimatize quickly in Ontario, but for the first warm weather of the season, more caution is recommended. Even Humidex 1 (see page 13 in Appendix B) may be too high to protect fully unacclimatized workers doing heavy work.

Note: *Clothing and radiant heat must be taken into account when using this guideline. See Steps 1 to 5 outlined on previous page.*

Managing heat stress

No system can address all situations. Workplaces with particular sources of heat or humidity may need extra assistance in developing a heat stress response plan. The Health and Safety Associations listed in Appendix E on page 18 are an excellent place to start.

Some workplaces begin with rigorous systems of measurement and prescribed reactions, but once in heat stress season, workers and supervisors eventually learn to anticipate when heat stress controls “kick in.” In such situations, the system becomes less formal.

A coroner’s inquest into a college student’s death noted that prescribed responses to the measurements alone will not protect every worker. Workers must also learn to listen to what their bodies are telling them and know how to respond appropriately. The heat stress response plan must be flexible enough to protect the most vulnerable workers.

Before establishing a policy, you must determine:

1. One or more monitoring methods or criteria (e.g., self-regulation, Humidex, WBGT measurements).
2. A sampling strategy (e.g., location, frequency, time, trigger to start monitoring).
3. Responses (e.g., rests, rotation, air conditioning, voluntary staying on the job, shut down).
4. Training (when, how often, content, length, Joint Health and Safety Committee involvement, supervisors, workers, first aid).
5. Water-supply coordination (ensuring workers have sufficient quantities of water available).
6. First-aid reporting, emergency response, medical monitoring, confidentiality.

In workplaces with JHSCs or Health and Safety representatives, it is important to get them involved and incorporate their ideas into the plan. The Health and Safety Associations and the Workers Health and Safety Centre have resources available to assist in educating Health and Safety representatives and JHSC members regarding the hazards of heat stress and controls.





Once these basics are addressed, you can write your policy and response plan. A sample of a heat stress policy can be found on page 11, in Appendix A, along with a self-audit checklist on page 14 in Appendix C. It is crucial to the success of the plan to get upper management's endorsement. Once the plan is approved, it needs to be communicated and implemented. All programs need to be evaluated to ensure that they prevent heat stress.

Control measures

General control measures

- Develop, communicate and implement the heat stress plan for all workers.
- Train workers to recognize the signs and symptoms of heat stress and to know how to avoid them.
- Provide water nearby on the job site and ensure everyone drinks about one cup of water every 20 to 30 minutes, even if they're not thirsty.
- Establish a first-aid response system with trained first-aid providers and a means to record and report heat stress incidents.
- Allow time for workers to acclimatize to the heat and the work. This usually takes about two weeks.
- Measure Humidex (or WBGT) levels and allow for self-limitation of exposure. (If this is not possible, adjust the work/rest cycles accordingly.)
- Encourage workers to use a buddy system — each buddy looks out for early signs and symptoms of heat stress in the other.

Job-specific control measures

- Provide barriers to shield workers from radiant heat exposure. Provide cooling fans when air temperature is below skin temperature (35°C) **and** the humidity is below 70%. Consider cooling or dehumidifying the workplace.

Note: *When the temperature exceeds 35°C and the relative humidity is above 70%, the use of fans will increase worker's temperature because there will be little evaporation of sweat*

- Provide mechanical aids for material handling — dollies, carts, lifting devices — to reduce physical activity. Organize the work to reduce the pace of activity.
- If possible, postpone strenuous work until a cooler time of the day.
- If work is done outside, ensure that shaded areas are available.
- Rotate workers in and out of hot work areas whenever possible.
- Consider cooling vests, if feasible and effective for the individual.

Personal control measures

- Avoid eating large meals before working in hot environments.
- Avoid alcohol or beverages with caffeine. These make the body lose water and increase the risk of heat stress.
- Wear light clothing that permits the evaporation of sweat (e.g., cotton clothing). Use sunscreen and cover your head if working outside.
- Advise workers to check with their doctor if their medication may affect their heat tolerance.
- Make healthy lifestyle choices (i.e., body weight, fitness, diet, rest, etc.)

In 2004, the WSIB supported a RAC grant to study heat stress in the firefighting profession. Findings of the report titled, "The Management of Heat stress for the Firefighter", led to the development of a slide rule (later a wheel) that can be used by incident commanders to determine safe work limits for their firefighters during activities that involve wearing their full protective clothing and self contained breathing apparatus. Results of the research performed in the laboratory on firefighters in full gear exercising on treadmills have shown that submerging the forearm in cool water for 20 minutes was an effective method for lowering the body temperature along with drinking sufficient fluids and resting.



Appendix A

Heat stress policy (sample)

(Company name)

(Company name) recognizes the potential problems caused by high temperatures in the work environment. To reduce the potential for heat-related illness, (Company name) has developed the following heat stress policy.

This policy requires the full cooperation of all members of the (Company name) team: Senior management, the Joint Health and Safety Committee, supervisors, and workers. In order to monitor and evaluate the potential for heat-related problems in the workplace, a reference guide called the *Heat Stress Awareness Guide* will be used. By linking temperature and humidity, a colour code on the heat stress awareness tool (as described in the *Guide*) provides the appropriate work-site response.

Employees are asked to cooperate fully with this policy. All employees of (Company name) will be trained to recognize the signs and symptoms of heat stress — in themselves, as well as in other employees.

Employees experiencing symptoms of heat stress must report to first-aid personnel immediately to obtain proper medical attention. During days when heat stress procedures are in place, all employees will follow the contingency plans. Extra water will be available and workers will be encouraged to drink it.

In order to monitor the effectiveness of this policy, (Company name) will perform an annual review. The heat stress policy will be evaluated, improvements will be made, and acknowledgement will be given to those who make significant contributions to its success.

(Company manager)

Date



Appendix B

The following heat stress reference chart shows Humidex readings for the 2007 ACGIH moderate action level (unacclimatized) workload category WBGT values from the heat stress/strain TLV. Since the Ministry of Labour heat stress guidelines state that “hot spells in Ontario seldom last long enough for workers to acclimatize,” workers performing “moderate” work (e.g., work with some pushing, lifting) cannot be assumed to be acclimatized unless they are regularly exposed to significant radiant heat. Workers performing “heavy” work (e.g., shovelling dry sand), however, could probably be considered acclimatized once they are into the warm-weather season.

Limitations: This table is based on the assumption that the work is being performed under conditions with little or no radiant heat, and workers wearing regular summer clothing; if your conditions vary from these, use the steps listed on pages 6 and 7 to make adjustments.

An online version of the chart is available for download at www.ohcow.on.ca/menuweb/hhrplan.pdf

An online calculator can be accessed at www.ohcow.on.ca/menuweb/heat_stress_calculator.htm

Heat stress reference chart

		RELATIVE HUMIDITY (%)																																														
		100%	95%	90%	85%	80%	75%	70%	65%	60%	55%	50%	45%	40%	35%	30%	25%	20%	15%	10%																												
TEMPERATURE (°C)	49																			50	49																											
	48																			49	48																											
	47																			50	47	47																										
	46																			49	46	46																										
	45																			50	47	45	45																									
	44																			49	46	44	44																									
	43																			49	47	45	42	43																								
	42																			50	48	46	43	41	42																							
	41																			48	46	44	42	40	41																							
	40																			49	47	45	43	41	39	40																						
	39																			49	47	45	43	41	39	37	39																					
	38																			49	47	45	44	42	40	38	36	38																				
	37																			49	47	45	44	42	40	38	37	35	37																			
	36																			50	48	47	45	44	42	40	39	37	35	34	36																	
	35																			50	48	46	45	43	42	40	39	37	36	34	35																	
	34																			49	48	46	45	43	42	40	39	37	36	34	33	35																
	33																			50	48	47	46	44	43	41	40	39	37	36	34	33																
	32																			50	49	48	46	45	44	42	41	40	38	37	36	34	32															
	31	50	49	48	47	45	44	43	42	40	39	38	37	35	34	33	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10										
30	48	47	46	44	43	42	41	40	39	37	36	35	34	33	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10												
29	46	45	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10												
28	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1					
27	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
26	39	38	37	36	35	34	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1								
25	37	36	35	34	34	33	32	31	30	29	28	27	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1									
24	35	34	33	33	32	31	30	29	28	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10
23	33	32	32	31	30	29	28	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10		
22	31	30	30	29	28	27	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10				
21	29	29	28	27	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10						



Humidex 1 or Humidex 2

There are two Humidex guidelines to determine the appropriate actions required:

Humidex 1 refers to **unacclimatized workers** doing “moderate” work, and ranges indicate the need for **general heat stress controls**.

Humidex 2 refers to **acclimatized workers** doing “moderate” work, and ranges indicate the need for **specific controls**.

The ACGIH specifies an action limit and a TLV to prevent workers’ body temperatures from exceeding 38°C (38.5°C for acclimatized workers). Below the action limit (which corresponds to Humidex 1 for work of moderate physical activity), most workers will not experience heat stress. Most healthy, well-hydrated, acclimatized workers not on medication will be able to tolerate heat stress up to the TLV (Humidex 2 for moderate physical activity).

NEVER IGNORE ANYONE’S SYMPTOMS, REGARDLESS OF YOUR MEASUREMENTS!

Note: Clothing and radiant heat must also be taken into account when using this guideline (See Steps 1 to 5 outlined on pages 6 and 7).

Humidex 1 general controls include providing annual heat stress training, encouraging adequate fluid replacement, permitting self-limitation of exposure, encouraging employees to watch out for symptoms in co-workers, and adjusting expectations for workers coming back to work after an absence.

Humidex 2 specific controls include (in addition to general controls) engineering controls to reduce physical job demands, shielding of radiant heat, increased air movement, reduction of heat and moisture emissions at the source, adjusting exposure times to allow sufficient recovery, and personal body-cooling equipment.

Example: Suppose the temperature in the workplace is measured at **33°C** and the relative humidity is **50%**. The **Humidex** would be **41** (see heat stress reference chart, page 12).

Therefore, recommended action is as follows:

Humidex 1: 30 minutes/hour relief, and;

Humidex 2: Full work, with warning to be wary of heat stress symptoms and to drink extra water.

Humidex 1 general controls	ACTION RECOMMENDED	Humidex 2 specific controls
30 – 37	Warn for symptoms and extra water	36 – 42
38 – 39	Work with 15 minutes/hour relief	43 – 44
40 – 41	Work with 30 minutes/hour relief	45 – 46*
42 – 44	Work with 45 minutes/hour relief	47 – 49*
45+	Hazardous to continue physical activity	50+*

* For Humidex ranges above 45, heat stress should be managed as per the ACGIH TLV



Appendix C

The self-audit checklist

A self-audit can determine what mechanisms and practices your workplace has in place to combat heat stress. It also indicates which programs or practices may be deficient and require attention.

LEADERSHIP

- Written heat stress policy and plan
- Responsibilities and accountabilities identified for:
 - Employer
 - Supervisor
 - JHSC/H&S representative
 - Worker

EMPLOYEE TRAINING For all relevant personnel

- What is heat stress?
- Symptoms and health effects
- Personal risk factors
- Jobs at risk
- Monitoring results
- Actions to be taken for controlling heat stress
- Heat stress policy and plan
- Controls as established — engineering, administration, work practices
- Personal protective equipment
- First aid
- Reporting procedures
- Medical surveillance



STANDARDS & PROCEDURES

- Identification of potential heat hazards and jobs at risk
- Visual observations
- Accident/incident reports
- Absentee rate, employee complaints, medical records
- Assessment and evaluation of risk

MONITORING

- Weather as a trigger
- Type of testing
- Frequency
- Workload categories for job
- Clothing insulation values
- Comparison of monitoring results to acceptable standards

CONTROLS

- Controls (e.g., shielding heat sources, ventilation, fans, air conditioning, reducing metabolic workload, acclimatization, work scheduling, rotation, work/rest regimen, water, personal protective equipment)
- Evaluation of overall program effectiveness
- Compliance with standards and procedures



Appendix D

Essentials for a successful heat stress prevention program

The following elements are important in making your heat stress prevention program successful:

Leadership commitment

Management must recognize that a heat stress prevention program is required to prevent heat stress, and must show commitment to a heat stress prevention program through appropriate assignment of resources. Employees must be involved at every step of the program's development and implementation.

Identifying hazards, assessing risk, and determining needs

The organization must perform and document an assessment to identify all risk factors in the workplace that could lead to heat stress. Consideration should be given to legislative requirements, industry best practices, internal lost-time data, etc. Tools to perform this assessment could include walk-through inspections, surveys, checklists, and task analysis. These assessments should be repeated periodically, or as often as processes in the organization change.

Implementation of the plan and strategy

Once the risks and needs have been identified, the organization should develop a plan to address them. The plan should define responsibilities, accountabilities, timelines, and milestones for implementing the plan.

Standards

The organization should establish and document its standards for heat stress prevention, considering guidelines from professional bodies, industry best practices, etc.

Procedures, guidelines, and practices

Procedures, guidelines, and practices to implement all identified heat stress policies and standards must be documented. They should define, step by step, the process to accomplish a task or activity, including work/rest regimes (how often, when, in what areas, etc.), as defined in the standards.

Communication

The organization should communicate the requirements of all heat stress standards, policies, and procedures to all employees.

Training and personnel development

Employees may need training on such topics as:

- Definition of heat stress
- Signs and symptoms of heat-related disorders
- Importance of reporting signs and symptoms to supervisors
- When, how, and why to take breaks from hot work
- Recognition, assessment, and evaluation of heat stress
- Controls for heat stress

Measurement

The organization should keep track of data that can provide an evaluation of the heat stress prevention program. For example, you should keep track of lost-time injuries due to heat and hot weather conditions, worker complaints of discomfort after prolonged work, and purchases of equipment meeting standards that have been set. You may want to repeat a needs assessment or a heat survey done earlier to get comparative data after controls have been put in place to check if the controls are adequate.



Evaluation

The organization should analyze the measurement data to determine the degree of compliance and effectiveness of the heat stress prevention program by looking at indicators such as:

- Reduction in heat-related symptoms and illness through implementation of controls
- Reduction in absenteeism or lost time related to heat
- Increase in workers' knowledge about heat stress recognition and prevention
- Decrease in complaints of discomfort
- Adherence to work/rest regimens on hot days

Recognition, improvement, correction

Develop an improvement plan based on the measurement and evaluation findings, and include opportunities for improvement and correction. If you ensure that all components of this continuous-improvement loop are in place, you will increase the effectiveness of your heat stress prevention program.



Appendix E

Research and support

Technical support is available from your Health and Safety Association. Workplace-specific information, as well as training and consulting services for illness and injury prevention, are provided by the Health and Safety Associations of Ontario, the Workers Health and Safety Centre, and the Occupational Health Clinics for Ontario Workers.

Ontario Ministry of Labour
www.labour.gov.on.ca

Institute for Work and Health
www.iwh.on.ca

Workplace Safety and Insurance Board
www.wsib.on.ca

Construction Safety Association of Ontario
www.csao.org

Education Safety Association of Ontario
www.esao.on.ca

Electrical & Utilities Safety Association
www.eusa.on.ca

Farm Safety Association
www.farmsafety.ca

Industrial Accident Prevention Association
www.iapa.ca

Mines and Aggregates Safety and Health Association
www.masha.on.ca

Municipal Health and Safety Association
www.mhsao.com

Ontario Forestry Safe Workplace Association
www.ofswa.on.ca

Ontario Safety Association for Community and Healthcare
www.osach.ca

Ontario Service Safety Alliance
www.ossa.com

Pulp & Paper Health and Safety Association
www.pphsa.on.ca

Transportation Health & Safety Association of Ontario
www.thsao.on.ca

Workers Health & Safety Centre
www.whsc.on.ca

Occupational Health Clinics for Ontario Workers
www.ohcow.on.ca

Other sources of information on heat stress include:

Health Canada
www.hc-sc.gc.ca

Occupational Safety and Health Administration (USA)
www.osha.gov/SLTC/heatstress/recognition.html

For information on humidity, weather reports, and smog alerts:

Environment Canada
www.msc.ec.gc.ca

Environment Canada fact sheet:
summer severe weather
www.on.ec.gc.ca/severe-weather/summer.html

OHCOW Humidex-based heat stress calculator
www.ohcow.on.ca/menuweb/heat_stress_calculator.htm

Environment Canada Humidex calculator
lavoieverte.qc.ec.gc.ca/meteo/Documentation/Humidex_e.html

Environment Canada weather office
www.weatheroffice.ec.gc.ca/canada_e.html

Air Quality Ontario smog advisories
www.airqualityontario.com



Appendix F

Environment Canada contacts

Environment Canada provides regional weather details and forecasts via the services listed below:

www.weatheroffice.ec.gc.ca

Environment Canada (toll-free at **1-800-668-6767**) for options to obtain the latest weather conditions and forecast for your location.



HEAT STRESS

CAN BE DEADLY

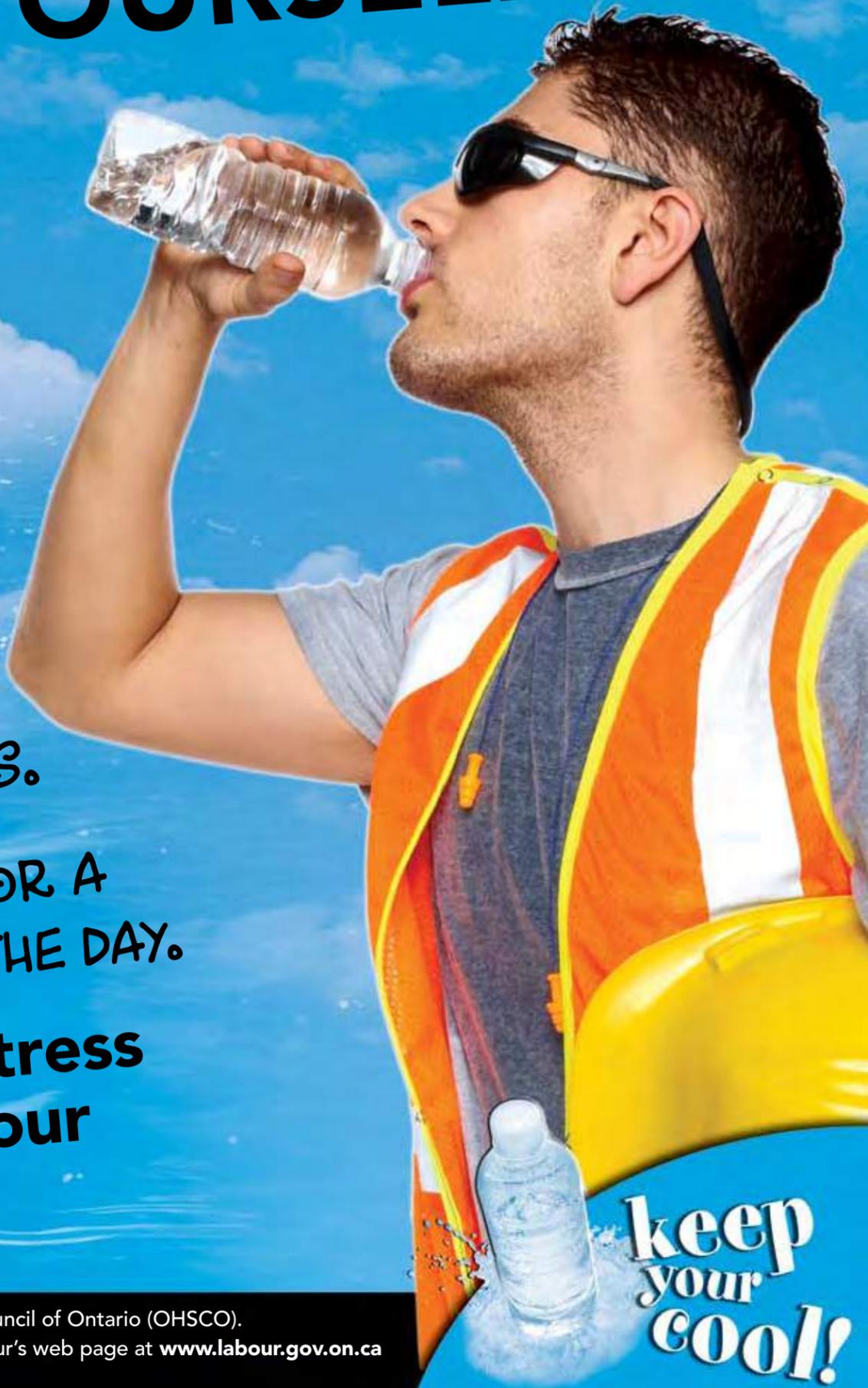
Symptoms include
weakness, fatigue,
& dizziness



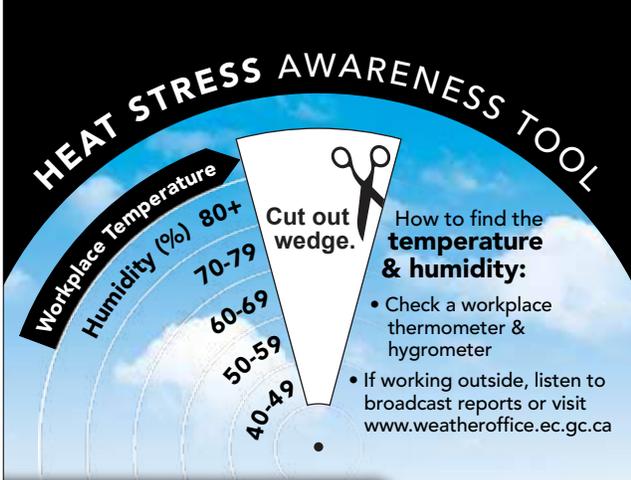
PROTECT YOURSELF!

- DRINK WATER.
- WEAR LIGHT, LOOSE CLOTHING.
- SCHEDULE MORE FREQUENT BREAKS.
- USE SUNSCREEN & KEEP YOUR HEAD COVERED OUTDOORS.
- SCHEDULE WORK FOR A COOLER PART OF THE DAY.

**Report heat stress
concerns to your
supervisor!**



keep
your
cool!



Once cutting and folding is complete, insert wheel so that the coloured side shows through the cut-out wedge.

Insert fastener at small black dot below the wedge to hold together, and rotate wheel.

Heat stress action chart

Conditions/actions listed below apply to **unacclimatized workers**. Never ignore symptoms. Refer to *Heat Stress Awareness Guide* for extra clothing and/or radiant heat conditions.

HUMIDEX	ACTION RECOMMENDED
LOW 30-37	<ul style="list-style-type: none"> • Post heat stress alerts • Drink water
MEDIUM 38-39	<ul style="list-style-type: none"> • Reduce physical activity (e.g., slower pace, more breaks) • Drink a cup of water every 20-30 minutes
MODERATE 40-41	<ul style="list-style-type: none"> • Further reduce physical activity • Drink a cup of water every 15-20 minutes
HIGH 42-44	<ul style="list-style-type: none"> • Severely curtail physical activity • Ensure sufficient rest/recovery time • Drink a cup of water every 10-15 minutes
EXTREME 45+	<ul style="list-style-type: none"> • Hazardous to continue physical activity

5251A (04/07) © 2007, WSIB Ontario. Printed in Canada.

Cut along vertical edges.



Fold on dotted line.

HEAT STRESS AWARENESS TOOL

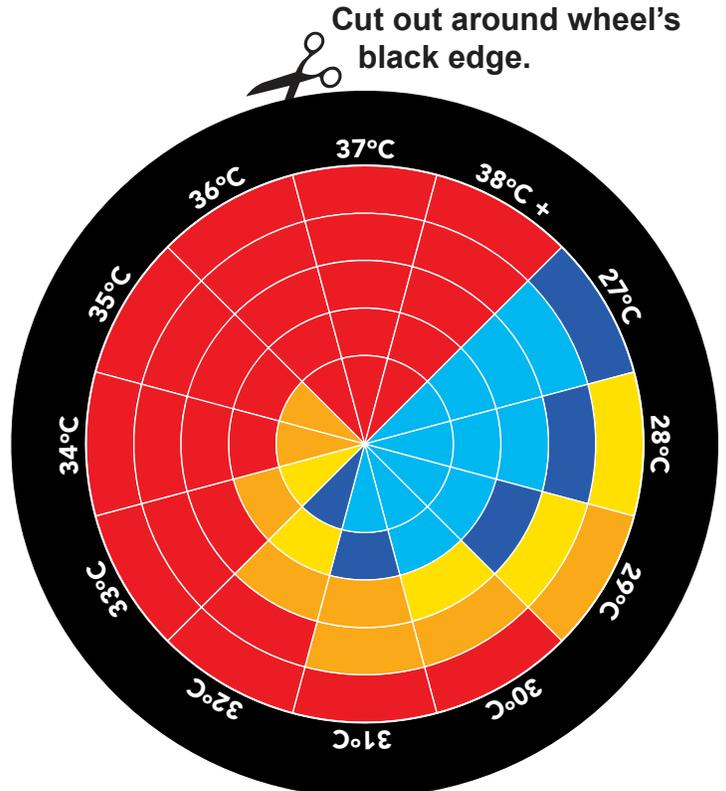
HEAT STRESS

RECOGNIZE THE SYMPTOMS... weakness, fatigue, & dizziness

How to use this tool:

1. Measure workplace temperature & humidity.
2. Turn the wheel to display the workplace temperature. Then, find the humidity value on the left axis.
3. Refer to the colour on the instruction chart for recommended action.
4. Refer to the *Heat Stress Awareness Guide* for more detailed information.

Cut out around wheel's black edge.





RIGHT TO REFUSE UNSAFE WORK

Title: RIGHT TO REFUSE UNSAFE WORK		Issue Date: September 2016
Project Safety Program Section: 12.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

RIGHT TO REFUSE UNSAFE WORK

1.0 PURPOSE

To ensure the prompt, effective and correct handling of "work refusal situations" under the *Occupational Health and Safety Act, including workplace violence*, and to encourage the quick resolution of these situations.

2.0 SCOPE

This procedure applies to all Employees, Contractors, Visitors and Delivery Persons.

3.0 DEFINITIONS

OHSA – Occupational Health and Safety Act

4.0 STANDARDS / PROCEDURES

The *Occupational Health and Safety Act* (OHSA) states (see REFERENCES section of this procedure for full version):

A Worker may refuse to work or do particular work where he or she has reason to believe that;

- Any equipment, machine, device or thing in operation is likely to endanger himself, herself or another;
- The physical condition of the workplace or the part thereof in which he or she works or is to work is likely to endanger himself or herself;
- Workplace violence is likely to endanger himself or herself; or,
- Any equipment, machine, device or thing he or she is to use or operate or the physical condition of the workplace or the part thereof in which he or she works or is to work is in contravention of this Act or the Regulations and such contravention is likely to endanger himself, herself or another Worker.

Where a Worker has reason to believe his / her health and safety are in danger, the Worker will report this to the appropriate Supervisor immediately. Workers are asked to specifically state the reason for the refusal. If the refusal is a health and safety concern then the Supervisor shall use this procedure.

The Supervisor will immediately contact the Worker Health and Safety Representative(s) / Joint Health and Safety Committee. If this individual is not available, the Worker will be asked to select another Worker to assist in the investigation of the safety concern.

The Supervisor, Worker Health and Safety Representative(s) / Joint Health and Safety Committee, and the Worker will investigate the concern as quickly as possible following the report. The Worker (with help of the Worker Health and Safety Representative(s) / Joint Health and Safety Committee, if needed) will complete the first section of the *Work Refusal Form* outlining the nature of the concern. The Supervisor will complete part two of the form outlining the response to that concern.

The Worker will then be asked to sign the form to indicate if he / she is satisfied with the response:

- If the Worker is satisfied, the situation will be considered resolved and the form will be forwarded to Management and the Worker Health and Safety Representative(s) / Joint Health and Safety Committee; or,
- If the Worker is not satisfied, the Ministry of Labour will be contacted by Management or their designate.

Pending the Ministry Inspector's arrival, the Worker refusing can be assigned other duties. Supervisors are reminded to ensure that these duties are consistent with the person's normal job function, and are such that he / she can be made readily available when the Inspector arrives or wishes to discuss the refusal over the telephone. These duties will be outlined on the form in Section 3.

No assignment of another Worker to the job refused shall be made without authorization from the Management. If this permission is given, section 4 of the form will be completed.

5.0 ROLES / RESPONSIBILITIES

Management:

- Maintain records of all work refusal situations on central file;
- Record all actions agreed to but not completed as a result of the work refusal on the "actions pending" log sheet. Confirm completion of other items; and
- Where possible, attend the Ministry of Labour Inspector's investigation and report on the situation.

Supervisor:

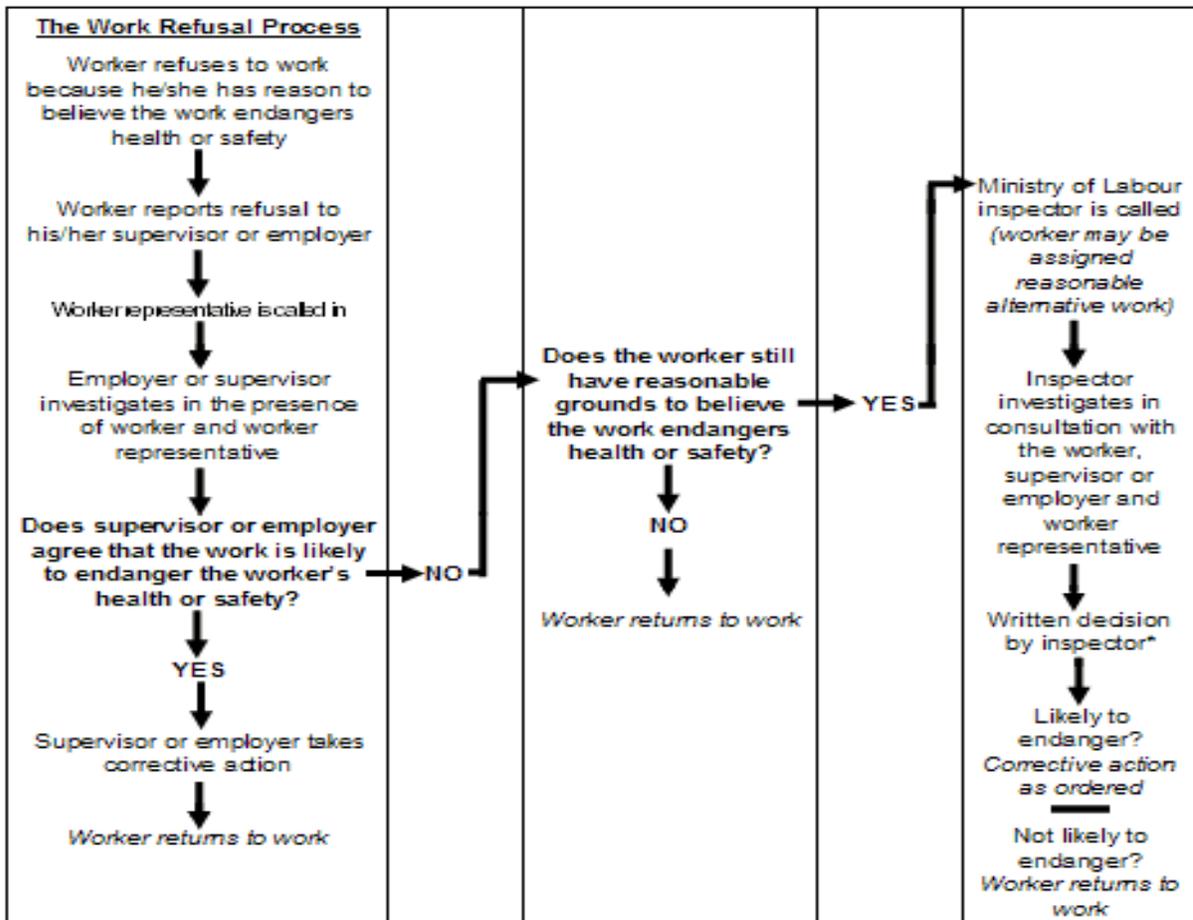
- Ensure that this procedure is correctly followed;
- Complete documents clearly and precisely;
- Be open and supportive to the concern(s) of the Worker, to help the Worker identify the specific problem, recognizing that it is in the best interest of the Company to resolve the situation without having to involve the Ministry of Labour;
- Where re-assigning a Worker, ensure that the new assignment is consistent with the person's normal duties; and
- Ensure that no action, comment or process is initiated that may be considered by the Worker as a threat, intimidation or coercion.

Worker:

- Report hazards immediately when you become aware of them;
- When you feel that you must refuse a work assignment, notify your Supervisor right away and state clearly that the reason is safety; and
- When completing Section 1 of the form, be as precise as possible about the reason for your concern. Consult with your Worker Health and Safety Representative(s) / Joint Health and Safety Committee if you are having difficulty expressing the exact nature of the concern.

Worker Health & Safety Representative:

- Observe to see that the requirements of the law and this procedure are adequately followed.
- Assist the Worker where possible in identifying the nature of the concern, and the management action necessary to address the concern.



*inspector's order can be appealed

6.0 COMMUNICATION

This procedure will be communicated during orientation to all employees.

7.0 TRAINING

Training will provided during orientation and/or as determined by Management.

8.0 EVALUATION / REVIEW

This procedure will be reviewed annually by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORM / RECORDS

Training Record

Work Refusal Form

10.0 REFERENCES

The Occupational Health and Safety Act (OHSA), section 43, states:

Refusal to work:

(3) A worker may refuse to work or do particular work where he or she has reason to believe that;

- (a) any equipment, machine, device or thing the worker is to use or operate is likely to endanger himself, herself or another worker;
- (b) the physical condition of the workplace or the part thereof in which he or she works or is to work is likely to endanger himself or herself;
- (b.1) workplace violence is likely to endanger himself or herself; or
- (c) any equipment, machine, device or thing he or she is to use or operate or the physical condition of the workplace or the part thereof in which he or she works or is to work is in contravention of this Act or the regulations and such contravention is likely to endanger himself, herself or another worker. R.S.O. 1990, c. O.1, s. 43 (3); 2009, c. 23, s. 4 (2).

Report of refusal to work:

(4) Upon refusing to work or do particular work, the worker shall promptly report the circumstances of the refusal to the worker's employer or supervisor who shall forthwith investigate the report in the presence of the worker and, if there is such, in the presence of one of;

- (a) a committee member who represents workers, if any;
- (b) a health and safety representative, if any; or
- (c) a worker who, because of knowledge, experience and training, is selected by a trade union that represents the worker, or if there is no trade union, is selected by

the workers to represent them, who shall be made available and who shall attend without delay. R.S.O. 1990, c. O.1, s. 43 (4).

Worker to remain in safe place and available for investigation

- (5) Until the investigation is completed, the worker shall remain,
- (a) in a safe place that is as near as reasonably possible to his or her work station; and
 - (b) available to the employer or supervisor for the purposes of the investigation.
- 2009, c. 23, s. 4 (3).

Refusal to work following investigation:

- (6) Where, following the investigation or any steps taken to deal with the circumstances that caused the worker to refuse to work or do particular work, the worker has reasonable grounds to believe that;
- (a) the equipment, machine, device or thing that was the cause of the refusal to work or do particular work continues to be likely to endanger himself, herself or another worker;
 - (b) the physical condition of the workplace or the part thereof in which he or she works continues to be likely to endanger himself or herself;
 - (b.1) workplace violence continues to be likely to endanger himself or herself; or
 - (c) any equipment, machine, device or thing he or she is to use or operate or the physical condition of the workplace or the part thereof in which he or she works or is to work is in contravention of this Act or the regulations and such contravention continues to be likely to endanger himself, herself or another worker, the worker may refuse to work or do the particular work and the employer or the worker or a person on behalf of the employer or worker shall cause an inspector to be notified thereof. R.S.O. 1990, c. O.1, s. 43 (6); 2009, c. 23, s. 4 (4).

Investigation by inspector:

- (7) An inspector shall investigate the refusal to work in consultation with the employer or a person representing the employer, the worker, and if there is such, the person mentioned in clause (4) (a), (b) or (c). 2001, c. 9, Sched. I, s. 3 (11).

Decision of inspector:

- (8) The inspector shall, following the investigation referred to in subsection (7), decide whether a circumstance described in clause (6) (a), (b), (b.1) or (c) is likely to endanger the worker or another person. 2009, c. 23, s. 4 (5).
- (9) The inspector shall give his or her decision, in writing, as soon as is practicable, to the employer, the worker, and, if there is such, the person mentioned in clause (4) (a), (b) or (c). R.S.O. 1990, c. O.1, s. 43 (9).

Worker to remain in safe place and available for investigation

- (10) Pending the investigation and decision of the inspector, the worker shall remain, during the worker's normal working hours, in a safe place that is as near as reasonably

possible to his or her work station and available to the inspector for the purposes of the investigation. 2009, c. 23, s. 4 (6).

Exception

(10.1) Subsection (10) does not apply if the employer, subject to the provisions of a collective agreement, if any,

- (a) assigns the worker reasonable alternative work during the worker's normal working hours; or
- (b) subject to section 50, where an assignment of reasonable alternative work is not practicable, gives other directions to the worker. 2009, c. 23, s. 4 (6).

Duty to advise other workers:

(11) Pending the investigation and decision of the inspector, no worker shall be assigned to use or operate the equipment, machine, device or thing or to work in the workplace or in the part of the workplace being investigated unless, in the presence of a person described in subsection (12), the worker has been advised of the other worker's refusal and of his or her reasons for the refusal. R.S.O. 1990, c. O.1, s. 43 (11).

(12) The person referred to in subsection (11) must be,

- (a) a committee member who represents workers and, if possible, who is a certified member;
- (b) a health and safety representative; or
- (c) a worker who because of his or her knowledge, experience and training is selected by the trade union that represents the worker or, if there is no trade union, by the workers to represent them. R.S.O. 1990, c. O.1, s. 43 (12).

Entitlement to be paid:

(13) A person shall be deemed to be at work and the person's employer shall pay him or her at the regular or premium rate, as may be proper,

- (a) for the time spent by the person carrying out the duties under subsections (4) and (7) of a person mentioned in clause (4) (a), (b) or (c); and
- (b) for time spent by the person carrying out the duties under subsection (11) of a person described in subsection (12). R.S.O. 1990, c. O.1, s. 43 (13).

Definition and non-application:

Definition 44. (1) In sections 45 to 48,

"Dangerous circumstances" means a situation in which;

- (a) a provision of this Act or the regulations is being contravened,
- (b) The contravention poses a danger or a hazard to a worker, and
- (c) The danger or hazard is such that any delay in controlling it may seriously endanger a worker.

Non-application:

44. (2) Sections 45 to 49 do not apply to;

- (a) A workplace at which workers described in clause 43 (2) (a), (b) or (c) are employed; or

(b) A workplace at which workers described in clause 43 (2) (d) are employed if a work stoppage would directly endanger the life, health or safety of another person. R.S.O. 1990, c. O.1, s. 44.

Bilateral work stoppage:

45. (1) A certified member who has reason to believe that dangerous circumstances exist at a workplace may request that a supervisor investigate the matter and the supervisor shall promptly do so in the presence of the certified member

Investigation by second certified member:

(2) The certified member may request that a second certified member representing the other workplace party investigate the matter if the first certified member has reason to believe that dangerous circumstances continue after the supervisor's investigation and remedial actions, if any

(3) The second certified member shall promptly investigate the matter in the presence of the first certified member

Direction following investigation:

(4) If both certified members find that the dangerous circumstances exist, the certified members may direct the constructor or employer to stop the work or to stop the use of any part of a workplace or of any equipment, machine, device, article or thing.

Constructor's or employer's duties:

(5) The constructor or employer shall immediately comply with the direction and shall ensure that compliance is effected in a way that does not endanger a person.

Investigation by inspector:

(6) If the certified members do not agree whether dangerous circumstances exist, either certified member may request that an inspector investigate the matter and the inspector shall do so and provide the certified members with a written decision.

Cancellation of direction:

(7) After taking steps to remedy the dangerous circumstances, the constructor or employer may request the certified members or an inspector to cancel the direction.

(8) The certified members who issued a direction may jointly cancel it or an inspector may cancel it.

Delegation by certified member:

(9) In such circumstances as may be prescribed, a certified member who represents the constructor or employer shall designate a person to act under this section in his or her stead when the certified member is not available at the workplace. R.S.O. 1990, c. O.1, s. 45.

Declaration against constructor, etc.:

46. (1) A certified member at a workplace or an inspector who has reason to believe that the procedure for stopping work set out in section 45 will not be sufficient to protect a constructor's or employer's workers at the workplace from serious risk to their health or safety may apply to the Board for a declaration or recommendation described in subsection (5), or both. R.S.O. 1990, c. O.1, s. 46 (1); 1998, c. 8, s. 53 (1).

46. (2) Repealed: 1998, c. 8, s. 53 (2).

Minister a party:

46. (3) The Minister is entitled to be a party to a proceeding before the Board. R.S.O. 1990, c. O.1, s. 46 (3); 1998, c. 8, s. 53 (3).

Board procedure, etc.:

46. (4) Subsections 61 (2) to (3.13) and subsection 61 (8) apply, with necessary modifications, with respect to applications under this section. 1998, c. 8, s. 53 (4).

Declaration and recommendation:

46. (5) If the Board finds that the procedure for stopping work set out in section 45 will not be sufficient to protect the constructor's or employer's workers at the workplace from serious risk to their health or safety, the Board

- (a) May issue a declaration that the constructor or employer is subject to the procedure for stopping work set out in section 47 for the period specified; and
- (b) May recommend to the Minister that an inspector be assigned to oversee the health and safety practices of the constructor or employer at the workplace on a full-time or part-time basis for a specified period. R.S.O. 1990, c. O.1, s. 46 (5); 1998, c. 8,

Criteria:

46. (6) In making a finding under subsection (5), the Board shall determine, using the prescribed criteria, whether the constructor or employer has demonstrated a failure to protect the health and safety of workers and shall consider such other matters as may be prescribed. R.S.O. 1990, c. O.1, s. 46 (6); 1998, c. 8, s. 53 (6). Decision final:

46. (7) The decision of the Board on an application is final. R.S.O. 1990, c. O.1, s. 46 (7); 1998, c. 8, s. 53 (7).

Costs of inspector:

46. (8) The employer shall reimburse the Province of Ontario for the wages, benefits and expenses of an inspector assigned to the employer as recommended by the Board. 1998, c. 8, s. 53 (8).

Unilateral work stoppage:

47. (1) This section applies, and section 45 does not apply, to a constructor or an employer,

- (a) Against whom the Board has issued a declaration under section 46; or
- (b) Who advises the committee at a workplace in writing that the constructor or employer adopts the procedures set out in this section respecting work stoppages. R.S.O. 1990, c. O.1, s. 47 (1); 1998, c. 8, s. 54.

Direction re work stoppage:

47. (2) A certified member may direct the constructor or employer to stop specified work or to stop the use of any part of a workplace or of any equipment, machine, device, article or thing if the certified member finds that dangerous circumstances exist.

Constructor's or employer's duties:

47. (3) The constructor or employer shall immediately comply with the direction and shall ensure that compliance is effected in a way that does not endanger a person.

Investigation by constructor, etc.:

47. (4) After complying with the direction, the constructor or employer shall promptly investigate the matter in the presence of the certified member.

Investigation by inspector:

47. (5) If the certified member and the constructor or employer do not agree whether dangerous circumstances exist, the constructor or employer or the certified member may request that an inspector investigate the matter and the inspector shall do so and provide them with a written decision.

Cancellation of direction:

47. (6) After taking steps to remedy the dangerous circumstances, the constructor or employer may request the certified member or an inspector to cancel the direction.

(7) The certified member who made the direction or an inspector may cancel it. R.S.O. 1990, c. O.1, s. 47 (2-7).

Entitlement to investigate:

8. (1) A certified member who receives a complaint that dangerous circumstances exist is entitled to investigate the complaint.

Entitlement to be paid:

48. (2) The time spent by a certified member in exercising powers and carrying out duties under this section and sections 45 and 47 shall be deemed to be work time for which the member's employer shall pay the member at the regular or premium rate as may be proper. R.S.O. 1990, c. O.1, s. 48.

Complaint re: direction to stop work:

49. (1) A constructor, an employer, a worker at the workplace or a representative of a trade union that represents workers at the workplace may file a complaint with the Board if he, she or it has reasonable grounds to believe that a certified member at the workplace recklessly or in bad faith exercised or failed to exercise a power under section 5 or 47. R.S.O. 1990, c. O.1, s. 49 (1); 1998, c. 8, s. 55 (1).

Limitation:

49. (2) A complaint must be filed not later than 30 days after the event to which the complaint relates. R.S.O. 1990, c. O.1, s. 49 (2); 1998, c. 8, s. 55 (2).

Minister a party:

49. (3) The Minister is entitled to be a party to a proceeding before the Board. R.S.O. 1990, c. O.1, s. 49 (3); 1998, c. 8, s. 55 (3).

Board procedure, etc.:

(3.1) Subsections 61 (2) to (3.13) and subsection 61 (8) apply, with necessary modifications, with respect to complaints under this section. 1998, c. 8, s. 55 (4).

Determination of complaint:

49. (4) The Board shall make a decision respecting the complaint and may make such order as it considers appropriate in the circumstances including an order decertifying a certified member. 1998, c. 8, s. 55 (5).

Decision final:

49. (5) The decision of the Board is final. R.S.O. 1990, c. O.1, s. 49 (5); 1998, c. 8, s. 55 (6).

**PART VI
REPRISALS BY EMPLOYER PROHIBITED**

No discipline, dismissal, etc., by employer:

50. (1) No employer or person acting on behalf of an employer shall,
(a) dismiss or threaten to dismiss a worker;
(b) discipline or suspend or threaten to discipline or suspend a worker;
(c) impose any penalty upon a worker; or
(d) intimidate or coerce a worker, because the worker has acted in compliance with this Act or the regulations or an order made thereunder, has sought the enforcement of this Act or the regulations or has given evidence in a proceeding in respect of the enforcement of this Act or the regulations or in an inquest under the *Coroners Act*. R.S.O. 1990, c. O.1, s. 50 (1).



WORK REFUSAL FORM

Title: WORK REFUSAL FORM		Issue Date: September 2016
Project Safety Program Section: 12.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

WORK REFUSAL FORM

Worker Name: _____ Date: _____

Supervisor: _____ Time Reported: _____

Location: _____

Worker Health and Safety Representative (s) / Joint Health and Safety Committee member:

Section 1:

Describe Job Assigned:

Nature of Concern:

Section 2:

Supervisor Response: (please check appropriate answer)

- A: Job is not safe: The Worker is re-assigned pending the completion of the recommendations listed below.
- B: Job is not safe: It can be made safe by completing the recommendations listed below.
- C: Job is felt to be safe: _____
 (Explain what was done / different)

Action Item	Responsibility	Action Taken	Date Received	Completion Date

IN THE EVENT OF RESPONSE (B) OR (C), THE WORKER WILL SIGN ONE OF:

1. I AGREE THAT MY HEALTH AND SAFETY CONCERN HAS BEEN ADDRESSED

Please Print Worker Name: _____

Worker Signature: _____

2. I DO NOT AGREE THAT MY HEALTH AND SAFETY CONCERN HAS BEEN ADDRESSED

Please Print Worker Name: _____

Worker Signature: _____

Section 3:

	Notified		Time of Notification
	YES	NO	
Ministry of Labour			
Senior Management			
Manager			
Worker Safety Rep/JHSC			

Describe Duties Assigned to Worker Pending Arrival of Ministry of Labour Inspector:

Inspector's Name: (print) _____

Date: _____

Time of Arrival: _____



POSTED HEALTH & SAFETY MATERIALS

Title: POSTED HEALTH & SAFETY MATERIALS		Issue Date: September 2016
Project Safety Program Section: 13.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

It is the responsibility of Management to ensure the following health and safety materials are posted and / or available in the workplace.

The Health and Safety Board and applicable postings must be kept current.

The Worker Health and Safety Representative(s) / Joint Health and Safety Committee conducting the monthly workplace inspections will check the health and Safety Board for compliance.

ITEM	DATE OF ISSUE	POSTED LOCATION
Occupational Health and Safety Act and Regulations – Consolidated Edition	Most current	Health and Safety Board
Material Safety Data Sheets	Not more than 3 years old	Health and Safety Board or other accessible location
Ministry of Labour – explanatory material <ul style="list-style-type: none"> • Guide to the OHSA • Guide to WHMIS • Guide to Worker Safety Rep/JHSC • “Prevention Starts Here” poster 	As released	Health and Safety Board
ESA “Employment Standards in Ontario” poster	Most current	Health and Safety Board
WSIB Form 82 – In case of injury poster	Most current	First Aid Kit and Health and Safety Board
WSIB First Aid Regulation (1101)	Most current	First Aid Kit
Copies of First Aid Certificates	Most current	First Aid Kit
Emergency Services and Numbers and Directions to Hospital	Most current	Health and Safety Board and All Main Telephones
Policy Statements <ul style="list-style-type: none"> • Health & Safety Policy • Violence & Harassment Policy 	Most current	Health and Safety Board
Reports <ul style="list-style-type: none"> • Safety Meeting Minutes • Ministry of Labour • Injury / Incident summary • Workplace Inspections 	Most current	Health and Safety Board
Other <ul style="list-style-type: none"> • Emergency Response Plan • Names & Locations of Worker Safety Rep(s) / JHSC Members 	Most current	Health and Safety Board



REPRESENTATIVE AND JHSC COMPOSITION & SELECTION

Title: REPRESENTATIVE AND JHSC COMPOSITION & SELECTION		Issue Date: September 2016
Project Safety Program Section: 14.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

REPRESENTATIVE AND JHSC COMPOSITION AND SELECTION

The creation and maintenance of a functioning Joint Health and Safety Committee for workplaces employing more than 20 workers is a requirement under Section 9 of the Occupational Health and Safety Act. This committee has duties that are outlined in Section 9.

The Joint Health and Safety Committee or Worker Health and Safety Representative(s) are an essential part of our internal responsibility system. They help to create a greater cooperation between management and labour in mutually achieving a safe and healthy operation.

Depending on the workplace/project duration and number of workers regularly employed, various types of worker representation or committees may be required. The following table represents the possible requirements for a company.

A Worker Health and Safety Representative or Joint Health and Safety Committee will be established within as per the table below.

WORKER REPRESENTATIVE/COMMITTEE REQUIREMENTS

Number of workers reporting to facility	Minimum Requirements
0-5	No requirements unless a designated substance regulation applies to your workplace (i.e. asbestos).
6-19	Worker health and safety representative selected by workers who they will represent. If a designated substance regulation applies to your workplace, a JHSC is required.
20-49	JHSC is required. Minimum, one manager and one worker member (worker selected by workers who they will represent). Certification of members required.
50+	JHSC is required. Minimum, two managers and two worker members (workers selected by workers who they will represent). Certification of members required.
	The JHSC will establish a Worker Trades Committee (WTC).

IMPLEMENTATION

Election/Selection - Notices/memos are to be sent to all workers (and trade unions, if required) requesting the selection of a worker Health and Safety Representative(s) for the workplace.

The election of the Worker Health and Safety Representative shall be made by workers who do not exercise managerial functions and who will be represented by the worker health and safety representative in the workplace or where there is a trade union(s) representing such workers, by the trade union(s).

Joint Health and Safety Committee (JHSC) - A JHSC or Worker Health and Safety Representative will be established within as per table above.

JHSC Certification Training Requirements - As of March 2016 a new standard was implemented outlining the requirements for JHSC Certification training. All those who became certified prior to March 1, 2016 will experience no changes including no recertification if they maintain the same job with the same hazards. All those who receive JHSC Certification training after February 29, 2016 will require a refresher course every three years to uphold their certification.

Workers Trades Committee (WTC) – A WTC will be established by the JHSC for projects expected to last three months or more with 50 or more workers regularly employed. The members of a WTC will be selected by the workers employed in the trades the members are to represent, or, if a trade union represents the workers, by the trade union.

COMPOSITION OF COMMITTEE

1. The JHSC will consist of at least 2 members, one of whom represents management and one representing workers. The addition of members to ensure all work areas are represented is acceptable, as long as at least half of the members represent workers.
2. The workers will elect members representing workers.
3. Management will appoint members representing management.
4. At least two members, one worker and one management, will obtain certification by completing training as prescribed and approved by the Workplace Safety and Insurance Board.
5. If there are more than two committee members, the members to act as chairs, and to receive certification training, will be chosen by the committee members. The members representing workers will choose the worker representative, the members representing management will choose the management representative.
6. The two certified members will Co-Chair the committee, and will share the duties of chair as agreed upon.
7. Terms of office will be at the discretion of the committee. It is the committee's intention to allow others to participate in the process. Members will be replaced on a regular schedule to be determined based on availability of interested employees. It is also the



REPRESENTATIVE AND JHSC COMPOSITION & SELECTION

intention of the JHSC to allow for a staggered replacement of members to facilitate continuity.



REPRESENTATIVE AND JHSC RECORD KEEPING

Title: REPRESENTATIVE AND JHSC RECORD KEEPING	Issue Date: September 2016
Project Safety Program Section: 14.2	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

REPRESENTATIVE AND JHSC RECORD KEEPING

1.0 PURPOSE

All records and reports of the Worker Health and Safety Representative(s) / Joint Health and Safety Committee (as applicable) must be maintained and readily available for government inspection.

2.0 SCOPE

This policy applies to the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

3.0 DEFINITIONS

No definitions are required.

4.0 STANDARDS / PROCEDURES

Although Committee/Worker Representative records are generally available to all persons in the workplace, some documents or information to which the Committee/Worker Representative has access to may be considered confidential. The Committee/Worker Representative(s) must be aware of this responsibility and act accordingly.

5.0 ROLES / RESPONSIBILITIES

Minutes of JHSC meetings will be kept on file and are available for review.

Completed Documentation / Materials to be kept in the Worker Health and Safety Representative(s) / Joint Health and Safety Committee file:

- JHSC Minutes (as applicable)
- JHSC Agenda (as applicable)
- JHSC Notices to Members or Employees (as applicable)
- JHSC or Sub-committee Reports (as applicable)
- Current List of JHSC members, alternates (as applicable)
- Current list of Worker H&S Representative(s), alternates (as applicable)
- Current List of Emergency Numbers
- Monthly Workplace Inspection Reports
- Monthly Fire Equipment Inspection Reports
- Monthly First Aid Kit Inspection Reports
- Investigation Report Forms (IRF) and Accident Reports (filed by month)

- First Aid Log Book
- Fire Extinguisher Inspection Reports
- Recommendations to Management
- Replies from Management to Recommendations
- Refusal to Work Reports
- Ministry of Labour Reports or Orders
- Current Copy of the Company's Health and Safety Policy
- Copy of Safe Operating Procedures
- Copy of original sections of Safety Manual
- Copy of archived sections of Safety Manual
- Copy of relevant health and safety information (articles, magazines, etc.)

6.0 COMMUNICATION

The JHSC Meeting Minutes (as applicable) will be posted on the safety board no later than one week after the meeting.

Due to the confidentiality of some of this information access to files will be restricted to committee members/worker representative accompanied by the management co-chairperson.

7.0 TRAINING

N/A

8.0 EVALUATION / REVIEW

Review annually by senior management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

The following is a list of all documents which must be stored in a separate filing system available specifically for Worker Health and Safety Representative(s) / Joint Health and Safety Committee:

Meeting Agendas
Meeting Minutes
Committee Inspection Reports & Management Follow-Up
Accident Investigations
Work Refusals & Unilateral Work Stoppage
Recommendations to Management
Response from Management
Committee Memorandums
General Information (WSIB reports, contractors' accident investigations, etc.)

10.0 REFERENCE MATERIALS

I.Ontario Legislation – Occupational Health and Safety Act section 9

Title: TERMS OF REFERENCE		Issue Date: September 2016
Project Safety Program Section: 14.3		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

Worker Health and Safety Representative(s) Terms of Reference (as applicable):

The following are the principles and guidelines from which the Worker Health and Safety Representative(s) will function:

- 1) The Worker Health and Safety Representative(s) must lead by example and work to resolve problems particular to their area of work through the internal responsibility system (i.e. reporting to supervisor)
- 2) For the purposes of maintaining good employment relations, Worker Health and Safety Representative(s) are requested not to abuse the time given for inspections and other duties outside their regular job functions;
- 3) A workplace health and safety inspection will be conducted **monthly**. If it is not practical to inspect the workplace at least once a month, the Worker Health and Safety Representative shall inspect the workplace at least once a year, and inspect at least a part of the workplace each month. Inspections will be submitted to site management immediately for follow-up;
- 4) Formal recommendations for improvement of workplace conditions should contain the following information and be presented on the appropriate form to be accepted by management:
 - Reason for recommendation (identify hazard);
 - Outline for requirements (what procedures or equipment are being requested);
 - Time requirements for implementation; and,
 - Time expectations for a response in writing (maximum 21 days).

JHSC Terms of Reference (as applicable):

- 1) The committee will meet monthly, the schedule to be posted.
- 2) Committee members will be entitled to up to an hour of preparation time prior to each meeting.
- 3) Committee members are responsible for notifying their Manager of the dates and times of meetings and preparation time.
- 4) All time spent by committee members performing their functions is paid at the regular or premium rate as is applicable.

- 5) Whenever possible, the committee will reach decisions through the process of discussion until consensus is reached. If consensus cannot be reached on a given issue, a vote may be taken.
- 6) A member will be selected to create the agendas, take minutes during the meetings and type and distribute the minutes within the provided time frame.
- 7) An agenda will be drafted and distributed prior to the meeting. Those wishing to add items to the agenda may do so by contacting any committee member.
- 8) Minutes will be kept of each meeting, and will be typed and signed by both co chairs. They will be distributed to members and posted within 5 working days of the meeting.
- 9) Minutes will include the following:
 - a. Date, time and location of the meeting.
 - b. Name of all members and others present.
 - c. Item by item record of all discussions, any recommendations made, items referred to future meetings, inspection reports.
 - d. Date, time and location of the next scheduled meeting.
- 10) Committee members' names and work locations will be posted.
- 11) Committee member(s) representing workers will complete monthly inspections of all three (3) training facilities, and ensure the resulting inspection report is reviewed by the JHSC at the next regularly scheduled meeting. Inspections may be divided between the worker members as agreed upon.
- 12) Any medical or personal information received during the course of their duties by any member of the JHSC will be held in the strictest confidence.
- 13) The committee may direct written recommendations related to health and safety in the workplace to the employer. The employer must provide a written response in accordance with Section 9 (20) of the Act.
- 14) The certified worker member has the right to be present during any investigation or visit of a Ministry of Labour inspector and at the beginning of all testing to be completed within the workplace.
- 15) The certified member representing workers will be called upon in the event of any work refusal. They will respond and assist with resolving the situation.
- 16) The certified member representing workers will be notified immediately of any critical injury or fatality within the workplace. This notification may be made by phone, fax, telegram or other immediate means.



TERMS OF REFERENCE

17) Committee members also have a responsibility to assist management to:

- Identify hazards within the workplace
- Assess the degree of risk posed by the hazards
- Implement appropriate controls for the hazards
- Review policies and procedures regularly,
- Provide input into new or revised policies or procedures, and
- Revise as necessary

As Worker Health and Safety Representative(s), or, members of the **Saturn Power Inc.** Joint Health and Safety Committee (JHSC), we have reviewed and agreed upon the above Terms of Reference.

All members are available to address the concerns of all Employees.

Name	Position	Signature



REPRESENTATIVE AND JHSC MEMBER NAMES & WORK LOCATIONS

Title: REPRESENTATIVE AND JHSC MEMBER NAMES & WORK LOCATIONS		Issue Date: September 2016
Project Safety Program Section: 14.4		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

REPRESENTATIVE AND JHSC MEMBER NAMES AND WORK LOCATIONS

Name	Location/Area	Phone Numbers
Co-Chair :		

NOTE: Workers with asterisks () are Certified by the Workplace Safety and Insurance Board**

Please post



JHSC MEETING SCHEDULE (AS APPLICABLE)

Title: JHSC MEETING SCHEDULE (AS APPLICABLE)		Issue Date: September 2016
Project Safety Program Section: 14.6		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

JHSC MEETING SCHEDULE

The Joint Health and Safety Committee is required to meet at least once every three months at the workplace, as per the *Occupational Health & Safety Act* s. 9(33).

	Date
Meeting #1	
Meeting #2	
Meeting #3	
Meeting #4	



RECOMMENDATIONS TO MANAGEMENT

Title: RECOMMENDATIONS TO MANAGEMENT		Issue Date: September 2016
Project Safety Program Section: 14.7		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

RECOMMENDATIONS TO MANAGEMENT

1.0 PURPOSE

The purpose of recommendations is to ensure that workplace health and safety hazards are identified and eliminated. Through the process of making recommendations, the committee places the onus on Management to review the recommendation, make a decision and respond in writing.

2.0 SCOPE

This policy applies to the Worker Health and Safety Representative(s) / Joint Health and Safety Committee and Management.

3.0 DEFINITIONS

No definitions are required.

4.0 STANDARDS / PROCEDURES

Any Worker Health and Safety Representative / Joint Health and Safety Committee member will be allowed to make written recommendations to Management using the *Recommendations to Management Form*. The Worker Health and Safety Representative(s) / Joint Health and Safety Committee member will complete the form and present it to Management.

The JHSC is expected to work in good faith to achieve consensus. If the committee has failed to reach a consensus about making recommendations to the Employer after trying to reach a consensus in good faith, either co-chair of the Committee has the power to make written recommendations to the Employer.

Once obtained by Management, the recommendation will be reviewed with senior Management. Management then has the obligation to respond to the recommendation within 21 days using the "Management Response to Recommendation Form".

Management will attempt to respond to written recommendations as soon as possible and in any event no later than 21 days from the day that the recommendation was provided to Management.

5.0 ROLES / RESPONSIBILITIES

All recommendations must be provided to Management.

All responses to recommendations must be returned back to the Worker Health and Safety Representative(s) / Joint Health and Safety Committee who made the recommendation (within 21 Days), utilizing the Management Response to Recommendations Form.

6.0 COMMUNICATION

Responses to recommendations shall be posted on the safety bulletin board.

7.0 TRAINING

The Worker Health and Safety Representative(s) / Joint Health and Safety Committee will receive training on this procedure.

8.0 EVALUATION / REVIEW

This procedure will be reviewed annually by management in co-operation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Recommendations to Management Form

All recommendations made to management will be retained on file for a period of up to 5 years.

10.0 REFERENCE MATERIALS

I. Ontario Legislation – Occupational Health and Safety Act sections 8 and 9



RECOMMENDATIONS TO MANAGEMENT FORM

Title: RECOMMENDATIONS TO MANAGEMENT FORM		Issue Date: September 2016
Project Safety Program Section: 14.8		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

RECOMMENDATIONS TO MANAGEMENT FORM

JHSC Meeting No. _____ Facility/Site: _____ Date : _____

Re: _____

REASON FOR RECOMMENDATION: (please provide a description of occurrence, violation, etc.)

REQUIREMENTS FOR IMPLEMENTATION: (please provide any supporting information or documentation for your suggestions)

DATE PRESENTED TO MANAGEMENT: _____

RECOMMENDATION PRESENTED TO: _____

EXPECTED DATE OF RESPONSE: _____



MANAGEMENT RESPONSE TO RECOMMENDATIONS

Title: MANAGEMENT RESPONSE TO RECOMMENDATIONS		Issue Date: September 2016
Project Safety Program Section: 14.9		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

MANAGEMENT RESPONSE TO RECOMMENDATIONS

1.0 PURPOSE

The purpose of recommendations is to ensure that workplace health and safety hazards are identified and eliminated.

2.0 SCOPE

This policy applies to Management and the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

3.0 DEFINITIONS

No definitions are required.

4.0 STANDARDS / PROCEDURES

Any Worker Health and Safety Representative(s) / Joint Health and Safety Committee will be allowed to make written recommendations to Management. The *Recommendation to Management Form* will be used for making recommendation to Management. The Worker Health and Safety Representative(s) / Joint Health and Safety Committee will complete the form and present it to senior Management.

The recommendation will be reviewed by senior Management. Management then has the obligation to respond to the recommendation using the *Management Response to Recommendations Form* within 21 days.

Management will attempt to respond to written recommendations as soon as possible and no later than 21 days from the day that the recommendation was provided to Management.

If Management accepts the recommendation(s), a timetable for action must be outlined and provided to the Worker Health and Safety Representative(s) / Joint Health and Safety Committee. The response must include actions taken and actions to be taken.

If Management decides against acting on the recommendation, reasons must be given in writing, on the *Management Response to Recommendations* form.

5.0 ROLES / RESPONSIBILITIES

Joint Health and Safety Committee or Worker Health and Safety Representative:

All recommendations must be provided to Management.

All responses to recommendations must be returned back to the Worker Health and Safety Representative(s) / Joint Health and Safety Committee who made the recommendation (within 21 Days), utilizing the Management Response to Recommendations Form.

6.0 COMMUNICATION

Responses to recommendations shall be posted on the safety bulletin board.

7.0 TRAINING

Management will receive training on this procedure.

8.0 EVALUATION / REVIEW

This procedure will be reviewed annually by management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Management response to JHSC recommendation Form

All recommendations made to Management will be retained on file for a period of up to 5 years.

The copies will be sent to head office and the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

10.0 REFERENCE MATERIALS

I.Ontario Legislation – Occupational Health and Safety Act sections 8 and 9



MANAGEMENT RESPONSE TO RECOMMENDATIONS FORM

Title: MANAGEMENT RESPONSE TO RECOMMENDATIONS FORM		Issue Date: September 2016
Project Safety Program Section: 14.10		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

MANAGEMENT RESPONSE TO RECOMMENDATION FORM

JHSC Meeting No. _____ Facility/Site: _____ Date : _____

Re: _____

WORKER H&S REPRESENTATIVE / COMMITTEE MEMBER RECOMMENDATION:

DATE RECOMMENDATION WAS RECEIVED: _____

MANAGEMENT AGREES WITH THE RECOMMENDATION: YES [] NO []

NOTE: If management agrees with the recommendation(s), complete the next section of this form, however, if there is a disagreement with or an alternative to the recommendation(s), please provide reasons or explanation.

IMPLEMENTATION TIMETABLE FOR RECOMMENDATION:

DISAGREEMENT WITH / OR ALTERNATIVE TO RECOMMENDATION:

DATE RETURNED: _____

Management Representative

Worker Representative

Title: HEALTH & SAFETY ORIENTATION		Issue Date: September 2016
Project Safety Program Section: 15.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

HEALTH & SAFETY ORIENTATION

1.0 PURPOSE

The purpose of this Procedure is to identify and list the requirements of health and safety orientation.

2.0 SCOPE

This Procedure applies to all Employees.

3.0 DEFINITIONS

N/A - No terms require further explanation.

4.0 STANDARDS / PROCEDURES

All Employees, regardless of the level in the organization, must receive health and safety orientation, this applies to:

- Supervisors,
- Newly hired Employees,
- Employees returning from an extended absence,
- Employees hired on a contract basis,
- Student Employees (including Co-op and summer), and
- Casual or part time Employees (including Supplied Labour).

Components of orientation will include, but are not limited to:

- Health and Safety Policy;
- Workplace Violence and Harassment Policies;
- Employee Responsibilities (company-specific and under the *Occupational Health and Safety Act*);
- Completion of the Ontario's Worker's Health and Safety Awareness Training;
- Employee rights (to know, participate, and refuse unsafe work);
- Reporting injury and illness;
- Reporting hazards;
- Emergency plans / procedures;
- Personal Protective Equipment;
- Early and Safe Return to Work; and
- Worker Health and Safety Representative(s) / Joint Health and Safety Committee, including who they are, how to contact them.

Orientation may include the use of the following resources/ tools:

- Videos (may include),
- New on the job (ISO training),
- Electrical safety in the workplace,
- WHMIS,
- Confined space safety,
- Ladder safety,
- Working at Heights training,
- Occupational Health and Safety Act,
- Health and Safety policy, and
- Distribution of PPE.

During the Orientation:

- Give the Worker a tour of the facility or worksite identifying gathering areas, first aid stations, spill kits, washroom / break facilities, etc.;
- Introduce the Supervisor to the Worker and explain their own commitment to Health and Safety on the work site;
- Have the Worker sign the Training Record;
- Advise the Worker to request a pre-job hazard review from his / her Supervisor when leaving the orientation and moving to the next step; and
- Ensure the Worker has signed the training attendance record.

5.0 ROLES / RESPONSIBILITIES

Management:

- Develop appropriate orientation material; and
- Coordinate and provide trainers and resources to carry out orientation.
- Maintain all records of Health and Safety Awareness Training provided to workers and supervisors

Supervisors:

- Review job tasks, safe work procedures, and hazards / controls with Workers; and
- Verify that Workers have the required training knowledge and experience before starting work.
- Complete the Ontario Supervisor's Health and Safety Awareness Training within one week of performing supervisor duties.

Workers:

- Participate and attend orientation as required.

6.0 COMMUNICATION

This Procedure will be communicated to Supervisors, as well as individuals assigned to deliver orientation.

7.0 TRAINING

All Employees will receive orientation training upon hire. Updates will be communicated as changes occur.

8.0 EVALUATION / REVIEW

The effectiveness of this procedure and the contents of orientation will be reviewed annually by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

- I. Orientation Materials
- II. Ontario Legislation – Occupational Health and Safety Act
- III. Health and Safety Program



ORIENTATION CHECKLIST

Title: OREINTATION CHECKLIST		Issue Date: September 2016
Project Safety Program Section: 15.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

ORIENTATION CHECKLIST

Employee:	Supervisor:	Date:	
TOPIC	Initial upon Review	TOPIC	Initial upon Review
Health and Safety Policy		Workplace Violence & Harassment Policy	
Occupational Health and Safety Act and Regulations		Break Areas and Washrooms	
Worker's Rights and Responsibilities		Discipline Policy	
Housekeeping		Smoking in the Workplace	
Hazard Reporting		Names of Worker H&S Rep / JHSC Members and Work Locations	
Location of MSDS's		Injury and Illness Reporting – Location of First Aid Kit, Worker Injury Kit	
Emergency Response – Gathering Areas, Emergency Communication Mechanisms, Fires, Spills, Gas Leaks, Power Failures, Tornados, etc.		Personal Protective Equipment - Hard Hats, Safety Footwear, Safety Eyewear, Hearing Protection, etc.	
Location of emergency equipment; first aid, fire extinguishers, eye wash / shower, etc.		Fall Protection/Working at Heights – Guardrails, Fall Arrest, Travel Restraint	
Safe Work Areas - Requirements for Signage and Barricades		Ladder Scaffold / Safety	
Lock Out Policy and Procedure		Arc Flash Protection / Working Live	
Early & Safety Return to Work		Vehicle Use	

I have been advised of the requirements listed above and fully understand my health and safety responsibilities and accountabilities.

Employee:		
	(Please Print Name)	(Signature)
Facilitator		
	(Please Print Name)	(Signature)

Title: WHMIS		Issue Date: September 2016
Project Safety Program Section: 16.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

1.0 PURPOSE

The Workplace Hazardous Materials Information System (WHMIS) Regulation was established under the Occupational Health and Safety Act to give Employers, Employees and the public information about hazardous materials used in the workplace.

This policy is intended to ensure, at a minimum, compliance with the requirements of the WHMIS regulation (R.R.O. 1990, Reg. 860). It applies at all **Saturn Power Inc.** locations where WHMIS-controlled products are used and / or stored.

2.0 SCOPE

This policy applies to all Company Employees, Contractors, Visitors and Delivery Persons.

3.0 DEFINITIONS

Controlled Product: A substance meeting the criteria of one or more of the hazard classes (i.e. compressed gas, flammable and combustible material, oxidizing material, poisonous and infectious material, corrosive, dangerously reactive material) set out in the Controlled Products Regulation under the federal Hazardous Products Act.

Safety Data Sheet (SDS): An information bulletin summarizing relevant technical information (as required by the federal Controlled Products Regulation or other legislation) on a substance, including a list of hazardous ingredients, potential hazards, safe handling procedures and first aid measures.

Supplier Label: A WHMIS label attached to the controlled product prior to shipment by the manufacturer or distributor and meeting the requirements of the federal Controlled Products Regulation, under the Hazardous Products Act.

Workplace Label: A label produced in the workplace and attached to a controlled product when it is dispensed into containers other than the original supplier container or when a supplier label becomes illegible. A workplace label contains a product identifier, information on the safe handling of the material and a reference to the material safety data sheet.

Generic Training: Training provided to Employees that includes generic information as set out in the accompanying training standard including the information contained on labels and material safety data sheets, occupational health and basic concepts of control.

Product-Specific Training: Training provided to employees that includes specific information as set out in the accompanying training standard including specific work

procedures, spill procedures, storage procedures, emergency procedures, personal protective equipment and first aid.

4.0 STANDARDS / PROCEDURES

Some hazardous substances may be exempt from certain WHMIS requirements such as labels and material safety data sheets. These substances are generally regulated by other legislation. Regardless of these exemptions, Employees required to use these substances shall receive training on their hazards and in the safe use, handling and storage procedures. Safety Data Sheets (SDS) shall also be kept at the workplace and provided to the Joint Health and Safety Committee / Worker Health and Safety Representative.

5.0 ROLES / RESPONSIBILITIES

Supervisor:

- Must be knowledgeable about the hazards and safe operating procedures associated with hazardous materials, the education and training requirements for working with hazardous materials and the requirements of this program;
- Advise Employees of the hazards associated with the work environment and the materials contained within that environment;
- Provide written procedures to Employees where required by the regulation or where the Supervisor believes it to be reasonable for the protection of the Employee;
- Identify equipment, protective devices and measures to be taken to enable the Employees to work safely with hazardous materials;
- Ensure that Employees work in compliance with all applicable legislation and procedures, using the required equipment and protective measures identified by the Supervisor or by the *Occupational Health and Safety Act and Regulations*; and,
- Make sure all hazardous materials in the workplace are labeled appropriately.

Employee:

- Must be familiar with the hazards associated with hazardous materials;
- Work in accordance with all applicable legislation and safe operating procedures for hazardous materials;
- Apply their WHMIS training to work safely;
- Use the appropriate equipment, protective devices and measures provided for working with hazardous materials;
- Promptly report any known or suspected chemical exposure incidents, unsafe conditions or unsafe procedures to his / her Supervisor; and,
- Place WHMIS workplace labels on small containers decanted from bulk containers.

Worker Health and Safety Representative / Joint Health and Safety Committee:

- As part of their monthly physical inspections, randomly check to verify if WHMIS-controlled products are appropriately labelled and that material safety data sheets are available and current; and,
- Once a year, in consultation with a Management Representative(s), review the WHMIS training program and determine the Workers' familiarity with the information.

If deficiencies are identified, the Worker Health and Safety Representative(s) / Joint Health and Safety Committee should recommend retraining Employees and / or amending the training program.

6.0 COMMUNICATION

This procedure is communicated to all Supervisors and Employees through:

- Staff meetings, one on one meeting or email;
- Orientation of new Employees; and,
- Coaching of Employees found to have contravened this procedure.

7.0 TRAINING

All Employees will receive WHMIS training. Affected Employees who use, store, transport, or dispense controlled product will also receive specific training.

All Employees will receive a refresher quiz and / or training once a year.

8.0 EVALUATION / REVIEW

Evaluation of this procedure and the hazard report form will be done by Management on an annual basis in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

I.Ontario Regulation 860 – Workplace Hazardous Materials Information System



Exploding bomb
(for explosion or reactivity hazards)



Corrosion
(for corrosive damage to metals as well as skin, eyes)



Flame
(for fire hazards)



Environment
(may cause damage to the aquatic environment)



Flame over circle
(for oxidizing hazards)



Exclamation mark
(may cause less serious health effects or damage the ozone layer)



Gas cylinder
(for gases under pressure)



Health hazard
(may cause or suspected of causing serious health effects)



Biohazardous infectious materials*
(for organisms or toxins that can cause diseases in people or animals)



Skull and Crossbones
(can cause death or toxicity with short exposure to small amounts)

* Biohazardous infectious materials: an extra pictogram has been adopted in Canada to cover the class of risks related to biohazardous infectious materials.

Title: TRAINING NEEDS REVIEW		Issue Date: September 2016
Project Safety Program Section: 17.1		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

TRAINING NEEDS REVIEW

1.0 PURPOSE

This procedure outlines the training expectation for all health and safety related training. It also includes objectives to assist in improving the Health and Safety Program.

2.0 SCOPE

This procedure applies to all Employees and Contractors.

3.0 DEFINITIONS

N/A - No definitions require further explanation.

4.0 STANDARDS / PROCEDURES

Items to be reviewed / considered during the training needs review may include:

- Any legislative updates;
- Application to each occupation (job or task);
- Review new or modified equipment and / or processes;
- Review Employee-training records, including new hires, transferred or promoted Employees; and,
- Review the hazard analysis and applicable MSDS, where required.

Training Methods:

- Internally by a qualified person; or
- Externally by a qualified 3rd party person or company.

Timetable:

- All Employees will receive the generic training by the end of the first quarter each year; and
- Those Employees who require workplace specific training will:
 - (1) Receive training directly after their initial training (if not possible then refer to sentence below); or
 - (2) No later than one month after the generic training.

Evaluation of Training Sessions / Courses:

The *Participant Evaluation Form* will be used at the end of each training session / course to gauge the quality, relevance, and accuracy. This allows for continuous improvement of all training provided.

5.0 ROLES / RESPONSIBILITIES

Management:

- Schedule and conduct an annual training needs review as per the standard indicated in this procedure;
- Provide, collect and review the *Participant Evaluation Forms* for each training session / course;
- Make recommendations for changes or additions to training;
- Act as a resource to schedule training as may be required;
- Develop and maintain the *Training Matrix*; and,
- Provide resources and support to conduct the *Training Needs Review* and to implement the *Training Matrix*.

6.0 COMMUNICATION

This procedure will be communicated to affected Management during management meetings, one-on-one, email, or other formats.

7.0 TRAINING

N/A – No formal training is required for this procedure.

8.0 EVALUATION / REVIEW

This procedure and its effectiveness will be reviewed annually by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Participant Evaluation Form

10.0 REFERENCE MATERIALS

N/A - No references are required.



TRAINING RECORD

Title: TRAINING RECORD		Issue Date: September 2016
Project Safety Program Section: 17.2		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

Title of Training Program:	
Date of Training:	
Certificate or Card Issued: Yes or No	
Instructors Name:	
Location of Training:	
Print Name	Signature
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	



PARTICIPANT EVALUATION FORM

Title: PARTICIPANT EVALUATION FORM		Issue Date: September 2016
Project Safety Program Section: 17.3		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

Course Name: _____ Date: _____
 Location: _____ Instructor Name: _____

OBJECTIVES

1. The learning objectives for the course and lessons were clearly explained in advance.

Strongly Disagree 1 2 3 4 5 Strongly Agree

2. The goals and objectives of this course were useful for my learning needs.

Strongly Disagree 1 2 3 4 5 Strongly Agree

CONTENT

3. The course was well organized.

Strongly Disagree 1 2 3 4 5 Strongly Agree

4. The course content was relevant to my job.

Strongly Disagree 1 2 3 4 5 Strongly Agree

5. The course content matched the course objectives.

Strongly Disagree 1 2 3 4 5 Strongly Agree

COURSE MATERIALS

6. To the best of my knowledge, the training materials appear up-to-date and accurate.

Strongly Disagree 1 2 3 4 5 Strongly Agree

7. The training materials relate to the learning objectives.

Strongly Disagree 1 2 3 4 5 Strongly Agree

8. Resources from the course will be helpful as I work at my job.

Strongly Disagree 1 2 3 4 5 Strongly Agree

PRESENTATION

9. The presentation was clear and understandable.

Strongly Disagree 1 2 3 4 5 Strongly Agree

10. Group discussions or exercises were valuable to my learning.

Strongly Disagree 1 2 3 4 5 Strongly Agree



PARTICIPANT EVALUATION FORM

INSTRUCTOR

12. The instructor appeared adequately prepared.

Strongly Disagree 1 2 3 4 5 Strongly Agree

13. The instructor demonstrated a level of knowledge adequate to teach the material.

Strongly Disagree 1 2 3 4 5 Strongly Agree

14. The instructor used clear and relevant examples to explain ideas.

Strongly Disagree 1 2 3 4 5 Strongly Agree

15. The instructor answered questions satisfactorily.

Strongly Disagree 1 2 3 4 5 Strongly Agree

16. The instructor encouraged participation.

Strongly Disagree 1 2 3 4 5 Strongly Agree

17. The instructor demonstrated familiarity with the instructional technology in use.

Strongly Disagree 1 2 3 4 5 Strongly Agree

18. Comments on the instructor:

GENERAL

19. The course is appropriate for someone with my level of experience.

Strongly Disagree 1 2 3 4 5 Strongly Agree

20. The knowledge and skills I developed in this course will contribute to my health & safety performance.

Strongly Disagree 1 2 3 4 5 Strongly Agree

21. I would recommend this course to my peers.

Strongly Disagree 1 2 3 4 5 Strongly Agree

22. Overall, this is a good course.

Strongly Disagree 1 2 3 4 5 Strongly Agree

23. Comments or recommendations to help improve Health & Safety training:



FIRST AID LOG

Title: FIRST AID LOG		Issue Date: September 2016
Project Safety Program Section: 18.1		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

This form or the log book must be completed by the First Aider and kept available.

Name of Injured Person	
Date of Injury (D/M/Y)	
Personal / Work related (please circle)	
Time of Injury	
Name of Witness	
Name of First Aider	
Description of how incident happened	
Description of how injury could have been prevented:	

Name of Injured Person	
Date of Injury (D/M/Y)	
Personal / Work related (please circle)	
Time of Injury	
Name of Witness	
Name of First Aider	
Description of how incident happened	
Description of how injury could have been prevented:	

Name of Injured Person	
Date of Injury (D/M/Y)	
Personal / Work related (please circle)	
Time of Injury	
Name of Witness	
Name of First Aider	
Description of how incident happened	
Description of how injury could have been prevented:	

Name of Injured Person	
Date of Injury (D/M/Y)	
Personal / Work related (please circle)	
Time of Injury	
Name of Witness	
Name of First Aider	
Description of how incident happened	
Description of how injury could have been prevented:	



TRANSPORTATION OF AN INJURED WORKER

Title: TRANSPORTATION OF AN INJURED WORKER	Issue Date: September 2016
Project Safety Program Section: 18.2	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

TRANSPORTATION OF AN INJURED WORKER

Saturn Power Inc. will provide transportation to the hospital, doctor's office or Worker's home when necessary, following an injury or illness.

The preferred method of transportation, if required, is an ambulance. Should this method of transportation not be appropriate then the Company will provide alternate transportation such as a Taxicab.

The injured Worker will be accompanied by the first aid attendant or designate. **Saturn Power Inc.** will provide transportation to and from the hospital for the injured Worker and the attending first aider or designate.

Should the Employee refuse the transportation, the company will attempt to:

- 1) Identify any other transportation methods that the Worker would prefer.
- 2) Reiterate the importance of accepting the transportation to the hospital, doctor's office or Workers home.
- 3) Call for an ambulance – the paramedic will require the injured Worker to sign a waiver if they still refuse to go for health care.
- 4) reiterate that the Employee will not be allowed to continue work until medical clearance is provided.

Responsibilities of the individual travelling with the injured Worker:

- 1) Continue to administer first aid, if required.
- 2) Ensure an injury package is taken, containing the WSIB Functional Abilities Form, Letter to the Medical Provider, Employee Report of Injury and return to work case plan (any Material Safety Data Sheets (if necessary)) to the medical facility.
- 3) Maintain contact with the Company providing updates when the Worker has reached their destination (hospital, doctor's office or the worker's home).

Title: FIRST AID REQUIREMENTS		Issue Date: September 2016
Project Safety Program Section: 18.3		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

FIRST AID REQUIREMENTS

Provisions for first aid are a legislative requirement of the *Workplace Safety Insurance Act* (WSIA).

Through prompt treatment by first aid trained personnel, pain and suffering endured by injured workers may be minimized and where required, injured workers will be sent for urgent medical care.

REQUIREMENTS

Availability of First Aid Kits

First aid kits / stations are available in the office. As required by the WSIB Regulation 1101 First Aid Requirements of Section 1 subsection (3) that states, "First Aid Stations shall be located as to be easily accessible for the prompt treatment of any worker at all times when work is in progress."

First Aid Treatment Log

The first aid log will be maintained by the first aid attendant(s) for each first aid kit to document first aid treatment or advice provided by the first aid attendants in their work areas.

The first aid log must be completed by the attendant every time an employee receives first aid treatment, regardless of how minor the injury. All work related injuries or illnesses shall be documented. The first aid log must be completed to describe the following information regarding the incident:

- The date and time of the injury;
- The name of the injured employee;
- A description of the injury detailing the nature and exact location (part of the body) of the injury;
- The nature of the treatment provided; and,
- The name of the first aid Attendant providing treatment.

First Aid Certificates Posted

First aid / CPR training certificates for each of the designated first aid attendants will be conspicuously posted with the respective first aid kits. Workers certified in first aid shall be readily available to assist injured workers. A listing of the names and work location of employees that are first aid / CPR qualified will also be posted on the health and safety bulletin board.

First Aid Kit Inspection and Records

First aid kits will be inspected on a monthly basis by the designated first aid attendants for the work area.

The first aid attendant will examine the first aid kit in their work area and document the results of their inspection on the first aid inspection checklist. Any deficiencies or missing items will be documented so that additional supplies can be requisitioned by Management or a Supervisor.

FIRST AID REQUIREMENTS: 0-5 WORKERS (WSIB REGULATION 1101, SECTION 8)

Regulation	Workers per Shift	Required Attendant / Training	Required FA Station Supplies
Sec. 8	1-5 (in any one shift)	At all times, First Aid Station must have 1 person trained in Emergency First Aid & CPR who works in the immediate vicinity of the station.	A current edition of a standard St. John's Ambulance First Aid Manual
			<i>First Aid Kit containing at a minimum:</i>
			1 card of safety pins
			12 adhesive dressings (individually wrapped)
			4 sterile gauze pads, 3 inches square
			2 rolls of gauze bandage, 2 inches wide
			2 field dressings, 4 inches square or 2 four-inch sterile bandage compresses
1 triangular bandage			

FIRST AID REQUIREMENTS: 6-15 WORKERS (WSIB REGULATION 1101, SECTION 9)

Regulation	Workers per Shift	Required Attendant / Training	Required FA Station Supplies
Sec. 9	6-15 (in any one shift)	At all times the First Aid Station must have 1 person trained in Standard First Aid & CPR who works in the immediate vicinity of the station.	A current edition of a standard St. John's Ambulance First Aid Manual
			<i>First Aid Kit containing at a minimum:</i>
			1 card of safety pins
			24 adhesive dressings (individually wrapped)
			12 sterile gauze pads, 3 inches square
			4 rolls of gauze bandage, 2 inches wide
			4 rolls of 4-inch gauze bandage
			4 sterile surgical pads suitable for pressure dressings (individually wrapped)
			6 triangular bandages
			2 rolls of splint padding
1 roll-up splint			

FIRST AID REQUIREMENTS: 16-199 WORKERS (WSIB REGULATION 1101, SECTION 10)

Regulation	Workers per Shift	Required Attendant / Training	Required FA Station Supplies
Sec. 10	16-199 (in any one shift)	At all times, the First Aid Station must have 1 person trained in Standard First Aid & CPR who works in the immediate vicinity of the station.	A current edition of a standard St. John's Ambulance First Aid Manual
			1 stretcher
			2 blankets
			<i>First Aid Kit containing at a minimum:</i>
			24 safety pins
			1 basin (preferably stainless steel)
			48 adhesive dressings (individually wrapped)
			2 rolls of adhesive tape, 1 inch wide
			12 rolls of 1-inch gauze bandage
			48 sterile gauze pads, 3 inches square
			8 rolls of gauze bandage, 2 inches wide
			8 rolls of 4-inch gauze bandage
			6 sterile surgical pads suitable for pressure dressings (individually wrapped)
			12 triangular bandages
2 rolls of splint padding			
splints of assorted sizes			

FIRST AID REQUIREMENTS: 200+ WORKERS (WSIB REGULATION 1101, SECTION 11)

Regulation	Workers per Shift	Required Attendant / Training	Required FA Room Instruments/Furnishings	Required FA Room Supplies
Sec. 11	200 or more (in any one shift)	At all times, the First Aid Room must have 1 person trained in Standard First Aid & CPR.		A current edition of a standard St. John's Ambulance First Aid Manual
			<i>Instruments</i>	<i>First Aid Kit containing at a minimum:</i>
			dressing scissors	1 card of safety pins
			dressing forceps	24 adhesive dressings (individually wrapped)
			safety pins	12 sterile gauze pads, 3 inches square
			graduated medicine glass	4 rolls of gauze bandage, 2 inches wide
			tongue depressors	4 rolls of 4-inch gauze bandage
		applicators, cotton-tipped	4 sterile surgical pads suitable for pressure dressings (individually wrapped)	
			<i>Furnishings</i>	
		hot and cold running water	6 triangular bandages	
		3 washbasins (preferably stainless steel)	2 rolls of splint padding	
		1 instrument sterilizer	1 roll-up splint	
		1 cabinet for surgical dressings		
		1 enamel foot bath		
		1 sanitary disposal receptacle with lid		
		1 ouch curtained off or in a separate cubicle		
		1 stretcher		
2 blankets				

Title: INCIDENT INVESTIGATION		Issue Date: September 2016
Project Safety Program Section: 19.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

INCIDENT INVESTIGATION

1.0 PURPOSE

To ensure that all applicable work related injuries, illnesses, and incidents are investigated, documented, analyzed, and reviewed in a timely manner so as to prevent the reoccurrence of future unplanned events.

2.0 SCOPE

This procedure applies to all Employees for the following categories:

- Fatalities
- Critical injuries
- Lost time injuries
- All personal injury accidents, involving health care but not first aid
- Occupational Illness
- Fires and explosions
- Environmental releases and / or chemical spills which require the Ministry of Environment to be contacted
- Near miss incidents (including property damage as may be determined)

3.0 DEFINITIONS

First Aid - Includes but is not limited to: cleaning minor cuts, scrapes or scratches; treating a minor burn, applying bandages and / or dressings, cold compress, cold pack, ice bag, splint, changing a bandage or a dressing after a follow-up observation visit and any follow-up for observation purposes only.

Health Care - An injury that results in attention received from a recognized health care provider but that does not result in time away from scheduled work nor a wage loss.

Near Miss - An event that under different circumstances could have resulted in physical harm to an individual, damage to the environment, equipment, property and / or material.

Fatality - An injury that results in the loss of life.

Critical Injury - A critical injury means an injury of a serious nature that:

- Places life in jeopardy;
- Produces unconsciousness;
- Results in substantial loss of blood;

- Involves the fracture of an arm or a leg but not a finger or toe;
- Involves the amputation of a leg, arm, hand or foot but not a finger or toe;
- Consists of burns to a major portion of the body; or,
- Causes the loss of sight in an eye.

Lost Time Injury - A work related injury that results in the injured Employee missing scheduled time from work resulting in a wage loss.

Property Damage - An event where contact is made between two objects resulting in alteration to one or both of the objects.

Occupational Illness - A condition that results from exposure in a workplace to a physical, chemical or biological agent to the extent that normal physiological mechanisms are affected and the health of the Worker is impaired.

Environmental Release - An accidental discharge of a physical, biological or chemical substance release into the workplace and / or community.

Fire/Explosion - An event where undesired combustion occurs.

4.0 STANDARDS / PROCEDURES

The investigating Supervisor, or their designate, will ensure they bring an Investigation Kit which should include:

- Digital camera,
- Tape measure,
- Clipboard, pad of paper, pens, pencils,
- DO NOT ENTER / CAUTION tape, and
- Investigation procedure and investigation forms.

The investigating Supervisor will perform the following task during the investigation:

- Visit the scene, gather and record evidence;
- Conduct interviews, and interview all witnesses separately. Ask open-ended questions, that don't allow a Yes / No answer. Use silence to elicit more information. Ask for opinions, and then ask why they think that way;
- Evaluate evidence and draw conclusions.
- Interview outside experts, if applicable (for example: Suppliers, Equipment Designers);
- Ensure the interviews are conducted as soon as reasonably possible;
- The interviews should be conducted in a quiet place (for example a Supervisor's office), one on one;
- The interview must be documented (see *Witness Statement Form*);
- Make observations, and use the scene assessment form to document the scene (site, equipment, material);
- Use photographs / sketches / drawings etc.;
- A written narrative (summary) of what happened, include witness statements;

- Identify contributing factors;
 - Factors to consider are People, Equipment and Material, Environment and Process and including what role the factor played.
- Use the *IHSA Incident Report Form* to identify contributing factors through a review of items such as maintenance records, drawings, training records, time of day, length of service in this - work area, etc. Consideration is given to lack of safety equipment enforcement and / or the need for safety equipment; and,
- Copies of the investigation report are sent (when investigation is completed) to Management.

Recommendations for Corrective Action:

- Responsibility must be assigned to implement the recommendations.
- The actions must be recorded on or attached to the investigation report form, and must include:
 - What has been done;
 - Who has completed the actions; and,
 - When the actions were completed.

5.0 ROLES / RESPONSIBILITIES

Supervisor:

The IAPA log book must be completed by the First Aider and kept available.

Initial Response:

- In the case of personal injury, the Supervisor ensures that the injured Employee(s) receives appropriate first aid or health care;
- Always ensure the Worker receives and completes the *Employee's Kit for Reporting Work Related Injuries*; and,
- Gather basic details of the event – who, what, where, when, how.

Investigation:

- Should the injury involve a critical injury, the accident scene must be cordoned off and protected to assure it is not disturbed, except for the purpose of:
 - Saving life or relieving human suffering; or
 - Maintaining an essential public utility service or public transportation system; or,
 - Preventing unnecessary damage to equipment or other property; or
 - Until permission to do so has been given by an (MOL) Inspector.
- The Supervisor will investigate the injury / incident and complete the *IHSA Incident Report Form* **within 24 hours** of the injury / incident, **or as soon as practicable**.
- The Supervisor will contact the Worker Health and Safety Representative(s) / Joint Health and Safety Committee as required, to help investigate the injury / incident.
- The Supervisor notifies appropriate personnel, as soon as possible:
 - Internal – by contacting Senior Management.
 - External – see communications section.

- Observes reporting deadlines for external agencies.
Note: The Supervisor can request assistance from other Supervisors, or any other source that may be available. They are also responsible for securing the scene of the injury / incident.

Worker Health and Safety Representative(s) / Joint Health and Safety Committee:

- The Worker Health and Safety Representative(s) / Joint Health and Safety Committee *should* be involved in the investigation of all injuries, illnesses and incidents. This is at the discretion of the investigating Supervisor unless it is a fatal or critical injury in which case;
 - The Worker Health and Safety Representative(s) / Joint Health and Safety Committee *must* be involved in the investigation of a fatality or critical injury.
- The Worker Health and Safety Representative(s) / Joint Health and Safety Committee and the Supervisor together conduct the investigation and assist in completing the report; and,
- Both the Supervisor and the Worker Health and Safety Representative(s) / Joint Health and Safety Committee sign the injury/incident investigation report, upon completion.

Worker:

- Immediately report all work related injuries, illnesses and incidents to Management and / or Supervisor; and,
- Cooperate and not interfere with investigations being conducted by internal and external personnel.

6.0 COMMUNICATION

The completed Investigation Report, with Action Plan, if appropriate, will be available in:

- Management File: for Management reference and potential / possible use at meetings (Management, Worker Health and Safety Representative(s) / Joint Health and Safety Committee etc.) for period of 3 years.
- Investigations will be recorded in the Incident Summary Spreadsheet and / or Trends Analysis reports.

Notification Requirements (Management or designate):

Critical and Fatal Injuries: (under Critical injury regulation) require the Employer to contact the Ministry of Labour immediately and a written investigation report must be completed and sent **within 48 hours**. Refer to the *Ministry of Labour Reporting Procedure* for more details.

Fire and Explosion: (Ministry of Labour) (Immediately, if it results in an injury).

Chemical Releases: (Ministry of Environment) (Immediately).

Ministry of Labour: 1-877-202-0008

Ministry of Environment: 1-800-268-6060

7.0 TRAINING

The Worker Health and Safety Representative(s) / Joint Health and Safety Committee, Management and all Supervisors who are required to conduct investigations will receive formal investigation training.

This training will occur within the first month of employment, or as soon as practicable.

8.0 EVALUATION / REVIEW

This procedure will be reviewed by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee on an annual basis or if an investigation identifies revisions are required.

9.0 FORMS / RECORDS

IHSA Incident Report Form

Witness Statement Form

Scene Description Form

NOTE: All original investigation form(s) and supporting documentation will be sent to Management immediately upon completion.

NOTE: All records will be kept for a period of 3 years

10.0 REFERENCE MATERIALS

- I. Ontario Legislation – Occupational Health and Safety Act sections 51 and 52
- II. Ontario Regulation 834/90 – Critical Injury – Definition
- III. Critical Injury Reporting Procedure



SCENE DESCRIPTION FORM

Title: SCENE DESCRIPTION FORM		Issue Date: September 2016
Project Safety Program Section: 19.4		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

SCENE DESCRIPTION FORM

Injury / Incident Date: _____ Location: _____

The following have been used to document the scene:

- Photographs Narrative Sketch Video



EARLY & SAFE RETURN TO WORK

Title: EARLY & SAFE RETURN TO WORK	Issue Date: September 2016
Project Safety Program Section: 20.1	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

EARLY & SAFE RETURN TO WORK

1.0 PURPOSE

Saturn Power Inc. will make every reasonable effort to help an injured Employee stay at work or return to work (RTW). This Early and Safe Return to Work (ESRTW) program will help ensure that as a Company we are committed and able to supply modified / accommodated duties to all Employees, where possible, and without undue hardship.

2.0 SCOPE

Saturn Power Inc. has implemented a modified duty program. The program will assist in promoting a timely return to work of Employees.

This procedure applies to all Employees with an occupational injury, illness or disability which results in absence from work, loss of wages, or requires accommodation.

3.0 DEFINITIONS

Modified Duty - The modification of an Employee's position (Work Hardening or Transitional Work) that allows for the Employee to carry out the work assigned with-in the Employees' capabilities. This might include, but is not limited to, changing of work tasks (transitional work, hours of work (sometimes referred to as work hardening)).

4.0 STANDARDS / PROCEDURES

Disclosure of Information:

In order to facilitate an effective and appropriate Return to Work Case Plan for an injured Worker the Supervisor and / or Management will be allowed access to:

- Restrictions / Limitations, and,
- Functional abilities (cognitive, environmental and physical).

Principles of Modified Duty:

Saturn Power Inc. recognizes that a temporarily disabled Employee can and should be performing meaningful and productive work. The Early and Safe Return to Work Procedure (ESRTW) gives structure and organization to this principal and recognizes the Employers, and Employee's joint responsibility to participate in the rehabilitation of the Employee.

Specifically:

- The work must be productive and the result must have value;
- The work provided must not aggravate the Employee's condition;
- The Employee's condition must not constitute an additional hazard to the Employee or fellow Employee(s) while performing the duties assigned;
- The duration of the modified duty will be determined at the commencement of the program, wherever possible;
- Prior to starting the modified duty the Employee and Employer will review and sign an Offer of Modified Duties with respect to the hours of work, the reporting requirements and the nature and duration of the modified duty position;
- The Functional Abilities of the Employee will be reviewed for the modified duty; and,
- The Employee is required to supply medical progress reports every two weeks or as often as determined by Management.

General Procedure:

- All Employees are required to report any occupational injury / illness to their Supervisor immediately, or as soon as reasonable – as per the *Injury, Illness and Incident Reporting Procedure*; and,
- Upon learning of a work-related injury / illness the Employee's Supervisor will follow the Injury, Illness and Incident Reporting procedure.

Communication Protocol:

- Communication with the Injured Worker will be documented on the *Contact Log* by Management;
- Communication is to be conducted on a regular basis, while the Employee is off work (at least once a week or as frequent as may be required). This will be determined on a case by case basis; and,
- When an Employee is on modified duties, communication should be daily.

5.0 ROLES / RESPONSIBILITIES

Management:

- Develop in consultation with the Supervisor, the *Modified Duties Offer Letter* and the *Return to Work Case Plan*;
- To provide a fair and consistent rehabilitation policy for injured Employees disabled due to illness or injury;
- To provide a meaningful Employment for temporarily disabled Employees and promote the *ESRTW Procedure*;
- To ensure that there is no conflict with the collective agreements (where applicable);
- Determine and maintain medical monitoring and treatment with the use of the Functional Abilities Form. The frequency of medical contacts can be determined on a case by case basis;
- To facilitate communication between the department, the Employee, and the treating agency of the Employee;

- To assist in the modification of the workplace;
- To explain the objectives and requirements of the ESRTW program;
- To oversee the progress of the Employees modified duties; and,
- To liaise with the Employees treating agency and other agencies, when required.

Supervisor:

- To advise the Employee of the availability of work hardening or transitional work;
- To assist in the creation the *Modified Duties Offer Letter* and *Return to Work Case Plan*;
- Provide the Employee with the *Employee's Kit for Reporting Work Related Injuries* as well as *Modified Work Offer Letter* and *Return to Work Case Plan*;
- To maintain communication with the Employee on modified duties and monitor their progress and the effectiveness, on an individual case by case basis;
- Submit weekly progress reports to Management;
- To ensure the Injured Worker obtains and submits page 3 of Form 8 (this page provides functional abilities and return to work information) following the initial visit with the Health Care Professional;
- To ensure the worker obtains and submit a Functional Abilities Form from the Health Care Professional, if required after a subsequent visit;
- To ensure the Employee signs the *Acknowledgement Form* in receipt of the *Employee's Kit for Reporting Work Related Injuries*, and their understanding of their responsibilities;
- Document and forward any communication and / or concerns with the return to work plan Management; and,
- Monitor the Workers compliance to the return to work plan including any restrictions of abilities which may apply.

Worker:

- To maintain regular contact with the Supervisor (see communication protocol above);
- To take an active role in developing their Return to Work Case Plan;
- To communicate any concerns to their Supervisor and Management;
- To obtain the necessary forms from the treating agencies as may be required by the Employer;
- Submit all Functional Abilities Forms or other supporting health care documentation to Management with 24 hours of treatment;
- To ensure that other scheduled rehabilitation activities such as physical therapy or doctor's appointments are continued while on modified duty. These appointments are to be arranged whenever possible during non-work hours;
- To co-operate with all requests for documentation as required by the WSIB and the Employer;
- To attend all scheduled ESRTW meetings;
- Must work within their functional abilities and / or restrictions as per the return to work plan;
- To obtain and submit page 3 of Form 8 (this page provides functional abilities and return to work information) from their Health Care Professional and return to Supervisor; and,

- To obtain and submit a Functional Abilities Form from the Health Care Professional, if required from Supervisor after a subsequent visit.

Health Professionals:

- To provide up to date medical information;
- Fill in the forms as requested; and,
- Act as a resource.

Workplace Safety & Insurance Board (WSIB):

- Process all reports / claims of occupational injury, illness, or disability; and,
- Act as a resource to the Employer and the Employee.

6.0 COMMUNICATION

This procedure will be communicated to all Employees during orientation. Any revisions or modifications of this procedure will be communicated to all Employees.

7.0 TRAINING

Upon initial hire or appointment, and refreshed annually. Supervisor will receive specific training on their roles and responsibilities under this procedure.

8.0 EVALUATION / REVIEW

Management will review the effectiveness of the policy statement, procedure and program annually in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Contact Log

Employee's Kit for Reporting Work Related Injuries

Modified Duties Offer Letter

Return to Work Case Plan

Letter to Health Care Provider

WSIB Functional Abilities Form

10. REFERENCE MATERIALS

I. Workplace Safety & Insurance Act



INTERNAL HEALTH & SAFETY COMMUNICATIONS

Title: INTERNAL HEALTH & SAFETY COMMUNICATIONS		Issue Date: September 2016
Project Safety Program Section: 21.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

INTERNAL HEALTH & SAFETY COMMUNICATIONS

1.0 PURPOSE

This guideline is intended to provide Staff with information related to health and safety both while at work and off the job.

2.0 SCOPE

This applies to all Employees and Contractors on **Saturn Power Inc.** projects.

3.0 DEFINITIONS

N/A - No definitions are required.

4.0 STANDARDS / PROCEDURES

The following are a variety of methods that will be used to communicate health and safety information / materials:

- Training sessions
- Hazard assessments
- Job Safety Analysis
- Management meetings
- Electronic messages
- Payroll inserts
- Bulletin boards
- Safety Talks

Frequency of Communication

Communication of health and safety information is done on an ongoing basis. At a minimum, communication of health and safety information must be done through the Health and Safety Bulletin Board.

Different venues for communication may require recording systems, for example: sign in sheet.

Project sites require weekly Safety Talks (or more frequently as may be determined).

5.0 ROLES / RESPONSIBILITIES

Project Manager:

- Determine what methods of communication will be used;
- Determine what subjects, topics, or other information will be communicated; and,
- Provide the communication materials as required.

Supervisor:

- Perform weekly safety talks;
- Communicate information to their Workers as required;
- Post / distribute information as may be required; and,
- Ensure all workers sign the appropriate form / record, as may be required.

6.0 COMMUNICATION

All Employees will receive health and safety communications as set out by this standard as deemed necessary by the Project Manager.

7.0 TRAINING

N/A – No formal training is required on this standard.

8.0 EVALUATION / REVIEW

This standard will be reviewed annually by the Project Manager.

9.0 FORMS / RECORDS

Training Record (as required to capture record of communication)

Safety Talk Form

10.0 REFERENCE MATERIALS

N/A



SAFETY TALK PROCEDURE

Title: SAFETY TALK PROCEDURE	Issue Date: September 2016
Project Safety Program Section: 21.2	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

SAFETY TALK PROCEDURE

1.0 PURPOSE

To provide relevant job-related health and safety communication to Workers.

2.0 SCOPE

This procedure applies to all **Saturn Power Inc.** Employees.

3.0 DEFINITIONS

N/A – No definitions are required.

4.0 STANDARDS / PROCEDURES

Safety Talks are meant to alert workers of changing conditions and hazards in the work and / or workplace.

Supervisors will complete and lead Safety Talks weekly or more frequently as may be determined. Workers must sign the Safety Talk Form.

Copies of Safety Talk Forms will stay on site with the Supervisor, and one copy will be given to **Saturn Power Inc.** Head Office.

5.0 ROLES / RESPONSIBILITIES

Supervisor:

- Complete the *Safety Talk Form* weekly, or as often as required;
- Ensure workers sign off on the *Safety Talk Form*; and,
- Retain a copy of the *Safety Talk Form* on site, and provide one copy to **Saturn Power Inc.** Head Office.

Worker:

- Participate in Safety Talks as required; and,
- Sign the *Safety Talk Form*.

6.0 COMMUNICATION

This procedure shall be communicated to all relevant employees of **Saturn Power Inc.** through orientation.

7.0 TRAINING

N/A – No training is required.

8.0 EVALUATION / REVIEW

This procedure shall be evaluated on an annual and ongoing basis for effectiveness and completeness by Management.

9.0 FORMS / RECORDS

Safety Talk Form

10.0 REFERENCE MATERIALS

N/A



SAFETY TALK FORM

Title: SAFETY TALK FORM		Issue Date: September 2016
Project Safety Program Section: 21.3		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

SAFETY TALK FORM

Project: _____ Date: _____

Conducted By: _____ (Attendees on Page 2)

1. Items to be Discussed:

a) _____

b) _____

c) _____

2. Results of Inspection or other activity during talk:

3. Items raised by Workers (Topic / Action):

4. Items to address / for Follow up:



SAFETY TALK FORM

Attendees:

Date: _____

- | | |
|-----------|-----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |
| 9. _____ | 10. _____ |
| 11. _____ | 12. _____ |
| 13. _____ | 14. _____ |
| 15. _____ | 16. _____ |
| 17. _____ | 18. _____ |
| 19. _____ | 20. _____ |
| 21. _____ | 22. _____ |
| 23. _____ | 24. _____ |
| 25. _____ | 26. _____ |
| 27. _____ | 28. _____ |
| 29. _____ | 30. _____ |
| 31. _____ | 32. _____ |
| 33. _____ | 34. _____ |
| 35. _____ | 36. _____ |
| 37. _____ | 38. _____ |
| 39. _____ | 40. _____ |
| 41. _____ | 42. _____ |
| 43. _____ | 44. _____ |

Copy of Report Given To:
<input type="checkbox"/> Project Manager / Supervisor
<input type="checkbox"/> Saturn Power Inc. Head Office



JOB SAFETY ANALYSIS

Title: JOB SAFETY ANALYSIS		Issue Date: September 2016
Project Safety Program Section: 22.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

JOB SAFETY ANALYSIS (JSA)

1.0 PURPOSE

The purpose of this policy is to ensure that all Employees are protected against the hazards of performing specific job tasks, and to ensure the work environment is safe for all Workers.

2.0 SCOPE

This procedure applies to all **Saturn Power Inc.** Employees.

3.0 DEFINITIONS

JSA – Job Safety Analysis

4.0 STANDARDS / PROCEDURES

Job Planning Steps

1. **TASK** – Describe the job being performed.
2. **JOB STEPS** – Break down the job into manageable steps
3. **HAZARDS** – Identify the hazards for each step.
4. **BARRIERS** – Select the barriers to eliminate, control or minimize the hazards.
5. **ASSESS** – Review the job plan to ensure the methods of reducing the risk are effective and practicable.
6. **JSA CONFERENCE** – Applicable sections of the JSA must be reviewed daily with the work crew. Supervisor and work crew must sign acknowledgement sheet daily to confirm review of the appropriate section.
7. **CHANGE** – Monitor the work for change. If changes are apparent, implement countermeasure and review; sign off with the work crew.
8. **EMERGENCY PLAN** – Analyze the work situation, have treatment available and develop a procedure for efficiently dealing with an emergency situation.

“YOU MUST PLAN SAFETY INTO EACH AND EVERY JOB!”

5.0 ROLES / RESPONSIBILITIES

Supervisor:

- Complete the Job Safety Analysis for each task being performed;
- Ensure that the JSA is reviewed and signed off daily by each Worker performing the task with review of applicable areas;
- Review the Job Safety Analysis any time there is a change in the work plan or a change in workplace conditions. If changes are required, they must be indicated on the Job Safety Analysis Form with a **red pen and dated**. The changes must be reviewed with the Workers and each member must sign and date the section that has been changed; and,
- Ensure any changes to the work plan are recorded and communicated to the Workers.

Worker:

- Clarify any questions or concerns regarding the task, hazards or measures included in the Job Safety Analysis Form prior to signing off on the JSA;
- Review and sign the Job Safety Analysis prior to commencing any work;
- Stop work immediately and notify the Supervisor of any change in the work plan or workplace conditions; and,
- If changes are made to the Job Safety Analysis Form, sign and date the changes.

5.0 COMMUNICATION

This procedure shall be communicated to all relevant employees of **Saturn Power Inc.** through orientations, Safety Talks and is available in the Health and Safety Manual.

6.0 TRAINING

Training shall be provided to all employees during orientation, and updated as required.

7.0 EVALUATION / REVIEW

This procedure shall be evaluated on an annual and ongoing basis for effectiveness and completeness by Human Resources.

8.0 FORMS / RECORDS

Job Safety Analysis (JSA) Form

9.0 REFERENCE MATERIALS

N/A



JOB SAFETY ANALYSIS FORM

Title: JOB SAFETY ANALYSIS FORM		Issue Date: September 2016
Project Safety Program Section: 22.2		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

JOB SAFETY ANALYSIS (JSA) FORM

Work Location:	# of Workers on Crew:	For the Week of:
Description:		Supervisor in Charge:
Prepared by:	Reviewed by:	
Date: _____	Date: _____	Comments: _____

TASKS	HAZARDS	COUNTER MEASURES

JSA Sign Off – JSA must be reviewed daily with the work crew. Supervisor and Workers must sign this acknowledgement sheet daily to confirm review.

Date: _____



JOB SAFETY ANALYSIS FORM

Work Crew (Print)	Work Crew (Signature)

Visitors (Print)	Visitors (Signature)

Supervisor's Name (Print)	Supervisor's Signature

IF THE WORK YOU INTEND / NEED TO DO IS NOT SPECIFIED ON THIS DOCUMENT, OR THE WORK DEVIATES FROM THE SPECIFIED SCOPE, OR THE WORK INTERFERES WITH OTHER EQUIPMENT, PROCESSES, WORKERS, OR; THE WORK POSES UNIDENTIFIED HAZARDS...**STOP WORK!!!**

1. **CONTACT YOUR SUPERVISOR.**
2. **RE-ASSESS THIS DOCUMENT TO ENSURE ALL SAFETY HAZARDS / RISKS ARE IDENTIFIED AND PREVENTIVE MEASURES ARE APPLIED.**
3. **CONTACT SAFETY REPRESENTATIVE AS REQUIRED TO REVIEW VARIATION TO THIS DOCUMENT.**
4. **REWRITE OR MAKE CHANGES IN RED PEN AND SUBMIT THIS DOCUMENT FOR APPROVALS AS REQUIRED.**
5. **COMMUNICATE THIS UPDATED DOCUMENT TO ALL WORKERS AFFECTED AND HAVE WORKERS SIGN OFF TO VERIFY THEIR COMPREHENSION.**

Title: TRENCHING & EXCAVATIONS		Issue Date: September 2016
Project Safety Program Section: 23.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

TRENCHING & EXCAVATIONS

1.0 PURPOSE

The purpose of this document is to outline the procedure to follow when digging or working in or around trenches and excavations.

2.0 SCOPE

This procedure applies to all Employees and Contractors **Saturn Power Inc.** projects.

3.0 DEFINITIONS

Excavation – Means the hole that is left in the ground, as a result of removing material.

Excavation Depth – Means the vertical dimension from the highest point of the excavation wall to a point level with the lowest point of the excavation.

Excavation Width – Means the least horizontal dimension between the two opposite walls of excavation.

Trench – Means an excavation where the excavation depth exceeds the excavation width.

4.0 STANDARDS / PROCEDURES

1. Determine Soil Type

The type of soil determines the strength and stability of trench walls.

Identifying soil types requires knowledge, skill, and experience. Even hard soil may contain faults in seams or layers that make it unstable when excavated.

The foreman or supervisor must be knowledgeable about soil types found on a project and plan protection accordingly. This knowledge must include an awareness that soil types and conditions can change over very short distances. It is not unusual for soil to change completely within 50 metres or for soil to become saturated with moisture over even smaller distances.

The Construction Regulation sets out four soil types.

Type 1 — It is hard to drive a pick into Type 1 soil. Hence, it is often described as “hard ground to dig”. In fact, the material is so hard, it is close to rock.

When excavated, the sides of the excavation appear smooth and shiny. The sides will remain vertical with no water released from the trench wall.

If exposed to sunlight for several days, the walls of Type 1 soil will lose their shiny appearance but remain intact without cracking and crumbling. If exposed to rain or wet weather, Type 1 soil may break down along the edges of the excavation.

Type 2 — A pick can be driven into Type 2 soil relatively easily. It can easily be excavated by a backhoe or hand-excavated with some difficulty.

In Type 2 soil, the sides of a trench will remain vertical for a short period of time (perhaps several hours) with no apparent tension cracks. However, if the walls are left exposed to air and sunlight, tension cracks will appear as the soil starts to dry. The soil will begin cracking and splaying into the trench.

Type 3 — Much of the Type 3 soil encountered in construction is previously excavated material.

Type 3 soil can be excavated without difficulty using a hydraulic backhoe. When dry, Type 3 soil will flow through fingers and form a conical pile on the ground. Dry Type 3 soil will not stand vertically and the sides of the excavation will cave in to a natural slope of about 1 to 1 depending on moisture.

Wet Type 3 soil will yield water when vibrated by hand. When wet, this soil will stand vertically for a short period. It dries quickly, however, with the vibration during excavation causing chunks or solid slabs to slide into the trench. All backfilled or previously disturbed material should be treated as Type 3.

Type 4 — Type 4 soil can be excavated with no difficulty using a hydraulic backhoe. The material will flow very easily and must be supported and contained to be excavated to any significant depth.

With its high moisture content, Type 4 soil is very sensitive to vibration and other disturbances which cause the material to flow.

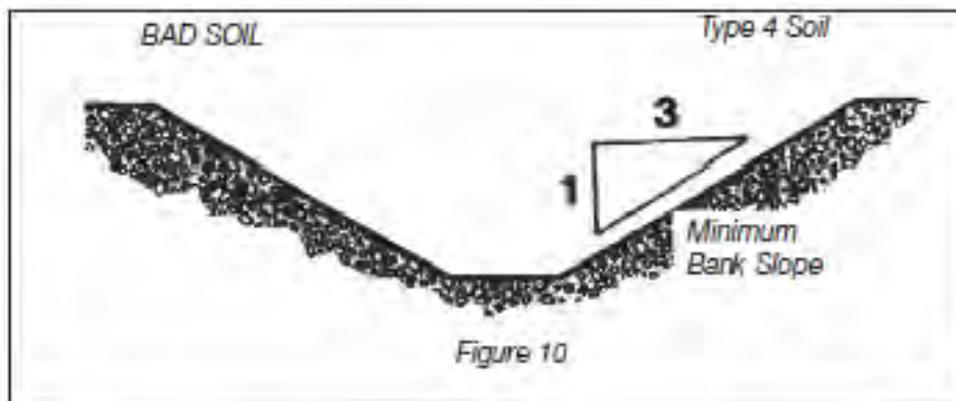
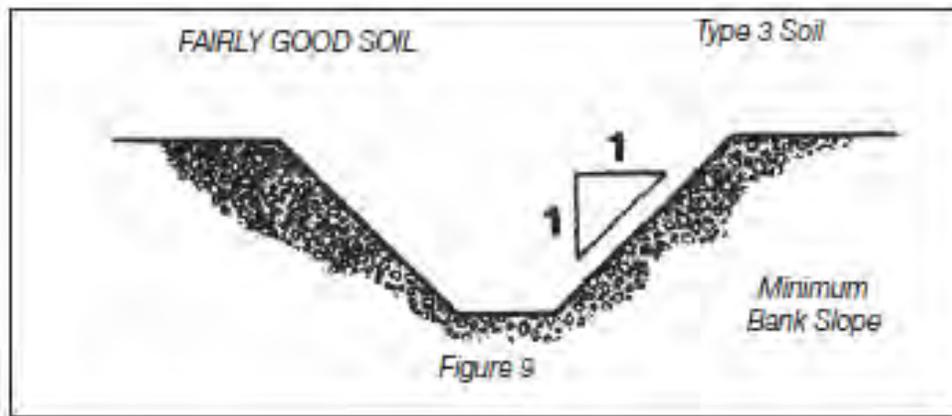
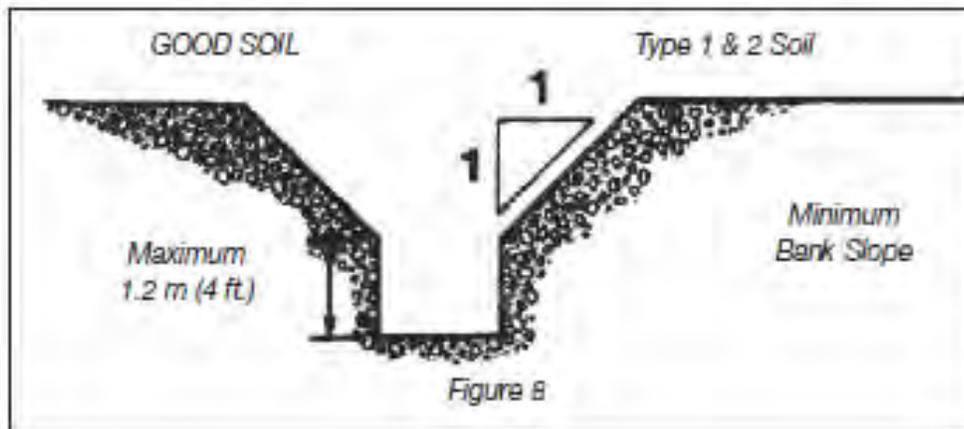
Typical Type 4 material includes muskeg or other organic deposits with high moisture content, quicksand, silty clays with high moisture content, and leta clays. Leta clays are very sensitive to disturbance of any kind.

2. Protect Against Cave-Ins (Sloping, Trenching Boxing, and Shoring)

Sloping

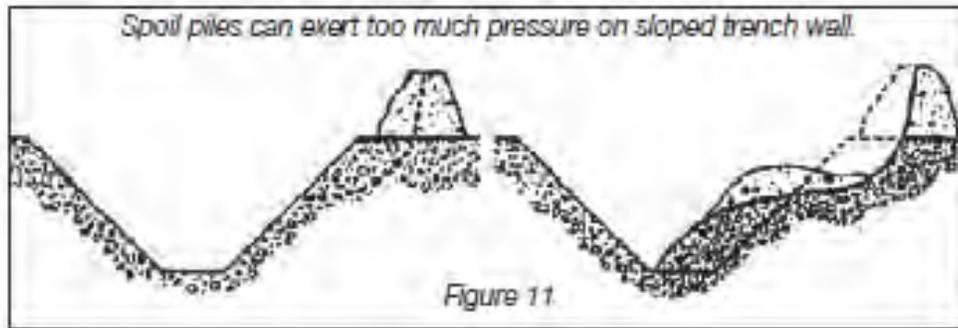
Where space and other requirements permit sloping, the angle of slope depends on soil conditions (Figures 8, 9 and 10).

For Type 1 and 2 soils, cut trench walls back at an angle of 1 to 1 (45 degrees). That's one metre back for each metre up. Walls should be sloped to within 1.2 metres (4 feet) of the trench bottom.



For Type 3 soil, cut walls back at a gradient of 1 to 1 from the trench bottom (Figure 9). For Type 4 soil, slope the walls at 1 to 3. That's 3 metres back for every 1 metre up from the trench bottom.

Although sloping can reduce the risk of a cave-in, the angle must be sufficient to prevent spoil not only from sliding back but also from exerting too much pressure on the trench wall.



Trench Boxes

Trench boxes are not usually intended to shore up or otherwise support trench walls. They are meant to protect workers in case of a cave-in. Design drawings and specifications for trench boxes must be signed and sealed by the professional engineer who designed the system and must be kept on site by the constructor.

Boxes are normally placed in an excavated but unshored trench and used to protect personnel. A properly designed trench box is capable of withstanding the maximum lateral load expected at a given depth in a particular soil condition.

Trenches near utilities, streets, and buildings may require a shoring system.

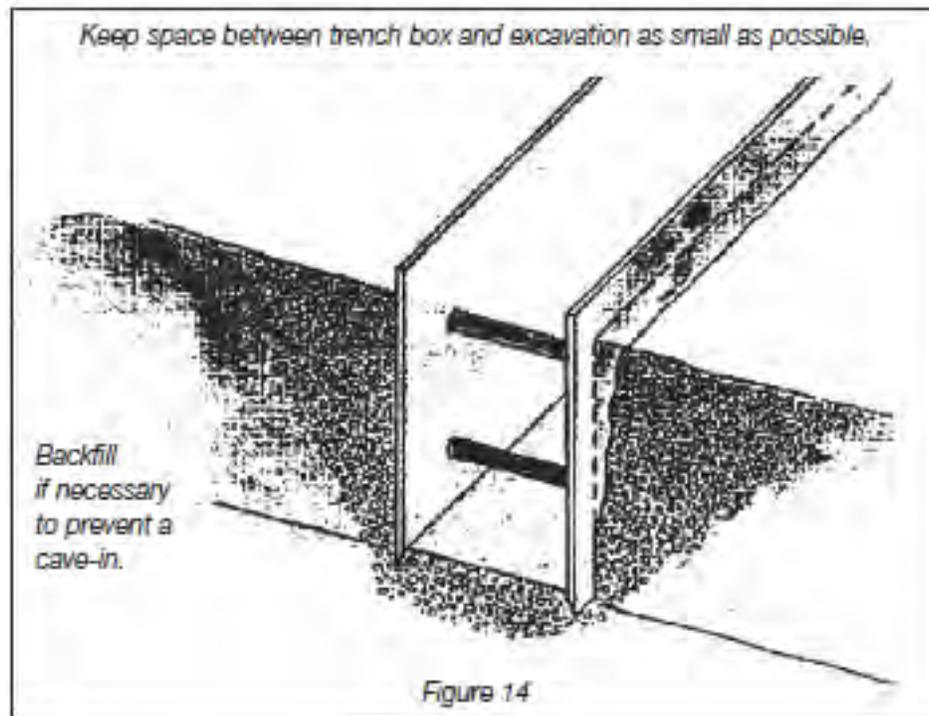
As long as workers are in the trench they should remain inside the box. Workers must not be inside the trench or the box when the box is being moved. A ladder must be set up in the trench box at all times.

Excavation should be done so that the space between the trench box and the excavation is minimized.

The two reasons for this are;

- 1) Allowing closer access to the top of the box; and,
- 2) Limiting soil movement in case of a cave-in.

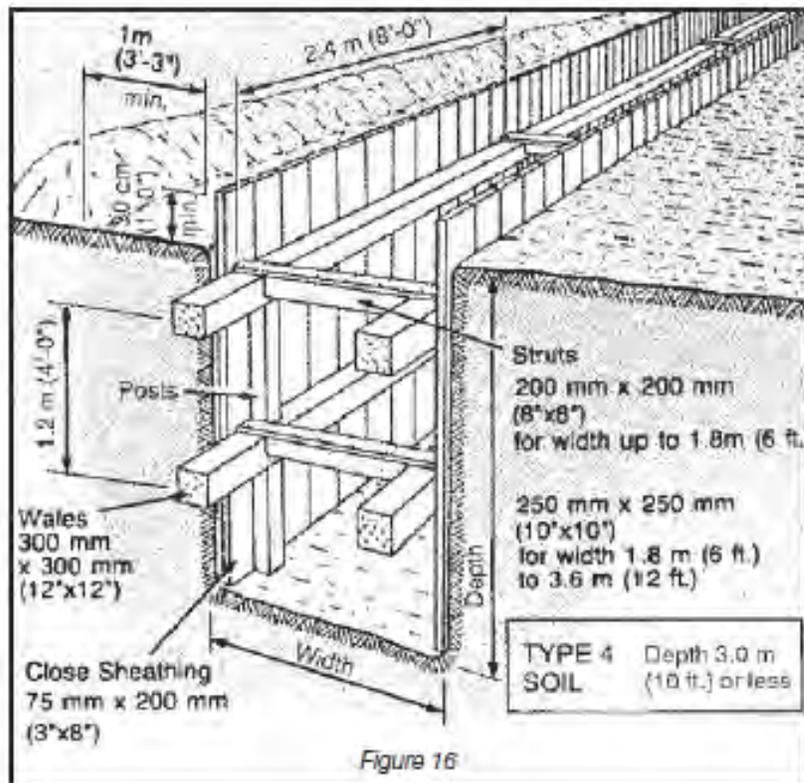
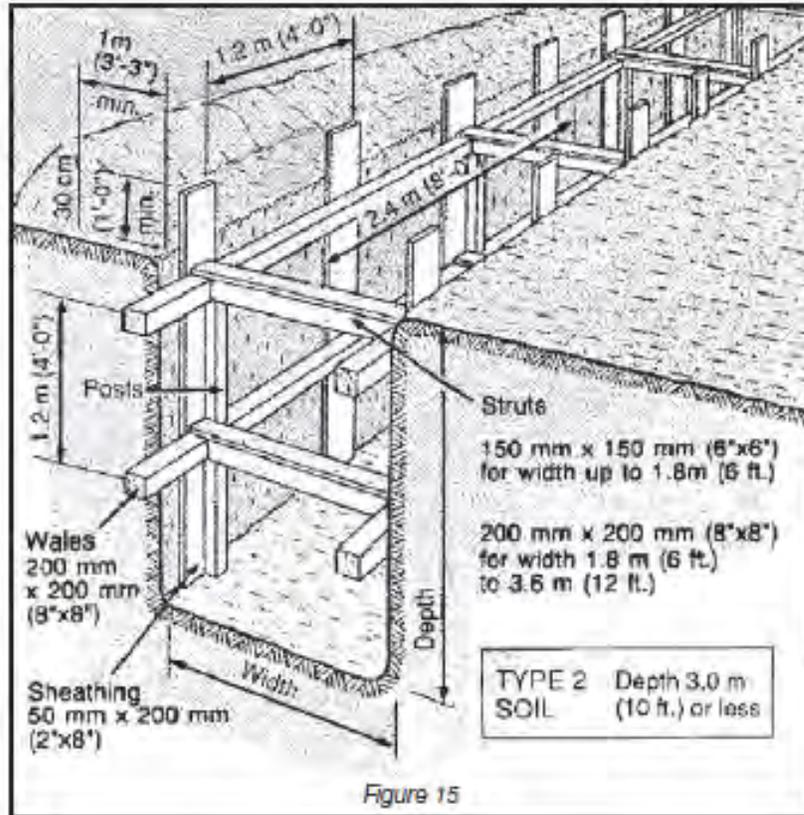
Check the drawings and specifications for the trench box to see if the space between the box and the trench wall needs to be backfilled and the soil compacted.



Shoring

Shoring is a system which “shores” up or supports trench walls to prevent movement of soil, underground utilities, roadways, and foundations. Shoring should not be confused with trench boxes. A trench box provides worker safety but gives little or no support to trench walls or existing structures such as foundations and manholes.

The two types of shoring most commonly used are timber and hydraulic. Both consist of posts, wales, struts, and sheathing.



Access & Egress

Whether protected by sloping, boxes, or shoring, trenches must be provided with ladders so that workers can enter and exit safely.

Ladders must;

- Be placed within the area protected by the shoring or trench box;
- Be securely tied off at the top;
- Extend above the shoring or box by at least 1 metre (3 feet); and,
- Be inspected regularly for damage.

Inspection

Inspection is every one's responsibility. Whatever the protective system, it should be inspected regularly.

Check hydraulic shoring for leaks in hoses and cylinders, bent bases, broken or cracked nipples, and other damaged or defective parts.

Check timber shoring before installation. Discard damaged or defective lumber. After installation, inspect wales for signs of crushing. Crushing indicates structural inadequacy and calls for more struts.

Inspect trench boxes for structural damage, cracks in welds, and other defects. During use, check the box regularly and often to make sure that it is not shifting or settling much more on one side than the other. If it is, leave the trench and ask the supervisor to check for stability.

Check ground surface for tension cracks which may develop parallel to the trench at a distance one-half to three-quarters of the trench depth. If cracks are detected, alert the crew and check all protective systems carefully.

Check areas adjacent to shoring where water may have entered the trench. A combination of water flow and granular soils can lead to undermining of the trench wall.

Finally, make sure that tools, equipment, material, and spoil are kept at least 1 metre (3 feet) back from the edge of the trench to prevent cave-in and falling objects from striking workers.

5.0 ROLES / RESPONSIBILITIES

Project Manager:

- Ensure that all gas, electrical and other services in and near the area to be excavated are located and accurately marked. If a service may pose a hazard, the service shall be shut off and disconnected;
- If a service may pose a hazard, and it cannot be shut off or disconnected, the owner of the services shall be requested to supervise the uncovering of the service during the excavation; and,

- Ensure that pipes, conduits and cables for gas, electrical and other services in an excavation are supported to prevent their failure.

Supervisor:

- Ensure this procedure is implemented, understood, and followed;
- Ensure daily visual inspections of trenches and excavations are performed and that any deficiencies are corrected prior to workers entering the trench / excavation; and,
- Ensure that any hazardous conditions or acts are followed up on a timely basis.

Worker:

- Is responsible to comply with this procedure.
- Is responsible to report immediately to his/her supervisor, the existence of any hazards or deficiencies related to the trench / excavation.

6.0 COMMUNICATION

This procedure is communicated to all employees through:

- Staff meetings
- Safety talks
- Postings on bulletin boards
- Orientation of new employees
- Coaching of employees found to have contravened this procedure

7.0 TRAINING

The Supervisor will ensure affected employees are trained in this procedure.

8.0 EVALUATION / REVIEW

Evaluation of this procedure will be done on an annual basis by the Project Manager in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

Trenching & Excavations Inspection Form

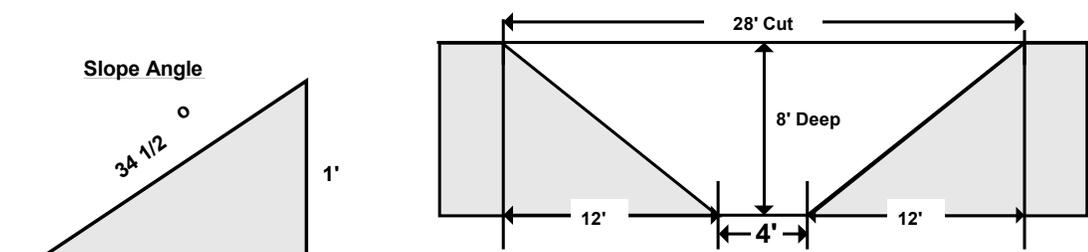
10.0 REFERENCE MATERIALS

- I. Ontario Legislation – Ontario Health and Safety Act
- II. Ontario Regulation 213/91 – Construction Projects

TRENCHING & EXCAVATION INSPECTION FORM

Title: TRENCHING & EXCAVATION INSPECTION FORM		Issue Date: September 2016
Project Safety Program Section: 23.2		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

TRENCHING & EXCAVATION INSPECTION FORM

Daily Excavation Checklist			
Inspected by:		Date:	
Project:		Job Number:	
Soil Type:	Excavation Depth:	Excavation Width:	
Type of Protective System Used:			
Indicate for each item: Yes – No – or N/A for not applicable:			
1. General Information:	Yes	No	N/A
A. Is excavation less than five feet in depth?			
B. Is there a potential for a cave-in? *IF YES, excavation must be sloped, shored, or shielded.			
C. Is excavation deeper than five feet in depth? * IF YES, excavation must be sloped, shored, or shielded.			
D. Is sloping used as your protective system?			
<u>Slope information to keep in mind:</u>			
 <p style="text-align: center;">Example of a Simple 34-degree Slope commonly used around the site for cave-in protection.</p>			
2. Inspection of Job-site:	Yes	No	N/A
Excavations, adjacent areas, and protective systems inspected by a competent person daily before the start of work.			
Competent person has the authority to remove employees from the excavation immediately.			
Surface encumbrances removed or supported.			
Employees protected from loose rock or soil that could pose a hazard by falling or rolling into the excavation.			
Spoils, materials, and equipment set back at least two feet from the edge of the excavation.			
Adequate barriers and signs provided and in place.			
Warning vests or other highly visible clothing provided and worn by all employees exposed to vehicular traffic. It's a good practice to wear vests at all times around heavy equipment.			
Employees standing away from vehicles being loaded or unloaded.			
Warning system established and utilized when mobile equipment is operating near the edge of the excavation.			
Employees prohibited from going under suspended loads.			



TRENCHING & EXCAVATION INSPECTION FORM

3. Utilities:	Yes	No	N/A
Location of utilities marked.			
Prior to the use of equipment, underground utilities have been located by hand digging.			
Underground utilities are protected, supported, or removed when excavation is open.			
4. Means of Access and Egress:	Yes	No	N/A
Travel distance to means of egress no greater than 25 feet in excavations four feet or more in depth.			
Straight ladders used in excavations extend at least three feet above the edge of the trench.			
Ramps being used for employee access have been designed by the competent person.			
Employees protected from cave-ins when entering or exiting the excavation.			
5. Wet Conditions:	Yes	No	N/A
Precautions have been taken to protect employees from the accumulation of water.			
Water removal equipment monitored by a competent person.			
Surface water or runoff diverted or controlled to prevent accumulation in the excavation.			
Inspections have been made after every rainstorm or other hazard-increasing occurrence.			
6. Hazardous Atmosphere: The atmosphere within the excavation must be tested where there is a reasonable possibility of an oxygen deficiency, combustible or other harmful contaminant exposing employees to a hazard.	Yes	No	N/A
Are there exposed sewer or natural gas lines in excavation?			
Is excavation near a landfill area, or are hazardous substances being stored close to the excavation?			
If you answered YES to A or B, then treat excavation as a confined space.			
7. Support Systems:	Yes	No	N/A
Materials and/or equipment for support systems selected based on soil analysis, trench depth, and expected loads.			
Materials and equipment used for protective systems inspected and in good condition.			
Materials and equipment not in good condition have been removed from service.			
Protective systems installed without exposing employees to the hazards of cave-ins, collapses, or threat of being struck by materials or equipment.			
Members of support system securely fastened to prevent failure.			
Support systems provided to ensure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc.			
Excavations below the level of the base of a footing have been approved by a Registered Professional Engineer.			
Removal of support systems progresses from the bottom and members are released slowly so you can note any indication of possible failure.			
Backfilling progresses with removal of support system.			
Excavation of material to a level no greater than two feet below the bottom of the support system and only if the system is designed to support the loads calculated for the full depth.			

Title: PERSONAL PROTECTIVE EQUIPMENT		Issue Date: September 2016
Project Safety Program Section: 24.1		Revision Date:
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

PERSONAL PROTECTIVE EQUIPMENT

1.0 PURPOSE

The purpose of this standard is to communicate the proper care, selection and use of PPE for the workers and ensure that they are protected at all times when all other means of eliminating hazards have either failed or are not practicable.

2.0 SCOPE

This procedure applies to all **Saturn Power Inc.** Employees, Contractors and Visitors.

3.0 DEFINITIONS

PPE – Personal Protective Equipment

CSA – Canadian Standards Association.

dBa - A measure of sound level in decibels using a reference sound pressure of 20 micropascals when measured on the A-weighting network of a sound level meter.

Decibel - A unit of measurement of sound pressure level that is equal to 20 times the logarithm to the base 10 of the ratio of the pressure of a sound, divided by the reference pressure of 20 micropascals.

Equivalent Sound Exposure Level - The steady sound level in dBA which, if present in a workplace for eight hours in a day, would contain the same total energy as that generated by the actual and varying sound levels to which a worker is exposed in his or her total work day, determined in accordance with the formula below.

The formula for determining the equivalent sound exposure level is as follows:

$$L_{ex,8} = 10 \text{ Log}_{10} \left(\frac{\left[\sum_{i=1}^n (t_i \times 10^{0.1 \text{ SPL}_i}) \right]}{8} \right)$$

Where,

L_{ex,8} is the equivalent sound exposure level in 8 hours,

Σ is the sum of the values in the enclosed expression for all activities from i = 1 to i = n,

i is a discrete activity of a worker exposed to a sound level,

t_i is the duration in hours of i,

SPL_i is the sound level of i in dBA,

n is the total number of discrete activities in the worker's total workday.

OHSA – Occupational Health and Safety Act.

4.0 STANDARDS / PROCEDURES

General:

Personal Protective Equipment (PPE) reduces or prevents workers from exposure to occupational health and safety hazards where other controls are not reasonable or available. The equipment acts as a barrier to protect workers from blows to the body, loud noises, heat, chemicals and infections, electrical and other hazards. Task-specific hazard assessments will be conducted to determine the type of PPE required for the task.

Workers will be trained on the safe use, handling and storage of PPE required for their job tasks. It is the responsibility of the worker to inspect PPE prior to use. If PPE is damaged or otherwise defective, it must be removed from service and reported immediately.

As per Ontario Regulation 851 S. 137 of the OHSA; Protective clothing or other safety device that has been worn next to the skin shall be cleaned and disinfected prior to being worn by another worker.

Please refer to the *Personal Protective Equipment List* for a list of all available PPE for **Saturn Power Inc.** Employees.

Eye and Face Protection:

Eye Protection – CSA approved safety glasses must be worn when the worker is exposed to the hazard of eye injury. Side shields must be utilized with Prescription Safety Glasses.

Full Face Protection – Face Shields are to be worn as required (task-specific, MSDS, etc.) Face shields must be worn (with safety glasses) for all hot work activities and when there is a possibility of injury to the face (i.e. cutting, grinding). Weld shields must be worn for all welding activities.

Foot Protection:

CSA certified footwear, as a minimum, must be worn when the worker is exposed to the hazard of foot injury.

Head Protection:

Adequate head protection shall be worn when the worker is exposed to the hazard of head injury.

Hand Protection:

Suitable gloves shall be worn when handling sharp material such as glass. In most cases cotton gloves are acceptable. Gloves should not be worn when work is being performed around moving machinery as it could cause an entanglement hazard.

Skin Protection:

Full length pants and a short sleeve shirt shall be worn at a minimum at all times.

Suitable and adequate apparel, or a shield, screen or similar barrier shall be worn when the worker is exposed to the following:

- i. A noxious gas, liquid, fume or dust;
- ii. A sharp or jagged object which may puncture, cut or abrade the worker's skin;
- iii. A hot object or hot liquid; or,
- iv. Radiant heat.

Hearing Protection:

Saturn Power Inc. will take all measures reasonably necessary in the circumstances to protect workers from exposure to a sound level greater than an equivalent sounds exposure level of 85 dBA, $L_{ex,8}$. Workers will be trained in the proper selection, use, care and maintenance for PPE appropriate in the circumstances to protect them from hazardous sound levels.

It is recommended that each worker have hearing protection available for use at their work area and it is to be worn at all times in areas where noise levels regularly exceed 85 dBA. (i.e. sawing, drilling, etc.). As an example - if you cannot hold a normal conversation (without shouting) at a distance of about 3 - 4 feet, due to noise, then hearing protection is likely required.

This does not mean that protection is required only where area sound levels exceed 85 dBA. For example, a 12-hour exposure to 84 dBA would mean that worker protection is mandated, because the $L_{ex,8}$ exposure limit would be exceeded.

Engineering controls will be implemented whenever reasonably possible in order to reduce noise and so that workers are not required to wear hearing protection.

Proper signage requiring the use of hearing protection will be installed in areas where hearing protection is required.

When work is performed at a client location, ensure posted noise signage and implemented controls are followed as required.

Respiratory Protection:

As per Ontario Regulation 851, S. 130 of the OHSA; Workers who may be exposed to a biological, chemical or physical agent that may endanger the worker's health or safety shall be trained in the proper use and care of required PPE.

The proper type and style of NIOSH approved respiratory protection specific for the given hazard must be used.

- It is **vital** that the respirator is in good working order and fits correctly. Facial hair must be minimal to ensure a tight seal;
- A pulmonary function test / medical clearance is required prior to use of respiratory protection; and,
- Employees must successfully complete a FIT test prior to use of respiratory equipment.

Remember: If you are unsure about the personal protective equipment required for the task being completed, ask your Supervisor for advice.

Working Live – Electricity

When working on or near energized parts of electrical equipment, please refer to the *Live Electrical Work Procedure* for complete PPE requirements.

Working at Heights

When workers are exposed to any of the following hazards, please refer to the *Working at Heights Procedure*:

- Falling more than three (3) meters;
- Falling more than 1.2 meters, if the work area is used as a path for a wheel barrow or similar equipment;
- Falling into or onto machinery;
- Falling into water or another liquid;
- Falling into or onto a hazardous substance or object; or,
- Falling through an opening on a work surface.

Solar, Wind and Construction Projects

Site-Specific Personal Protective Equipment Checklists will be developed for all Solar, Wind and Construction Projects (to be inserted into Appendix B).

5.0 ROLES / RESPONSIBILITIES

Project Manager:

- Shall take all measures reasonably necessary in the circumstances to protect workers from exposure to hazardous sound levels through a combination of engineering controls, workplace practices and personal protective equipment;
- Shall ensure a clearly visible warning sign shall be posted at every approach to an area in the workplace where the sound level regularly exceeds 85 dBA;
- Ensure that PPE is available to all staff when required and complies with all the legislative requirements for the industry standards;
- Ensure workers are trained on the correct use, handling and storage of PPE; and,
- Act as a resource for the effectiveness of the use of PPE.
- If necessary, have a noise survey conducted to identify high noise areas.

Supervisor:

- Wear the required PPE for the work they are supervising;
- Verify that the required PPE is available to the workers; and,
- Ensure workers under their authority are using and maintaining PPE as required

Worker:

- Wear PPE as required in policy, practices, and procedures or where specific site or requirements apply;
- Care for and maintain the PPE issued to them according to manufacturer's instructions, codes of practice, and related training they have received; and,
- Inspect all components of PPE prior to use and use only approved PPE that is in good condition or repair.

6.0 COMMUNICATION

This standard is communicated through orientation and through annual review.

7.0 TRAINING

All employees are trained in the necessary areas for their scope of work and will be trained on an ongoing basis.

8.0 EVALUATION / REVIEW

This standard will be reviewed on an annual basis by the Project Manager in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

- I. Ontario Regulation 213/91 – Construction Projects sections 21-26, 44 (1) (2).
- II. Ontario Regulation 851 – Industrial Regulations section 139 (5) (10)



SITE SPECIFIC PERSONAL PROTECTIVE EQUIPMENT LIST- SOLAR

Title: SITE-SPECIFIC PERSONAL PROTECTIVE EQUIPMENT LIST - Solar	Issue Date: September 2016
Project Safety Program Section: 24.2	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

PPE LIST – Solar Project Sites

This list is the minimum requirements for the Solar Project Site. All workers must comply with their own Company programs and the Regulations.

- CSA approved **Hard Hats** will be worn on site at all times
- High **Visibility Clothing** shall be worn at all times
- CSA approved **Work Boots**, at least 6” high
- **Safety Glasses** with side shields or firm clip-on side shields
- Hearing protection appropriate for the noise level, as required
- Appropriate gloves for hand protection depending on the task
- Long pants and shirts with minimum 4” sleeves are required for fieldwork activities; no tank tops or sleeveless shirts



SITE-SPECIFIC PPE CHECKLIST TEMPLATE

Title: SITE-SPECIFIC PPE CHECKLIST TEMPLATE		Issue Date: September 2016
Project Safety Program Section: 24.4		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

SITE-SPECIFIC PPE CHECKLIST TEMPLATE – Gesner Wind Farm

Employee Name: _____

Date (DD/MM/YYYY): _____

Item	Supplier/Vendor	Provided
DBI Sala ExoFit Nex Rope Access & Rescue Harness, Tech---Lite aluminum front, back & side D---rings, Duo Lok locking quick---connect buckles & hybrid comfort padding --- CSA	Team-1 Academy	
Petzl Vertex Best, Helmet, CSA	Team-1 Academy	
Petzl e+Lite emergency headlamp with retractable cord	Team-1 Academy	
Petzl Cordex Light Weight Glove	Team-1 Academy	
Skylotec Skysafe Pro Flex Y Lanyard CSA Z259.11E6:2005	Team-1 Academy	
DBI Sala Lad---saf Sleeve with carabiner -use with 8mm & 3/8" Solid core cable	Team-1 Academy	
Miller 1m Positioning Lanyard Non---Adjustable	Team-1 Academy	
Miller 2m Positioning Lanyard, Adjustable, w/Locking Rebar hook and nonremovable adjustable rope grab with captive---eye carabiner	Team-1 Academy	
DBI Sala Suspension Trauma Safety Straps (one pair), Connects to most harnesses	Team-1 Academy	
OGIO Big Dome Equipment Bag, Red	Team-1 Academy	

SITE-SPECIFIC WEEKLY PPE INSPECTION CHECKLIST TEMPLATE

Title: SITE-SPECIFIC WEEKLY PPE INSPECTION CHECKLIST TEMPLATE		Issue Date: September 2016
Project Safety Program Section: 24.5		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

SITE-SPECIFIC WEEKLY PPE INSPECTION CHECKLIST TEMPLATE

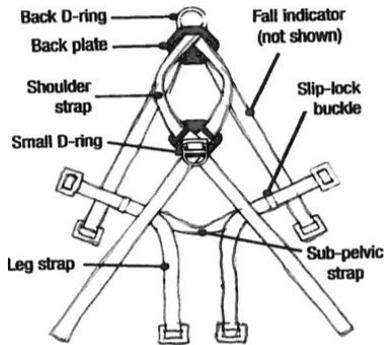
PPE assigned to (Name): _____	Date of Inspection: _____
-------------------------------	---------------------------

Site Name: _____	Customer: _____
------------------	-----------------

*Please complete this inspection checklist on a weekly basis for PPE issue to you. The purpose of this checklist is to assess the condition of PPE and to replace defective equipment. If any defects are found in any PPE, the defective equipment must be removed from service immediately and labeled defective. Replacement PPE may then be requested. **Although this checklist is required weekly, PPE must always be inspected before each use.***

I. Harness Inspection (full body harness, front, back, and side D-rings)

Model: _____ Serial Number: _____ Issued Date: _____



	Yes	No
a. Webbing free of cuts and frays		
b. Any tears, abrasions, mold or burns		
c. Any chemical, heat, or UV damage		
d. Any pulled or cut stitches		
e. Hardware cracked, damaged		
f. Buckles work freely		

II. Cable Grab (LAD - SAF) & Carabiner

Model: _____ Serial Number: _____ Issued Date: _____

	Yes	No
a. Free of dirt, grease, etc.		
b. Markings are readable		
c. Any cracks or deformities		

	Yes	No
d. Operates freely, smoothly		
e. Rollers spin freely		
f. Secures tight to the cable		

III. Energy Absorbent Lanyard

Model: _____ Serial Number: _____ Issued Date: _____

	Yes	No
a. Webbing free of cuts, frays		
b. Any excessive dirt buildup		
c. Any abrasions, mold or burns		

	Yes	No
d. Any chemical or heat damage		
e. Any damage to the absorber		
f. Any damage to snap hooks		



SITE-SPECIFIC WEEKLY PPE INSPECTION CHECKLIST TEMPLATE

Additional Comments: _____

Please indicate any new PPE ordered following inspection.

New harness

Cable Grab (Lad -SAF)

New Lanyard

New equipment order placed with (*write name*) _____

Signature (verifying inspection completed)



SITE-SPECIFIC PPE CHECKLIST TEMPLATE

Title: SITE-SPECIFIC PPE CHECKLIST TEMPLATE		Issue Date: September 2016
Project Safety Program Section: 24.4		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

SITE-SPECIFIC PPE CHECKLIST TEMPLATE – Gesner Wind Farm

Employee Name: _____

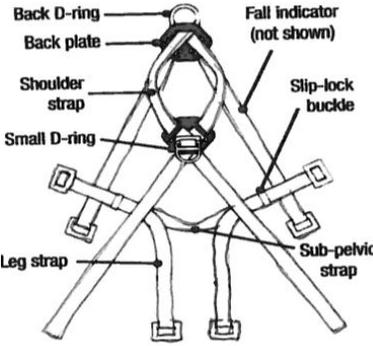
Date (DD/MM/YYYY): _____

Item	Supplier/Vendor	Provided
DBI Sala ExoFit Nex Rope Access & Rescue Harness, Tech---Lite aluminum front, back & side D---rings, Duo Lok locking quick---connect buckles & hybrid comfort padding --- CSA	Team-1 Academy	
Petzl Vertex Best, Helmet, CSA	Team-1 Academy	
Petzl e+Lite emergency headlamp with retractable cord	Team-1 Academy	
Petzl Cordex Light Weight Glove	Team-1 Academy	
Skylotec Skysafe Pro Flex Y Lanyard CSA Z259.11E6:2005	Team-1 Academy	
DBI Sala Lad---saf Sleeve with carabiner -use with 8mm & 3/8" Solid core cable	Team-1 Academy	
Miller 1m Positioning Lanyard Non---Adjustable	Team-1 Academy	
Miller 2m Positioning Lanyard, Adjustable, w/Locking Rebar hook and nonremovable adjustable rope grab with captive---eye carabiner	Team-1 Academy	
DBI Sala Suspension Trauma Safety Straps (one pair), Connects to most harnesses	Team-1 Academy	
OGIO Big Dome Equipment Bag, Red	Team-1 Academy	

SITE-SPECIFIC WEEKLY PPE INSPECTION CHECKLIST TEMPLATE

Title: SITE-SPECIFIC WEEKLY PPE INSPECTION CHECKLIST TEMPLATE		Issue Date: September 2016
Project Safety Program Section: 24.5		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

SITE-SPECIFIC WEEKLY PPE INSPECTION CHECKLIST TEMPLATE

PPE assigned to (Name): _____	Date of Inspection: _____																								
Site Name: _____	Customer: _____																								
<p><i>Please complete this inspection checklist on a <u>weekly</u> basis for PPE issue to you. The purpose of this checklist is to assess the condition of PPE and to replace defective equipment. If any defects are found in any PPE, the defective equipment must be removed from service immediately and labeled defective. Replacement PPE may then be requested. Although this checklist is required weekly, PPE must always be inspected before each use.</i></p>																									
I. Harness Inspection (full body harness, front, back, and side D-rings)																									
Model: _____ Serial Number: _____ Issued Date: _____																									
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> </tr> </thead> <tbody> <tr> <td>a. Webbing free of cuts and frays</td> <td></td> <td></td> </tr> <tr> <td>b. Any tears, abrasions, mold or burns</td> <td></td> <td></td> </tr> <tr> <td>c. Any chemical, heat, or UV damage</td> <td></td> <td></td> </tr> <tr> <td>d. Any pulled or cut stitches</td> <td></td> <td></td> </tr> <tr> <td>e. Hardware cracked, damaged</td> <td></td> <td></td> </tr> <tr> <td>f. Buckles work freely</td> <td></td> <td></td> </tr> </tbody> </table>		Yes	No	a. Webbing free of cuts and frays			b. Any tears, abrasions, mold or burns			c. Any chemical, heat, or UV damage			d. Any pulled or cut stitches			e. Hardware cracked, damaged			f. Buckles work freely					
	Yes	No																							
a. Webbing free of cuts and frays																									
b. Any tears, abrasions, mold or burns																									
c. Any chemical, heat, or UV damage																									
d. Any pulled or cut stitches																									
e. Hardware cracked, damaged																									
f. Buckles work freely																									
II. Cable Grab (LAD - SAF) & Carabiner																									
Model: _____ Serial Number: _____ Issued Date: _____																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> </tr> </thead> <tbody> <tr> <td>a. Free of dirt, grease, etc.</td> <td></td> <td></td> </tr> <tr> <td>b. Markings are readable</td> <td></td> <td></td> </tr> <tr> <td>c. Any cracks or deformities</td> <td></td> <td></td> </tr> </tbody> </table>		Yes	No	a. Free of dirt, grease, etc.			b. Markings are readable			c. Any cracks or deformities			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> </tr> </thead> <tbody> <tr> <td>d. Operates freely, smoothly</td> <td></td> <td></td> </tr> <tr> <td>e. Rollers spin freely</td> <td></td> <td></td> </tr> <tr> <td>f. Secures tight to the cable</td> <td></td> <td></td> </tr> </tbody> </table>		Yes	No	d. Operates freely, smoothly			e. Rollers spin freely			f. Secures tight to the cable		
	Yes	No																							
a. Free of dirt, grease, etc.																									
b. Markings are readable																									
c. Any cracks or deformities																									
	Yes	No																							
d. Operates freely, smoothly																									
e. Rollers spin freely																									
f. Secures tight to the cable																									
III. Energy Absorbent Lanyard																									
Model: _____ Serial Number: _____ Issued Date: _____																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> </tr> </thead> <tbody> <tr> <td>a. Webbing free of cuts, frays</td> <td></td> <td></td> </tr> <tr> <td>b. Any excessive dirt buildup</td> <td></td> <td></td> </tr> <tr> <td>c. Any abrasions, mold or burns</td> <td></td> <td></td> </tr> </tbody> </table>		Yes	No	a. Webbing free of cuts, frays			b. Any excessive dirt buildup			c. Any abrasions, mold or burns			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> </tr> </thead> <tbody> <tr> <td>d. Any chemical or heat damage</td> <td></td> <td></td> </tr> <tr> <td>e. Any damage to the absorber</td> <td></td> <td></td> </tr> <tr> <td>f. Any damage to snap hooks</td> <td></td> <td></td> </tr> </tbody> </table>		Yes	No	d. Any chemical or heat damage			e. Any damage to the absorber			f. Any damage to snap hooks		
	Yes	No																							
a. Webbing free of cuts, frays																									
b. Any excessive dirt buildup																									
c. Any abrasions, mold or burns																									
	Yes	No																							
d. Any chemical or heat damage																									
e. Any damage to the absorber																									
f. Any damage to snap hooks																									



SITE-SPECIFIC WEEKLY PPE INSPECTION CHECKLIST TEMPLATE

Additional Comments: _____

Please indicate any new PPE ordered following inspection.

New harness Cable Grab (Lad -SAF) New Lanyard

New equipment order placed with (*write name*) _____

Signature (verifying inspection completed)

Title: WORKING AT HEIGHTS		Issue Date: September 2016
Project Safety Program Section: 25.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

WORKING AT HEIGHTS

1.0 PURPOSE

The purpose of this procedure is to define the requirements and satisfy legislation for the use, care and selection of Fall Protection Equipment.

2.0 SCOPE

This procedure applies to all **Saturn Power Inc.** employees who are exposed to any of the following hazards;

- Falling more than three (3) metres;
- Falling more than 1.2 metres, if the work area is used as a path for a wheel barrow or similar equipment;
- Falling into or onto machinery;
- Falling into water or another liquid;
- Falling into or onto a hazardous substance or object; or,
- Falling through an opening on a work surface.

3.0 DEFINITIONS

CSA – Canadian Standards Association.

PPE – Personal Protective Equipment.

4.0 STANDARDS / PROCEDURES

As per Ontario Regulation 213/91, sec. 26.1 of the OHSA; worker(s) should be adequately protected by a guardrail system; this is a form of fall protection not fall restraint or fall arrest.

Fall Protection includes:

1. Guardrail Systems
2. Protective Cover Systems
3. Travel Restraint Systems
4. Fall Restrictive Systems
5. Fall Arrest Systems

Travel Restraint System – shall consist of a full body harness with adequate attachment points or a safety belt. The full body harness should be attached by a lifeline or lanyard to a fixed support.

If a worker falls while using a fall restricting system or fall arrest system, the system shall be immediately removed from service and shall not be used again by a worker unless all components of the system have been certified by the manufacturer as being safe for re-use.

Fall Restricting System – shall consist of an assembly of components that are attached to an independent fixed support and is designed so that a worker's free fall distance does not exceed 0.6 metres.

Fall Arrest System – shall consist of a full body harness with adequate attachment points and a lanyard equipped with a shock absorber or similar device. The fall arrest system shall be attached by a lifeline or lanyard to an independent fixed support. The fall arrest system shall be arranged so that a worker cannot hit the ground or an object or level below the work.

It is the expectation that all employees will have the knowledge to:

- Know how to use the fall arrest equipment properly;
- Recognize hazards; and,
- Determine if other controls can be put in place to limit the need for fall arrest (e.g. guardrails).

Full Body Harnesses, Lanyards, and Shock Absorbers

- All full body harnesses, lanyards, and shock absorbers must be CSA-certified. Look for the CSA label.
- Full body harnesses must be snug-fitting and worn with all hardware and straps intact and properly fastened.
- Lanyards must be 16 millimeter (5/8") diameter nylon or equivalent.
- Lanyards must be equipped with a shock absorber.

Lifelines

- All lifelines must be:
 - 16 millimeter (5/8") diameter polypropylene or equivalent;
 - used by only one worker at a time;
 - free from any danger of chafing;
 - free of cuts, abrasions and other defects;
 - long enough to reach the ground or knotted at the end to prevent the lanyard from running off the lifeline; and,
 - secured to a solid object.

Types of Connecting Devices:

Locking Snap Hook – has a spring loaded keeper across the opening of the hook that cannot be opened unless the locking mechanism is depressed.

Karabiner (D Clip) – designed not to open under twist loads. To open the gate or keeper requires two (2) separate actions: 1). Twisting the locking mechanism and (2) pulling the

locking mechanism back. When released, the spring loaded locking mechanism flicks back into the locked position.

Rope Grab – used to connect lanyard to lifeline. These devices can be moved up and down the lifeline when a steady force is applied but will lock when a sharp tug or pull is applied. They will remain locked on the lifeline until the applied force is released.

- Each rope grab is designed and manufactured for use with a specific diameter and type of lifeline. **Rope grab and lifeline must be compatible**. Specifications are usually listed on the housing.
- The rope grab must also be attached to the lifeline in the correct direction – **not upside down**. On most rope grabs an arrow indicates the direction in which to orient the device. In addition, each rope grab is designed for use with a specific length of lanyard, normally two or three feet maximum.

Check all connecting devices for:

- CSA Certification;
- Damage, cracking, dents, bends or signs of deformation;
- Connecting rings centered, not bent to one side or otherwise deformed;
- Rust;
- Moving parts working smoothly; and,
- Signs of wear or metal fatigue.

Fall Arrest Planning – Before deciding on a fall arrest system, assess the hazards that you may be exposed to in case of a fall. Will the worker hit the ground, material or equipment, or a lower level of the structure (bottom out)? Will the worker swing from side to side and possibly strike equipment (pendulum effect)? Planning must take these into account and any other concerns.

Emergency Rescue – O. Reg. 213/91 requires that before any fall arrest system or safety net is used, the employer must develop written rescue procedures.

Working from Scaffolds / Ladders

For guidelines on working from Scaffolds or Ladders, please refer to the *Scaffolds and Ladders Procedures*.

Working Beside Unprotected Openings and Edges

A worker must wear a full body harness with lanyard and shock absorber tied off to an independent fixed support whenever the worker is more than 3 metres (10 feet) above the next level or whenever the worker is above operating machinery, hazardous substances or objects regardless of the possible fall height.

5.0 ROLES / RESPONSIBILITIES

Project Manager:

- Provide all required equipment to affected workers;

- Provide appropriate training for affected workers; and,
- Must ensure there is a fall protection rescue procedure is developed and implemented when required prior to any work activities start involving the use of fall restraint, travel restraint and / or a fall arrest system.

Supervisor:

- Ensure all relevant workers are aware of known and potential fall hazards;
- Ensure that all efforts have been exhausted to protect the worker(s) from being exposed to falls before using a fall restraint, travel restraint and / or fall arrest system; and,
- Must ensure workers are adequately trained in fall protection systems including its use, care, storage and practical application.
- Must check all subcontractor harnesses before use on site.

Worker:

- Visually inspect their equipment before each use – if it is damaged, worn, or defective it must be immediately removed from service and tagged; and,
- Use and maintain the equipment provided as trained and instructed.

6.0 COMMUNICATION

This procedure shall be a part of the Personal Fall Protection Training Platform; it shall be communicated to all relevant employees through the training platform. This procedure shall be a part of the overall Safety Management System and will be available for review in the Health and Safety Manual.

7.0 TRAINING

Any worker subject to the scope of this procedure shall ensure that they have participated in the Personal Fall Protection Training Program prior to donning any fall arrest equipment. Training outlines the hazards and prevention methods associated with fall arrest.

8.0 EVALUATION / REVIEW

This procedure shall be evaluated on an annual basis for effectiveness and completeness by Human Resources in cooperation with the JHSC

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

I.Ontario Regulation 213/91 – Construction Projects section 26 and 27

Title: DROWNING HAZARDS		Issue Date: September 2016
Project Safety Program Section: 25.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

DROWNING HAZARDS

1.0 PURPOSE

The purpose of this procedure is to define the requirements and satisfy legislation for the use, care and selection of Fall Protection Equipment.

2.0 SCOPE

This procedure applies to all Employees, Contractors or Visitors who are exposed to the hazard of falling into liquid that is of sufficient depth for a life jacket to be effective as protection from the risk of drowning.

3.0 DEFINITIONS

CSA – Canadian Standards Association.

OHSA – Occupational Health and Safety Act.

PPE – Personal Protective Equipment.

4.0 STANDARDS / PROCEDURES

General

As per Ontario Regulation 851, s. 86 of the OHSA; Worker(s) exposed to the hazard of falling into liquid that is of sufficient depth for a life jacket to be effective as protection from the risk of drowning:

- There shall be an alarm system and rescue equipment, appropriate in the circumstances, to ensure the worker's rescue from the liquid;
- And,
 - i. The worker shall wear a life jacket; or,
 - ii. The employer shall develop written measures and procedures to prevent the worker from drowning, and shall implement them.

As per Ontario Regulation 851, s. 85 of OHSA; Workers exposed to the risk of falling more than three metres must also meet the requirements of the *Working at Heights Procedure*.

All employees are to follow manufacturer's instructions in the use, care, storage, inspection and maintenance of all personal protection equipment.

5.0 ROLES / RESPONSIBILITIES

Employer:

- Where workers are exposed to falling in a liquid of sufficient depth, develop written measures and procedures to prevent the workers from drowning, and implement them; and,
- Ensure the premises of the workplace is in compliance with Ont. Regulation 851 as it relates to the use, care, maintenance and storage of Rescue Equipment.

Management:

- Provide all required equipment to affected Workers.

Supervisor:

- Ensure all Worker(s) exposed to the hazard of falling into liquid that is of sufficient depth for a life jacket to be effective as protection from the risk of drowning;
- Ensure that all efforts have been exhausted to protect the Worker(s) from being exposed to the drowning hazards before work has begun;
- Ensure affected Workers are adequately trained in emergency rescue procedures and equipment.

Worker:

- Visually inspect their equipment before each use – if it is damaged, worn, or defective it must be immediately removed from service and tagged; and,
- Use and maintain the equipment provided as trained and instructed.

6.0 COMMUNICATION

This procedure shall be communicated to all relevant Employees through training and will be available for review in the Health and Safety Program.

7.0 TRAINING

Any Worker subject to working near drowning hazards shall complete Emergency Rescue training.

8.0 EVALUATION / REVIEW

This procedure shall be evaluated on an annual basis for effectiveness and completeness by Management.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

- I. Ontario Regulation 851 – Industrial Establishments section 85.

Title: LADDERS	Issue Date: September 2016
Project Safety Program Section: 26.1	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

LADDERS

1.0 PURPOSE

The purpose of this procedure is to provide guidelines for selecting, using and maintaining ladders.

2.0 SCOPE

This procedure applies to all **Saturn Power Inc.** Employees, Contractors and Visitors.

3.0 DEFINITIONS

Extension Trestle Ladder – Means a combination of a trestle ladder and a vertically-adjustable single ladder with a suitable means of securely locking the ladders together.

Platform Ladder – Means a self-supporting portable ladder that is not adjustable in length, where the highest standing level is a platform.

Single Ladder – Means a non-self-supporting portable ladder that is not adjustable in length and having only one section.

Step-Ladder – Means a self-supporting portable ladder that is not adjustable in length, having flat steps and a hinged back, and whose back section is either a single ladder or other supporting device, but does not include a step stool or platform ladder.

Step stool – Means a self-supporting, portable, fixed or foldable ladder, not adjustable in length, and having:

- a) a height of 800 millimetres or less, excluding side rails, if any, above the top cap;
- b) flat steps, but no pail shelf; and,
- c) a ladder top cap that can be stood or stepped on.

Top Step – Means the first step below the top cap of a step-ladder or, if there is no top cap, the first step below the top of the rails.

Trestle Ladder – Means a self-supporting portable ladder, non-adjustable in length, having two sections and hinged at the top so as to be able to form equal angles with the base.

4.0 STANDARDS / PROCEDURES

General

As per Ontario Regulation 213/91, S. 26 of the OHS Act; Worker(s) exposed to the following hazards, must meet the requirements of the *Working at Heights Procedure*:

- Falling more than three (3) metres;
- Falling more than 1.2 metres, if the work area is used as a path for a wheel barrow or similar equipment;
- Falling into or onto machinery;
- Falling into water or another liquid;
- Falling into or onto a hazardous substance or object; or,
- Falling through an opening on a work surface.

Maximum Lengths of Ladders

The maximum length of a ladder measured along its side rail shall not be more than:

- a) five metres for a trestle ladder or for each of the base and extension sections of an extension trestle ladder;
- b) six metres for a step-ladder;
- c) nine metres for a single ladder or an individual section of a ladder;
- d) fifteen metres for an extension ladder with two sections; and
- e) twenty metres for an extension ladder with more than two sections.

No ladder shall be lashed to another ladder to increase its length.

Access Ladders

As per Ontario Regulation 213/91, S.84 (1); An access ladder fixed in position shall:

- Be vertical;
- Have rest platforms at not more than nine metre intervals;
- Be offset at each rest platform;
- Where the ladder extends over three metres, above grade floor or landing, have a safety cage commencing not more than 2.2 metres above grade, floor or landing and continue 90 centimetres above the top of the landing with openings to permit access by a worker to rest platforms or to the top landing;
- Have side rails that extend 90 centimetres above the landing; and,
- Have rungs which are at least 15 centimetres from the wall and spaced at regular intervals.

As per Ontario Regulation 213/91, S. 84 (2), subsection (1) does not apply to an access ladder on a tower, water tank, chimney or similar structure which has a safety device which will provide protection should a worker using the ladder fall.

Portable Ladders

- Ensure the proper ladder grade selection for the trade;
- Portable ladders are available in the following grades:
 - Medium duty or Grade 2;
 - Heavy duty or Grade 1 (preferred) ; and,
 - Fiberglass / non-conductive ladders (must be used by Electrical Workers)

Extension / Trestle Ladder

All straight or extension ladders should be erected at an angle such that the horizontal distance between the top support and the base is not less than one-quarter or greater than one-third the vertical distance between these points;

Step-Ladder

- When a step-ladder is being used as a self-supporting unit, its legs shall be fully-spread and its spreader shall be locked; and,
- No worker shall stand on the top of, or, the pail shelf of a step-ladder.

Wooden Ladder

- Shall be made of wood and free of loose knots, sharp edges, splinters and shakes;
- Shall not be painted or coated with an opaque material;
- The side rails of a wooden ladder of the cleat type shall:
 - Be not less than 400 millimetres and not more than 610 millimetres apart; and,
 - Measure not less than:
 - i. thirty-eight millimetres by eighty-nine millimetres if the ladder is 5.8 metres or less long; or,
 - ii. thirty-eight millimetres by 140 millimetres if the ladder is more than 5.8 metres long.
- The rungs of a wooden ladder of the cleat type shall:
 - Measure not less than:
 - i. nineteen millimetres by sixty-four millimetres if the side rails are 400 millimetres apart; or,
 - ii. nineteen millimetres by eighty-nine millimetres if the side rails are more than 400 millimetres and not more than 610 millimetres apart; and,
 - Be braced by filler blocks that are nineteen millimetres thick and are located between the rungs.
- A double-width wooden ladder shall:
 - Have three evenly-spaced rails that measure at least thirty-eight millimetres by 140 millimetres;
 - Have rungs that:
 - i. measure at least thirty-eight millimetres by eighty-nine millimetres;
 - ii. extend the full width of the ladder; and,
 - iii. are braced by filler blocks that are at least 19 millimetres thick; and,
 - Not be less than 1.5 metres wide and not more than two metres wide.

Maintenance and Inspection

- Ladders will be visually inspected daily / prior to use.
- Any ladder found to be defective shall be taken out of service and tagged.
- Once tagged, the ladder must not be used. The tag shall read “DO NOT USE”.

Proper Use of Ladders

- Check the ladder for defects at the start of the shift, after it has been used in another location by other workers, or after it has been left in one location for a lengthy period of time;
- Areas surrounding the base and top of the ladder should be clear of trash, materials and other obstructions;
- Set the ladder up at a safe angle - one foot out for every three or four feet up, depending on length.
- The base of the ladder should be secured against accidental movement. Use a ladder equipped with non-slip feet appropriate for the situation;
- The ladder must be set up on firm level surface, if its base is to rest on soft, un-compacted or rough soil, a mud sill should be used;
- The top of the ladder should be tied off or otherwise secured to prevent any movement. If this is not possible, given the type of ladder or circumstances of its use, one worker should hold the base of the ladder while it is being used;
- If a ladder is used as a regular means of access between levels of a structure, it shall:
 - a) shall extend at the upper level at least 900 millimetres (3 feet) above the landing or floor;
 - b) shall have a clear space of at least 150 millimetres behind every rung;
 - c) shall be located so that an adequate landing surface that is clear of obstructions is available at the top and bottom of the ladder; and,
 - d) shall be secured at the top and bottom to prevent movement.
- Check all overhead areas for such things as power lines, etc.;
- Ladders should not be placed against flexible or moveable surfaces;
- No ladder shall be present in an elevator shaft or a similar hoisting area when the shaft or area is being used for hoisting;
- Maintain 3-point contact when climbing up or down a ladder. That means two hands and one foot or two feet and one hand on the ladder at all times. This is especially important when you get on or off a ladder at heights;
- Whenever possible, avoid climbing up or down a ladder while carrying anything in your hands. Tools, equipment and materials should be placed in a container and raised and lowered by a rope, if necessary;
- Never straddle the space between a ladder and another object;
- Never erect ladders on boxes, carts, tables or other unstable surfaces; and,
- Never rest a ladder on its rungs, ladders must rest on their side rails only.

Shafts

- A stairway, ladder or ladderway for a shaft that is more than six metres deep shall:
 - Have landings or rest platforms spaced at intervals not greater than 4.5 metres;
 - Be off-set at each landing or rest platform; and,
 - Be located in a sheathed compartment that is constructed in such a way that a worker who falls while on the stairway, ladder or ladderway will land on the landing or rest platform below.
- Every landing and rest platform shall be wide enough to permit at least two workers to pass on it safely;
- Every opening and ladderway shall be wide enough to permit the passage of a worker wearing rescue equipment and shall be at least 750 mm by 750 mm;
- Every conveyance located in a service shaft that is more than six metres deep shall be separated from a stairway, ladder or ladderway in the shaft by a lining;
 - The lining shall consist of solid planks at least fifty-one millimetres thick and spaced no more than ten millimetres apart; and,
 - This does not apply with respect to a conveyance located in a service shaft if the hoisting area is so remote from the stairway, ladder or ladderway that it is not possible for a load, bucket or device being hoisted or lowered to come into contact with the stairway, ladder or ladderway.

5.0 ROLES / RESPONSIBILITIES

Supervisors:

- Ensure workers inspect, maintain and use ladders properly;
- Evaluate the access requirements of a specific work assignment; and,
- Choose the best means of access for the job.

Workers:

- Conduct daily / pre-use visual inspections of ladders;
- If any defects are found DO NOT use the ladder – remove the ladder from service, tag it out, and follow the *Hazard Reporting Procedure*;
- Set up and use ladders as per this procedure; and,
- Clear materials, debris and other obstructions from the top and bottom of the ladder.

6.0 COMMUNICATION

Sections of this procedure are reviewed under Orientation Training, for further reference, it is available in the Health and Safety Manual.

7.0 TRAINING

Training for awareness on ladder use, care and maintenance will be conducted during Orientation.

8.0 EVALUATION / REVIEW

This procedure shall be evaluated on an annual basis for effectiveness and completeness by the Project Manager in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

- I. Ontario Regulation 213/91 – Construction Projects Sections 26, 78-84 and 286-287.
- II. Hazard Reporting Procedure

Title: SCAFFOLDS		Issue Date: September 2016
Project Safety Program Section: 26.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

SCAFFOLDS

1.0 PURPOSE

The purpose of this procedure is to inform workers of the basic requirements to set, inspect, and use scaffolding.

2.0 SCOPE

The procedure applies to all **Saturn Power Inc.** Employees, Contractors and Visitors.

3.0 DEFINITIONS

OHSA – Occupational Health and Safety Act

4.0 STANDARDS / PROCEDURES

Basic types of Scaffolds:

- Tube & Clamp Scaffold
- Adjustable Scaffold
- System Scaffold
- Mast-Climbing Work Platform
- Tower Scaffold

The erection and dismantling of scaffolds must be carried out under the supervision of a competent worker who is knowledgeable and experienced in such operations:

- Workers erecting and dismantling a scaffold more than 2.4 metres (8 feet) high must be tied off with a full body harness and lanyard equipped with a shock absorber;
- Scaffolds must be erected with all braces, pins, screw jacks, base plates, and other fittings installed, as required by the manufacturer;
- Scaffolds must be adequately braced horizontally and vertically;
- Scaffolds must be equipped with guardrails consisting of a top rail, mid-rail and toe board;
- Scaffold platforms must be at least 46 centimetres (18 inches) wide and if they are over 2.4 metres (8 feet) high they must be planked across their full width;
- Scaffolds must be tied in to a building at vertical intervals not exceeding three times the least lateral dimension, including the dimension of any outrigger stabilizing devices;
- Where scaffolds cannot be tied in to a building, guy lines adequately secured should be used to provide stability;

- Scaffold frames must be properly pinned together where scaffolds are two frames or more in height or where they are used as rolling scaffold towers;
- Scaffolds must be erected, used and maintained in a reasonably plumb condition;
- Scaffold planks must be securely fastened to prevent them from sliding;
- Scaffold planks must be installed so that they overhang by at least 15 centimetres (6 inches) but no more than 30 centimetres (12 inches);
- Scaffold planks must be:
 - of good quality,
 - free of defects, such as loose knots, splits or rot,
 - Rough sawn, measuring 48mm X 248mm (1 7/8 " X 9-3/4") in cross section, and No. 1 spruce or better.
- Scaffolds must be equipped with a proper ladder for access. Vertical ladders must be equipped with 15 centimeter (6 inch) stand-off brackets and a ladder climbing fall protection device or safety cage when they are more than 3 metres (10 feet) high;
- Frame scaffolds over 15 metres (50 feet) high and tube-and-clamp scaffolds over 10 metres (30 feet) high must be designed by a professional engineer and constructed in accordance with the design;
- Remove ice, snow, oil, grease and other slippery material from the platform, and apply sand to the surface;
- Wheels or casters on rolling scaffolds must be equipped with braking devices and securely pinned to the scaffold frame;
- Engineered Scaffolds must be installed and inspected by a qualified person prior to use;
- All scaffolds must be visually inspected daily prior to use by a qualified person and tagged out as required;
- Scaffolds must never be overloaded – load (weight) capacities must be determined prior to use and never exceeded; and,
- Scaffolds must be visually inspected each day prior to use.

5.0 ROLES AND RESPONSIBILITIES

Supervisor:

- Ensure that all scaffolds are erected, maintained and inspected as per regulations, this procedure, or engineered drawings; and,
- Ensure that all workers who may use scaffolds are trained in this procedure and follow it at all times.

Worker

- Follow instructions from the supervisor;
- Become familiar with this procedure and work within its scope; and,
- Do not use any scaffold which is damaged, incomplete, or tagged out.

6.0 COMMUNICATION

This procedure will be communicated to all staff on the project who may use scaffolds.

7.0 TRAINING

Staff who may erect, dismantle, or inspect scaffolds will also receive specific and relevant training to do so, as well as training on this procedure.

8.0 EVALUATION

This procedure will be reviewed annually by Human Resources in cooperation with the JHSC. It may be reviewed sooner or as required for any incidents or near misses related to Scaffolding.

9.0 FORMS / RECORDS

Training Record

Scaffold Inspection Form

10.0 REFERENCE MATERIALS

- I. Ontario Regulation 213/91 – Construction Projects
- II. Construction Safety Association of Ontario



SCAFFOLD INSPECTION FORM

Title: SCAFFOLD INSPECTION FORM		Issue Date: September 2016
Project Safety Program Section: 26.3		Revision Date: N/A
Approved by: Doug Wagner, President		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager		Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development		Signature: SEE ORIGINAL FOR SIGNATURE

SCAFFOLD INSPECTION FORM

Project:

Inspected By: _____ Date of Inspection: _____

	Yes	No	Action/Comments
1. Are scaffold components and planking in place, and in safe condition for use?			
2. Is the scaffold capable of carrying intended loadings?			
3. Have qualified persons been in charge of erection?			
4. Are sills properly placed and adequate size?			
5. Have screw jacks been used to level and plumb scaffold instead of unstable objects such as concrete blocks, loose bricks, etc.?			
6. Are base plates and/or screw jacks in firm contact with sills and frame?			
7. Is scaffold level and plumb?			
8. Are all scaffold legs braced with braces and properly attached?			
9. Are guard rails in place on all open sides and ends?			
10. Has proper access been provided?			
11. Has overhead protection or wire screening been provided where necessary?			
12. Has scaffold been tied to structure at least every 30' in length and 26' in height?			
14. Have brackets and accessories been properly placed?			

Completed forms must be submitted to the supervisor. If any deficiencies are found, the scaffold must be tagged out of service until repaired.

Title: EWP PROCEDURE		Issue Date: September 2016
Project Safety Program Section: 27.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

EWP PROCEDURE

1.0 PURPOSE

The purpose of this procedure is to ensure that work involving an Elevated Work Platform (EWP) is being done within the regulations for Construction Projects and within the parameters set in the EWP Training Program.

2.0 SCOPE

This procedure applies to all employees.

3.0 DEFINITIONS

Competent Person – Means a person who,

- i. Is qualified because of knowledge, training and experience to organize the work and its performance;
- ii. Is familiar with the Occupational Health and Safety Act and the Regulations that apply to the work; and,
- iii. Has knowledge of any potential or actual danger to health and safety in the workplace.

4.0 STANDARDS / PROCEDURES

Basic Types:

There are two basic types of EWP's; Boom and scissor; both types come in on-slab models and rough terrain models.

Scissor Type Machines

These are raised and lowered by hydraulic pistons and an expanding scissor mechanism. Platforms are available in various configurations with different capabilities for extension and movement. Some have extendable platforms or platforms that can rotate. Extendable platforms should be retracted before raising and lowering the device.

On-Slab Units

- Not designed for uneven or sloping ground.
- Normally have solid rubber tires.
- Generally powered by rechargeable DC battery.
- Some powered by internal combustion engine, either gas or propane.
- Most have "pothole protection" – a metal plate lowered close to the ground to afford some protection against inadvertent movement into depressions or debris.

Rough-Terrain Units

- Similar in design to on-slab machines.
- Built to handle rigorous off-slab challenges.
- Normally have wider wheel bases, larger wheel and pneumatic tires;
- Some fitted with outriggers for extra stability.
- Usually powered by internal combustion engines, gasoline, diesel or propane;
- DC Units also available but not common.
- Lifting mechanism is hydraulic.

NOTE: Scissor type machine range in capacity from 500 to several thousand pounds. They are available with platform height often reaching 15 metres (50 feet) and beyond.

Selection:

It is essential to select the right machine, refer to the selection criteria for further details.

Typical mistakes are;

- Using an on-slab machine on rough terrain;
- Using an undersized unit with respect to height, reach and lifting capacity;
- Lifting large materials that overhang the platform;
- Using a scissor lift where the reach of a boom type is needed; and,
- Extending the platform with planks, ladders or other devices because the machine can't reach the required height.

Factors to Consider when Selecting an EWP;

- **Capacity** – Does the machine have the lifting capacity, the reach and the height to complete the task?
- **Surface Conditions** – Are the surface conditions hard or soft, sloped or level? Will the ground have an effect on the type of machine selected?
- **Platform Size and Configuration** – Do you need a regular or extendable platform? Is rotation required? Are there space restrictions to consider?
- **Mobility** – Is a boom type better suited than a scissor lift to the task at hand?
- *Material to be Lifted* – will the machine be able to lift the size and weight of the material required for the job?
- **Access** – Will the machine be able to travel around the workplace safely? Are there obstructions or depressions that will restrict the use of certain machines?
- **Operator Skill and Training** – Are the people on site competent to operate the machine? If a propane powered engine is used, has the operator received propane training?
- **Work Environment** – If the work is to be done indoors or in a poorly ventilated area, will an electronically powered machine be required?

Basic Hazards:

The following are some basic hazards associated with the operation of an EWP:

- **Machine Tipping or Overturning** – many factors cause instability, sudden stops, drop-offs, overreaching, overloading, etc.
- **Overriding Safety Features** – disarming the dead man switch can prevent operators from knowing when they are in a dangerous situation.
- **Overhead Power line Contact** – Contacting wires can cause electrocution.
- **Makeshift Extensions** – When the machine cannot reach the working height desired, do not compensate by using scaffolding planks, ladders, blocks of wood, or other make shift arrangements.
- **Overloading the Platform** – EWP’s overloaded or loaded unevenly can become unstable and fail. Boom types are especially sensitive to overloading.
- **Failure to Cordon Off** – EWP’s can be struck by other construction equipment or on-coming traffic when the work area is not properly marked or cordoned off.
 - Workers have been injured when they have inadvertently entered an un-marked area and were struck by falling materials, tools or debris.
 - Workers have also been injured by swinging booms and pinched by scissor mechanisms.

Improper Access:

Do not enter or leave the platform by climbing the scissors or the boom. Do not use extension ladders to gain access, for safest access, lower the platform to the ground.

Moving with the Platform Raised:

Lower the platform before moving the machine unless;

- The machine is designed to move with the platform raised; and,
- The supporting surface is smooth and level.

Pinch Points – As platforms are raised, machines may sway. Workers can be pinched between guard rails and the structure. Position the platform so that the work takes place above the guard rail height.

General Guidelines for Safe Operation:

Always check for overhead power lines before moving the machine or operating the platform. Minimum permitted distances from overhead power lines must be observed. See Table 1 below. And refer to the manufacturers operating manual.

TABLE 1

Voltage Rating of Power Line	Minimum Distance
750 to 150 000 volts	3 metres (10 feet)
150 001 to 250 000 volts	4.5 metres (15 feet)
over 250 000 volts	6 metres (20 feet)

- Wear a full body harness and tie off to a designated tie off point while using the equipment;
- Do not leave the machine unattended without locking it or otherwise preventing unauthorized use;
- Make sure all controls are clearly labeled with action and direction;
- Make sure guard rails are in good condition and ensure that the gate is securely closed before moving the platform;
- Do not remove guardrails while the platform is raised;
- Position the boom in the direction of travel when possible;
- Keep ground personnel away from the machine and out from under the platform;
- Do not access the platform by walking on the boom;
- Do not use the machine as a ground for welding;
- Do not operate the machine in windy conditions;
- Secure loads and tools on the platform so that machine movement will not dislodge them; and,
- Use proper three point and proper climbing techniques when mounting or dismounting from the machine.

NOTE: Never operate equipment on which you have not been trained or which you are not comfortable operating. The safety of you and others on site depends on the competent, knowledgeable operation of the equipment.

Inspections:

- All components which bear directly on the safe operation of the EWP and can change from day to day must be inspected **DAILY**;
- Users must check the operator's manual for pre-operator checks specific to that machine; and,
- Any EWP not meeting the safe operating requirements must be tagged "DO NOT USE" and taken out of service until repairs/alterations can be made.

5.0 ROLES AND RESPONSIBILITIES

The Project Manager / supplier must ensure that the machine;

- Is in good condition;
- Complies with the regulations set forth in the Construction Regulations;
- Is maintained in good condition;
- Conforms to the appropriate C.S.A. Standard; and,
- Includes the correct load rating charts, if required.

The Project Manager and/or Supervisor on the Project must;

- Ensure that the operator is competent;
- Maintain the equipment and all its protective devices;
- Maintain a log book for each platform;
- Ensure the workers use appropriate personal protective equipment; and,
- Keep the manufacturer's operating manual on site.

The Worker or Operator of the Equipment must;

- Receive adequate training to be fully competent;
- Operate the machine in a safe manner and as prescribed by the manufacturer.
- Inspect the equipment daily before use;
- Report any defects to your Supervisor; and,
- Read, understand and obey the manufacturer's safety rules, including the operating manual and warning decals.

6.0 COMMUNICATION

This procedure shall be communicated to all relevant trained personnel. It applies only to trained employees.

7.0 TRAINING

Workers shall ensure that they have participated in an Elevated Work Platform Training Program prior to beginning any work on an Elevated Work Platform. Training outlines the hazards and prevention methods associated with Elevated Work Platforms.

8.0 EVALUATION

This procedure shall be evaluated on an annual basis for effectiveness and completeness by the Project Manager in conjunction with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

- I. Ontario Legislation - Occupational Health and Safety Act
- II. Ontario Regulation 213/91 – Construction Projects section 143-149

Title: LIFTING DEVICES		Issue Date: September 2016
Project Safety Program Section: 27.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

LIFTING DEVICES

1.0 PURPOSE

The purpose of this procedure is to provide guidelines for inspecting, using and maintaining Lifting Devices.

2.0 SCOPE

This procedure applies to all **Saturn Power Inc.** Employees and contractors.

3.0 DEFINITIONS

Competent Person – Means a person who,

- i. Is qualified because of knowledge, training and experience to organize the work and its performance;
- ii. Is familiar with the Occupational Health and Safety Act and the Regulations that apply to the work; and,
- iii. Has knowledge of any potential or actual danger to health and safety in the workplace.

Lifting Devices – A device that is used to raise or lower any material or object and includes its rails and other supports.

4.0 STANDARDS / PROCEDURES

- The company does not operate any powered mobile equipment equipped with Roll Over Protection (ROPS),
- Lifting devices or powered mobile equipment shall be inspected daily, or before each use, using the *Equipment Inspection Form*;
- Lifting devices or powered mobile equipment shall be maintained and repaired as required;
- Lifting devices shall only be operated only by,
 - A competent person; or,
 - A Worker being instructed who is accompanied by a competent person.
- Lifting devices shall be operated in such a way that,
 - No part of the load passes over any worker;
 - Guide ropes are used to prevent rotation or other uncontrolled motion;
 - When a load is in a raised position, the controls are attended by an operator.
- Lifting devices shall use the head lights and tail lights when in motion;

- Where the operator of a lifting device does not have a full view of the intended path of travel, or its load, the operator shall be directed by a competent signaler who is stationed,
 - In full view of the operator;
 - With a full view of the intended path of travel of the lifting device; and,
 - Clear of the intended path of travel of the lifting device and its load.
- Unattended lifting devices shall be immobilized and secured against accidental movement, with forks in the lowered position, or solidly supported;
- Lifting devices shall be refueled,
 - Outdoors;
 - With the engine stopped;
 - With no source of ignition within three metres of the dispensing point; and,
 - With an allowance made for expansion of the fuel should the equipment be exposed to a higher ambient temperature,
- Any lifting device found to be defective shall be taken out of service and tagged for repair; and,
- Once tagged, the lifting device must not be used until it is repaired. The tag should be removed by the person who initially took the lifting devices out of service, or the person repairing the lifting device. The tag shall read “DO NOT USE”.

5.0 ROLES / RESPONSIBILITIES

Supervisor:

- Ensure workers are competent to inspect, maintain and use lifting device properly prior to each use.
- Maintain a log book for each device,
- Ensure the device clearly indicates the correct load rating charts, if required.

Worker:

- Conduct daily / pre-use inspections of lifting device; and,
- Ensure lifting devices are inspected, maintained and used properly.

6.0 COMMUNICATION

This shall be communicated to all relevant employees during orientation.

7.0 TRAINING

Training for the safe operation of lifting devices will be will be conducted for all applicable Employees.

8.0 EVALUATION / REVIEW

This procedure shall be evaluated on an annual basis for effectiveness and completeness by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Equipment Inspection Form
Training Record

10.0 REFERENCE MATERIALS

- I. Ontario Regulation 851 – Industrial Establishments – sections 51, 54-58 and 61
- II. CSA Standard for Lift Trucks B335-04
- III. Ontario Legislation – Occupational Health and Safety Act 25 (1)(b)

Title: CONFINED SPACE		Issue Date: September 2016
Project Safety Program Section: 28.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

CONFINED SPACE

1.0 PURPOSE

The purpose of this procedure is to ensure that the hazards of performing work within a Confined Space are communicated and training is provided to all employees in order to effectively control the hazards.

This procedure also provides all necessary information to effectively implement the Confined Space Management Program.

2.0 SCOPE

This procedure applies to all defined confined spaces.

3.0 DEFINITIONS

Atmospheric Hazards – include the following,

- i. The accumulation of flammable, combustible or explosive agents;
- ii. An oxygen content in the atmosphere that is less than 19.5 per cent or more than 23 per cent by volume; or,
- iii. The accumulation of atmospheric contaminants, including gases, vapours, fumes, dusts or mists that could,
 - a. Result in acute health effects that pose an immediate threat to life; or,
 - b. Interfere with a person’s ability to escape unaided from a confined space.

Confined Space – A fully or partially enclosed space,

- i. That is not both designed and constructed for continuous human occupancy; and,
- ii. In which atmospheric hazards may occur because of construction, location or contents or because of work that is done in it.

Purging – Displacing contaminants from a confined space.

4.0 STANDARDS / PROCEDURES

GENERAL

Hazard Assessment:

- Before each time a worker enters a confined space, a competent worker must perform a written *Confined Space Assessment*; and,
- The Assessment must include the following:
 - The hazards that may exist in the confined space;

- The hazards that may develop while the work is being performed inside the confined space;
- General safety hazards in the confined space;
- Every confined space must be thoroughly assessed and evaluated by a competent worker to determine whether it is possible to eliminate the atmospheric hazard completely; and,
- Even if a space is not defined as a confined space under the regulations, supervision must take every precaution reasonable in the circumstances to protect workers entering the space.

CONTROLLING THE HAZARDS

Once the hazards have been identified in the assessment, a competent person must develop a plan to eliminate or control the hazards. The plan must include these mandatory regulated requirements:

- Duties of workers;
- Coordination (Where required and prepared by the constructor);
- Rescue Procedures;
- Rescue Equipment (inspected by a competent person and methods of communication);
- Protective Clothing and Personal Protective Equipment;
- Isolation of energy and control of material movement;
- Attendants;
- Adequate means of access and egress;
- Atmospheric testing (performed by a competent person);
- Ventilation and purging; and,
- Adequate procedures for working in the presence of explosive or flammable substances.

Duties of Workers:

- Do not enter or re-enter (if the confined space has been left unoccupied and unattended) the confined space unless testing has been performed;
- Know the hazards that may be faced upon entry. Know the route of exposure, signs and symptoms and long-term effects of exposure;
- Know how to use the equipment properly (tools and PPE); and,
- Maintain communication with the attendant so that the attendant can monitor your safety and be able to alert workers to evacuate the confined space.

Alert the Attendant whenever:

- You recognize any warning sign or symptom of exposure;
- You see a dangerous condition; and,
- An alarm is activated.

Get out of the Permit space immediately whenever:

- A warning system indicating a ventilation failure is activated;
- The attendant gives an evacuation order;
- A worker recognizes any signs or symptoms of exposure;
- A person inside detects a dangerous condition; and,
- An evacuation alarm is activated.

Coordination:

- When workers of more than one employer perform work in the same confined space, the constructor must coordinate entry operations; and,
- The constructor must prepare a coordination document to ensure that the various employers perform their duties in a way that protects the health and safety of all workers entering the confined space.

Rescue Procedures:

The confined space rescue plan must include written procedures for safe on-site rescue that can be implemented immediately in case of an emergency. An adequate number of people must be available to carry out the rescue procedures immediately.

These people must be trained in;

- The on-site rescue procedures;
- First aid and Cardio Pulmonary Resuscitation (CPR); and,
- How to use the rescue equipment necessary to carry out the rescue.

Rescue Equipment:

- The rescue equipment must be readily available, appropriate for the confined space and inspected by a competent worker;
- The competent worker must keep a written record of the inspection(s); and,
- The size of the confined space opening must be considered when choosing the rescue equipment (Do not plan for a SCBA when it will not fit through the opening of the confined space).

Protective Clothing and Personal Protective Equipment:

- A Competent person should assess the protective equipment and clothing required to perform the work. (i.e. gloves, boots, chemical suits, fire resistant coveralls, hearing, eye and face and respiratory protection); and,
- All workers shall be trained in the selection, care and use of all necessary PPE.

Isolation of Energy and Control of Material Movement:

Equipment that moves in any way (even rotation) must be isolated by:

- Disconnecting the equipment from its power source and de-energizing the equipment and follow lockout procedures;
- Only trained, competent employees shall perform lockout operations;
- Pay special attention to procedures when performing live electrical work within a confined space, see Live Electrical Work operation procedure for further information; and,
- Gloves, mats and other insulating equipment may be required depending on the type of work. Capacitors or other components which can store a charge should be discharged or grounded.

Attendant:

An attendant must be present whenever a worker enters a confined space. The attendant is not allowed to enter the confined space, unless he / she is replaced by another attendant in accordance with the plan.

The attendant must:

- Remain alert outside and near to the entrance;
- Be in constant communication (visual and speech) with all workers in the confined space. Radio checks shall be performed hourly as a minimum requirement;
- Monitor the safety of workers inside the confined space;
- Provide assistance as necessary;
- Be provided with a device for summoning help in case of an emergency; and,
- Initiate an adequate rescue procedure in case of an emergency.

Entry and Exit (Access and Egress):

- The means of entry and exit can be evaluated before entry by checking drawings, prior knowledge, or inspection from outside the space.
- Confined space entrances are generally small and not well located, these small openings must be considered in the rescue plan since they restrict the movement of workers and equipment in and out of the confined space.

Atmospheric Testing:

- If the hazard assessment determines that there is an atmospheric hazard in the confined space, atmospheric testing must be performed;
- Only a trained, competent person shall conduct atmospheric testing safely and before and during the time a worker is in a confined space to ensure that acceptable levels are maintained;
- The person performing the tests shall be trained and familiar with all atmospheric testing equipment including, calibration, maintenance and operation of the equipment;

- If the confined space is left unattended and unoccupied, the tests must be performed again prior to re-entry; and,
- Results of every sample of a test must be recorded on the entry permit. If continuous monitoring is required, test results must be recorded at regular intervals (every hour).

Combustible, Explosive or Flammable Atmospheres (Hot Work):

- No worker is allowed to enter as confined space if airborne combustible dust or mist is present in a concentration sufficient for explosion;
- If an explosive or flammable atmosphere is detected, only certain types of work can be performed. The conditions for each type of work are specified below;
- Hot Work-means activities that can produce a source of ignition such as a spark or open flame. (i.e. welding, cutting, grinding and using non-explosion proof electrical equipment);
- Cold Work-means activities that cannot produce a source of ignition;
- Between 0% and 5% of the LEL, hot work can be performed providing the following conditions are met;
- The oxygen content must be maintained below 23%;
- The atmosphere must be continually monitored;
- The entry permit must include adequate provisions for Hot Work; it must specify the appropriate measures to be taken;
- An alarm and exit procedure must be in place to provide adequate warning and allow safe escape if the atmospheric concentration exceeds 5% of the LEL or if the oxygen content exceeds 23%;
- Between 0% and 10% of the LEL cold work can be performed; and,
- Between 0% and 25% of the LEL, inspection work can be performed.

Ventilation / Purging:

- This is the most effective measure of control, the space can be purged of dangerous atmospheres by blowing enough fresh air, and / or by removing (or suction venting) the bad air and allowing clean air in;
- Best results are obtained by blowing fresh air into a space close to the bottom;
- Check the efficiency of the ventilation by re-testing the atmosphere with gas detection equipment before re-entry; and,
- If mechanical ventilation is used to maintain acceptable atmospheric levels, there must be a warning system and exit procedure in case there is a ventilation failure.

Entry Permits:

- A competent person must verify that the permit issued complies with the plan before every shift.
- If mechanical ventilation is used to maintain acceptable atmospheric levels, there must be a warning system and exit procedure in case there is a ventilation failure.
- Entry permits should be understood by everyone involved with the job and must be readily available to every person entering the confined space.

Entry Permits shall include but not be limited to the following:

- The location and description of the confined space;
- A description of the work;
- A description of the hazards and the corresponding controls;
- The time period for which the permit applies;
- The name of the attendant;
- A record of each worker who enters and leaves;
- A list of equipment required for entry and rescue, and verification that the equipment is in good working order;
- Additional procedures and controls if Hot Work is to be performed;
- The Entry Permit may also include;
- A record of the hazard assessment; and,
- The hazard control plan and training records.

Unauthorized Entry:

The constructor must ensure that each entrance to the confined space is secured against unauthorized entry and / or has adequate barricades or signs warning against unauthorized entry.

RESCUE PROCEDURES

- Ensure that no worker enters or remains in a confined space unless, in accordance with the relevant plan, adequate written on-site rescue procedures that apply to the confined space have been developed and are ready for immediate implementation;
- Before any worker enters the confined space adequate personnel trained in the matters listed below are available for immediate implementation of the on-site rescue procedures. The personnel shall be trained in;
- The constructor must ensure that each entrance to the confined space is secured against unauthorized entry and/or has adequate barricades or signs warning against unauthorized entry;
- The use of rescue equipment required in accordance with the relevant plan; and,
- Establish methods of communication that are appropriate for the hazards identified in the relevant assessment, and shall make them readily available for workers to communicate with the attendant.

RESCUE EQUIPMENT

The rescue equipment to be used will be dependent upon the hazards in the confined space and the relevant plan. Examples of safety equipment include:

- Harnesses and lifelines
- Hoist / retrieval systems
- Self-Contained Breathing Apparatus (SCBA)
- Airline respirators and other equipment as necessary.

It is very important to take into account the size of the confined space access/egress points when selecting the type of rescue equipment to be used.

Ensure that the rescue equipment identified in the relevant plan is:

- Readily available to effect a rescue in confined space;
- Appropriate for entry into the confined space;
- Inspected as often as necessary to ensure it is in good working order, by a competent person and is appointed by the Supervisor;
- The inspection record shall be recorded in writing by a competent person, and the record of the inspection may be incorporated into the entry permit;
- Calling “911” does not satisfy the confined space regulation in an emergency situation, it is not considered ready for immediate implementation; and,
- When using radios or other methods of communication, regular checks (on an hourly basis) must be performed on the equipment to ensure it is in good working order.

5.0 ROLES / RESPONSIBILITIES

Project Manager:

- All written rescue procedures and measures are developed and maintained;
- Before a worker enters a confined space, a written procedure is developed, maintained and communicated to all relevant workers;
- A copy of the confined space program and relevant plan(s) is given to the client prior to any entries; and,
- Identify areas where known confined spaces exist with signage and awareness training.

Supervisor:

- A written, adequate assessment of the hazards related to the confined space has been carried out by a competent worker prior to entry;
- A written plan, including procedures for the control of hazards identified in the assessment has been implemented by a competent person for that confined space;
- All workers relevant to the confined space have been appropriately trained to perform work within the boundaries of the confined space plan; and,
- Permits are related to the plan and all paperwork is relevant and correct.

Worker:

- They work in accordance with the confined space plan, rescue plans and hazard assessment and all other requirements under the company Confined Space Management Program;
- They have received the appropriate training;
- They use all required personal protective equipment; and,
- They report all substandard conditions, actual or potential hazards and / or deviation(s) from this procedure or the Confined Space Management Program immediately to their supervisor.

6.0 COMMUNICATION

This procedure shall be communicated to all relevant trained personnel through the Confined Space Management Program. It applies only to trained employees.

7.0 TRAINING

Any worker subject to the scope of this procedure shall ensure that they have participated in a Confined Space Awareness, Entrant and Attendant Training Program prior to beginning any work related to a confined space. Training outlines the hazards and prevention methods associated with confined spaces.

8.0 EVALUATION / REVIEW

This procedure shall be evaluated on an annual basis for effectiveness and completeness by the Senior Management in conjunction with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

Confined Space Assessment

Confined Space Permit

Confined Space Entry Log

10.0 REFERENCE MATERIALS

I.Ontario Regulation 632/05 – Confined Spaces



LIVE ELECTRICAL WORK PROCEDURE

Title: LIVE ELECTRICAL WORK PROCEDURE	Issue Date: September 2016
Project Safety Program Section: 29.1	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

LIVE ELECTRICAL WORK PROCEDURE

1.0 PURPOSE

The purpose of this procedure is to ensure the potential for loss of life or damage to property is eliminated while performing electrical maintenance or repairs.

2.0 SCOPE

This procedure applies to all **Saturn Power Inc.** Employees.

3.0 DEFINITIONS

Energized State – Any situation where electrical energy is present or the power is on.

Service Technician – Any individual who;

- Has the appropriate Certifications / Trade Qualifications required to perform electrical work in Ontario;
- Is competent based on their knowledge, training and experience;
- Is familiar with the Electrical Safety Act and Regulations that apply to the work; and
- Has knowledge of any potential or actual danger to health or safety during the commencement of this work.

PPE – Personal Protective Equipment, including Arc Flash Gear.

Arc Flash – The sudden release of large amounts of heat and light energy at the time of an electrical fault.

4.0 STANDARDS / PROCEDURES

EQUIPMENT TESTING & TROUBLE-SHOOTING

Tools or equipment capable of conducting electricity shall not be used in close proximity to any live electrical installation or equipment.

If it is not practical to disconnect electrical installations, equipment or conductors from the power supply before working on, or near, live exposed parts of the installations, equipment or conductors, then the worker shall use;

- rubber gloves;
- mats;
- shields; and
- other protective equipment (such as Flame Resistance Clothing)

Procedures adequate to ensure protection from electrical shock and burns while performing the work shall also be implemented and followed.

WORKING LIVE

Saturn Power Inc.'s policy is that we do not work live, however at certain times it is recognized that it is unavoidable. The following are the only circumstances permitted when working on or near exposed energized parts of electrical equipment, as per Ontario Regulation 851, S. 85 of the OHSA;

1. When equipment testing or trouble-shooting needs to be carried out, safety guidelines should be followed. The *Electrical Work Permit* is not required under this circumstance.
2. When it is not reasonably possible to disconnect the equipment, installation or conductor from the power supply before working on or near the live exposed energized parts.
3. When the equipment, installation, or conductor is operating at a nominal voltage of 300 volts or more, and a suitably equipped competent person who is able to recognize the hazards and perform rescue operations, including artificial respiration, is available and able to see the worker who is performing the work.

The Ontario Ministry of Labour does not consider the disruption of normal building operations or any increased expenses associated with providing temporary power to be an acceptable reason for saying "it is not reasonably possible" to de-energize the system (see point 2, above). Inconvenience does not qualify as a situation where "it is not reasonably possible" to de-energize the system.

If your work is part of a major shut down for maintenance, it is reasonably possible to disconnect the equipment. If your work is part of routine maintenance, it is reasonably possible to schedule a shutdown of the system you will be working on.

Every effort will be made to first adequately Lockout and Tag any device that requires service or maintenance before work commences.

A site review must be performed to verify that there is absolutely no way the power can be turned off. **Saturn Power Inc.** shall at this time perform the site review and provide to the Workers a detailed analysis of the task and the service records for the equipment.

Once **Saturn Power Inc.** has ascertained that electrical work must be completed on or around energized equipment then the following practices must be applied before the live work commences;

- Using the *NFPA 70E Compliance Guide*, the Arc Flash potential shall be determined and the proper PPE supplied to the service technician;
- A detailed work procedure must then be prepared highlighting all activities and associated risks. The level of Arc flash rating shall be indicated on the report. The report shall state the appropriate equipment and clothing required. Tables 1 and 2 will determine the necessity of this step. All personnel working on, or around the

equipment must have proper Arc Flash Training and apparel before any work commences; and,

- If tables 1 and 2 indicate a live work plan are necessary then it is the Supervisors responsibility to fill out the live *Electrical Work Permit* and have all authorized parties sign it, including the owner or customer. For diagnostic testing and electrical circuit trouble shooting the above procedure does not apply. Only a qualified person with the approved Arc flash gear may perform trouble shooting, diagnostic work, or live work.

Table 1 – Shock Hazard Boundaries

TABLE 1 - SHOCK HAZARD BOUNDARIES				
System Voltage Range, Phase to Phase	Limited Approach Boundary		Restricted Approach Boundary	Prohibited Approach Boundary
	Bus Work/Fixed circuit part	Overhead Line/Movable Conductor		
0 to 50	Not Specified	Not Specified	Not Specified	Not Specified
51 to 300	3 ft. - 6 in.	10 ft. - 0 in.	Avoid Contact	Avoid Contact
301 to 750	3 ft. - 6 in.	10 ft. - 0 in.	1 ft. - 0 in.	0 ft. - 1 in.
751 to 15kV	5 ft. - 0 in.	10 ft. - 0 in.	2 ft. - 2 in.	0 ft. - 7 in.
15.1kV to 36kV	6 ft. - 0 in.	10 ft. - 0 in.	2 ft. - 7 in.	0 ft. - 10 in.
36.1kV to 46kV	8 ft. - 0 in.	10 ft. - 0 in.	2 ft. - 9 in.	1 ft. - 5 in.
46.1kV to 72.5kV	8 ft. - 0 in.	10 ft. - 0 in.	3 ft. - 3 in.	2 ft. - 1 in.
72.6kV to 121kV	8 ft. - 0 in.	10 ft. - 0 in.	3 ft. - 2 in.	2 ft. = 8 in.

Table 2 – Planning and Authorization

TABLE 2 - PLANNING AND AUTHORIZATION				
Work Class	Degree of Planning	Authority	Live Work Plan	Live Work Permit
Limited	Written	Person In charge	Yes	No
Restricted	Written	Plant Manager	Yes	Yes
Prohibited	Written	Plant Manager	Yes	Yes
Diagnostic and Testing	Un-Written	Qualified Person	No	No

5.0 ROLES / RESPONSIBILITIES

Project Manager:

Saturn Power Inc. will ensure that resources are available to workers in order to accomplish their tasks safely and that work is performed according to the company Health and Safety Policy and Program. **Saturn Power Inc.** will take every precaution reasonable in the circumstances to protect the health and safety of its workers. In situations where working on or near energized equipment is permitted, **Saturn Power Inc.** will protect its workers by ensuring steps such as the following are taken:

1. Conducting an assessment to identify the hazards;

2. Determining and implementing measures and procedures to protect the worker from the hazards;
3. Ensuring that workers have adequate training to carry out those measures and procedures; and,
4. Ensuring that workers have the required personal protective equipment (PPE) and adequate training to use it.

Supervisors:

- Ensure Workers are competent and qualified by trade certification;
- Ensure Workers are trained on the provisions within the policy
- Ensure that all electrical equipment is approved for its intended use;
- Ensure Workers have the correct Personal Protective Equipment (PPE) to perform their job tasks;
- Assist Workers in deciding whether it is or is not reasonably possible to de-energize a system; and,
- Assist with assessing the potential for both electric shock and arc flash and determining the right PPE for the job task.

Workers:

- Do not perform live electrical work without receiving proper guidelines set forth by **Saturn Power Inc.** and direction by the Supervisor, including Electrical Safety Awareness training;
- Work in compliance with **Saturn Power Inc.'s** Health and Safety Policy and Program;
- Work in compliance with the Occupational Health and Safety Act and its applicable regulations;
- Use and wear the required Personal Protective Equipment (PPE), protective devices or clothing that the Employer requires to be used or worn;
- Utilize *Form 718 – Energized Electrical Work Permit* as required.

6.0 COMMUNICATION

This procedure shall be communicated to all relevant employees of **Saturn Power Inc.** through orientations, Safety Talks and is available in the Health and Safety Manual.

7.0 TRAINING

Affected workers will be trained on this procedure.

8.0 EVALUATION / REVIEW

This procedure shall be evaluated on an annual basis by Management cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

Electrical Work Permit

10.0 REFERENCE MATERIALS

- I. Ontario Regulation 851 – Industrial Establishments sections 42.1, 42.2 and 43
- II. Ontario Electrical Safety Code

42.1 (1) This section applies and section 42 does not apply if it is not practical to disconnect electrical installations, equipment or conductors from the power supply before working on, or near, live exposed parts of the installations, equipment or conductors. O. Reg. 630/94, s. 1.

(2) The worker shall use rubber gloves, mats, shields and other protective equipment and procedures adequate to ensure protection from electrical shock and burns while performing the work. O. Reg. 630/94, s. 1.

(3) If the installation, equipment or conductor is operating at a nominal voltage of 300 volts or more, a suitably equipped competent person who is able to recognize the hazards and perform rescue operations, including artificial respiration, shall be available and able to see the worker who is performing the work. O. Reg. 630/94, s. 1.

(4) Subsection (3) does not apply to equipment testing and trouble-shooting operations. O. Reg. 630/94, s. 1.

42.2 Work performed on electrical transmission systems or outdoor distribution systems rated at more than 750 volts shall be performed in accordance with,

- (a) the *Rule Book, Electric Utility Operations* published in 1990 by the Electrical Utilities Association of Ontario, Incorporated; or
- (b) the *Ontario Hydro Corporate Safety Rules and Policies*, dated 1994. O. Reg. 630/94, s. 1; O. Reg. 144/99, s. 3.

43. Tools and other equipment that are capable of conducting electricity and endangering the safety of any worker shall not be used in such proximity to any live electrical installation or equipment that they might make electrical contact with the live conductor. R.R.O. 1990, Reg. 851, s. 43.



LOCK OUT PROCEDURE

Title: LOCK OUT PROCEDURE		Issue Date: September 2016
Project Safety Program Section: 29.4		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

LOCK OUT PROCEDURE

1.0 PURPOSE

To ensure that all energy sources are: isolated and effectively controlled prior to any work being done *on or in close proximity* to machinery or equipment.

2.0 SCOPE

This policy / procedure applies to all Employees and Contractors involved in managing, administering or completing work on energized equipment.

This also applies to all energy sources: kinetic, chemical, potential, thermal, electrical and radiation.

3.0 DEFINITIONS

Authorized Employee - An Employee who is qualified and assigned to perform lockout procedures as a result of their level of knowledge, training, and experience. He or She has received Lockout Training, including comprehension of equipment-specific lockout procedures.

Energy Source - Any source of; electrical, mechanical, hydraulic, pneumatic, chemical, thermal, gravitational, stored or other energy.

Lockout - Placement of a lock on an energy-isolating device in accordance with an established procedure, thereby indicating that the energy-isolating device is not to be operated until removal of the lock and lockout procedure has been completed.

Lockout Device - A mechanical means of locking out an energy source using an individually keyed lock to secure an energy-isolating device in a position that prevents movement of a machine, equipment, or process.

4.0 STANDARDS / PROCEDURES

PERFORMING MAINTENANCE IN EQUIPMENT THAT IS NOT LOCKED OUT IS STRICTLY PROHIBITED.

Isolation of energy sources is a five-step process:

1. Lock
2. Tag
3. Clear
4. Try
5. Release

LOCK

The person responsible of the work will notify all affected personnel of the extent and duration of the shutdown of the machinery, equipment or process.

The person in charge of the work will ensure that all machinery, equipment or process is shut down, locked and tagged.

Each individual working on or near the equipment must place their assigned lock and tag at the lockout point(s). This may include a scissor clasp or a lock box if the machinery, equipment or process does not allow enough space for each individual to lock out.

TAG

A tag must be securely attached to each lock.

The tag used must be made of non-conductive material with the words “DO NOT OPERATE” written on it, the name of the worker and the date of the lockout.

CLEAR

The person in charge of the work will clear the machinery, equipment or process of any hazards or people.

TEST / TRY

1. Once the person in charge of the work is assured that all sources of energy are locked-out and tagged and all is clear, they will try to activate the equipment:
2. Make certain everyone stands clear then try to operate the equipment controls (push buttons, switches, etc.) to ensure the machinery or equipment or process will not activate or move.
3. Ensure the machinery/equipment/process controls are returned to the off position immediately after the test.
4. Relieve or restrain any residual or stored energy.
5. Ground electrical energy stored in capacitors.
6. Test with appropriate test equipment and visually check to determine that all energy sources have been neutralized.

RELEASE

If it is assessed that everything is properly locked out, the person in charge will release the equipment for work to be done.

Equipment removed from service because of safety concerns must be locked, tagged, cleared and tried by the person in charge of the work to ensure it cannot be used. The individual worker's lock and tag must remain on any system that was rendered inoperable until such time that:

1. They complete the repair of the system and it is safe to operate
2. They turn over responsibility for the system to another person, and the lock and tag of the individual accepting the responsibility is properly affixed to the equipment.

LOCKS CAN ONLY BE REMOVED BY THE OWNER!

If a worker fails to remove a lock and tag and leaves the work area, and can be reached, they may authorize the Supervisor to cut off the lock. If the worker cannot be reached, the Supervisor after checking that the equipment can be operated safely may authorize the removal of the lock and tag. A written record of such removal must be kept on file.

The worker is to be contacted regarding their lock being removed at the earliest opportunity to ensure that they do not return to work on the equipment and not realize that their lock has been removed and the equipment may be energized.

It is not permitted to remove another workers lock unless the preceding steps were followed.

STORED ENERGY HAZARDS

Can include electrical current, spring-loaded devices, suspended weight (gravity), compressed air or gases.

Each type of energy source requires an appropriate means of isolation.

COMPLETION OF MAINTENANCE / REPAIRS

Upon completion of the maintenance / repairs, the person in charge of the work will make a final inspection to ensure that all repairs are completed; all guards etc. have been replaced.

All personnel are informed prior to the equipment being re-energized. The locks are removed in reverse sequence (the last person to put on the lock will be the first to remove it and the first person to put on the lock will be the last to remove it) and the equipment brought on-line by the person in charge of the work.

EQUIPMENT REQUIRING SPECIFIC HANDLING

Some equipment may require a specific "Isolation" procedure to ensure all sources of energy are de-energized.

The Supervisor will ensure that the equipment, machinery and / or process are identified and an appropriate specific "Isolation" procedure is in place and followed

MULTIPLE PERSON LOCK-OUT

Each person working on the machinery, equipment or process is responsible for locking out the energy-isolating device. Multiple locks can be applied with scissor adapters.

The first worker who applies the lock (must be an authorized company employee) must make sure the lockout is effective and the equipment will not start. When each worker has finished maintenance, the worker removes only his or her own personal lock. The worker who removes the last lock (who is the worker who applied the first lock) should check that all workers are in the clear and that the equipment can be safely restarted.

MULTIPLE POINT LOCK-OUTS

To effectively lockout equipment with multiple energy sources, you must lockout all energy-isolating devices.

An equipment, machinery or process specific lockout procedure will be required in order to identify all the lockout points.

ISOLATION OF ELECTRICAL ENERGY SOURCES

Electricity is the most common energy source that needs to be locked out.

For plugged in type of equipment, a personal lock is not necessary if the person doing the work keeps the plug in view and under control (Coiled) while working on the equipment. If the worker must leave the equipment, then a lock / tag are required. Before doing any work, the worker must ensure that all moving parts have stopped and are secured.

For hard-wired equipment, the equipment or machine will need to be shut-off making sure that all moving parts have come to a complete stop.

ISOLATION BY MEANS OF START / STOP BUTTON OR OTHER CONTROL SWITCH IS NOT ACCEPTABLE

PAY PARTICULAR ATTENTION TO ENSURE ALL MULTIPLE ENERGY SOURCES ARE IDENTIFIED AND INCLUDED IN ISOLATIONS

Isolation of lighting circuits in fused /breaker panels can be achieved by removing the fuse or flipping the breaker switch to the off position and locking and tagging the breaker switch or the lighting panel door closed.

It is preferred that an Electrician removes the fuse(s) to provide additional isolation of the system(s).

Following isolation, the systems are to be locked and tagged.

WHEN OPERATING A POWER DISCONNECT SWITCH, EMPLOYEES MUST, LOOK AWAY FROM THE BOX, STAND TO ONE SIDE OF THE SWITCH BOX, ON THE SIDE OF THE HANDLE, AND USING THEIR LEFT HAND, OPEN OR CLOSE THE SWITCH.

5.0 ROLES / RESPONSIBILITIES

Supervisor:

- Ensure that all potential hazards are evaluated, the necessary precautions taken, and that personnel assigned to isolate energy sources are properly trained prior to any work being done on machinery, equipment or process;
- Ensure personal locks / tags have been provided to employees;
- Implement written procedures where required; and,
- Administer this procedure and verify that it is adhered to.

Worker:

- Become familiar with and adhere to this policy and any equipment-specific lock out procedure which may apply to their work; and,
- Must not work on any equipment which has not been adequately isolated and confirmed (tested) to be in a zero energy state, unless it is for the purpose of diagnostic testing or troubleshooting, in which case, adequate controls and protection must be implemented and maintained.

6.0 COMMUNICATION

This procedure will be communicated to all Supervisors and Employees through:

- Orientation; and,
- Posting / meetings as deemed necessary by Management.

7.0 TRAINING

Training Requirements:

Personnel who are required to isolate energy sources will receive training.

Frequency of Training:

The initial training will be provided before an employee is required to isolate an energy source. Follow-up training will be provided as needed based on management decision and / or incident occurrence.

Training is provided for all new machinery, equipment or processes.

Type of Training:

The training will include classroom theory (legislative requirements, internal procedure, and specific procedures) with quiz and practice (actual isolation of machinery or equipment).

The training can also be equipment, machinery or process specific.

8.0 EVALUATION / REVIEW

This procedure will be reviewed annually by Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Training Record

10.0 REFERENCE MATERIALS

- I. Ontario Regulation 213/91 – Construction Projects section 190

190. (1) This section applies if work is to be done on or near energized exposed parts of electrical equipment or of an electrical installation or conductor. O. Reg. 627/05, s. 7.

(2) An employer shall,

- (a) establish and implement written measures and procedures for complying with this section to ensure that workers are adequately protected from electrical shock and burn; and
- (b) make a copy of the written measures and procedures available to every worker on the project. O. Reg. 627/05, s. 7.

(3) The worker shall follow the written measures and procedures. O. Reg. 627/05, s. 7.

(4) Subject to subsection (9), the power supply to the electrical equipment, installation or conductor shall be disconnected, locked out of service and tagged in accordance with subsection (6) before the work begins, and kept disconnected, locked out of service and tagged while the work continues. O. Reg. 627/05, s. 7.

(5) Hazardous stored electrical energy shall be adequately discharged or contained before the work begins and shall be kept discharged or contained while the work continues. O. Reg. 627/05, s. 7.

(6) The following rules apply to the tagging of the power supply under subsection (4):

1. The tag shall be made of non-conducting material and shall be installed so as not to become energized.
2. The tag shall be placed in a conspicuous location and shall be secured to prevent its inadvertent removal.
3. The tag shall indicate,
 - i. why the equipment, installation or conductor is disconnected,

- ii. the name of the person who disconnected the equipment, installation or conductor,
- iii. the name of the person's employer, and
- iv. the date on which the equipment, installation or conductor was disconnected.

4. The tag shall not be removed unless it is safe to do so. O. Reg. 627/05, s. 7.

(7) A worker, before beginning work to which this section applies, shall verify that subsections (4) and (5) have been complied with. O. Reg. 627/05, s. 7.

(8) If more than one worker is involved in work to which this section applies, a means shall be provided to communicate the purpose and status of,

- (a) the disconnecting, locking out and tagging of the electrical equipment, installation or conductor; and
- (b) the discharging and containment of any hazardous stored electrical energy. O. Reg. 627/05, s. 7.

(9) Locking out is not required under subsection (4) if,

- (a) in the case of a conductor, it is adequately grounded with a visible grounding mechanism;
- (b) in the case of equipment or an installation,
 - (i) the power supply is less than 300 volts, the equipment or installation was not manufactured with provision for a locking device for the circuit breakers or fuses, and a written procedure has been implemented that is adequate to ensure that the circuit is not inadvertently energized, or
 - (ii) the power supply is 300 or more volts but not more than 600 volts, the equipment or installation was not manufactured with provision for a locking device for the circuit breakers or fuses, a written procedure as to how work is to be done has been implemented and the work is supervised by a competent worker to ensure that the circuit is not inadvertently energized. O. Reg. 627/05, s. 7.



LOCK OUT LOG

Title: LOCK OUT LOG		Issue Date: September 2016
Project Safety Program Section: 29.5		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

Site Location: _____ **Date:** _____

Supervisor Name: _____ **Telephone #:** _____

Electrical Pneumatic Hydraulic Mechanical Gravitational Thermal Chemical

Employee Name	Lock No.	Location	Date On	Time On	Date Off:	Time Off:	Comments:



HOT WORK PROCEDURE

Title: HOT WORK PROCEDURE	Issue Date: September 2016
Project Safety Program Section: 30.1	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

HOT WORK PROCEDURE

1.0 PURPOSE

This procedure is to provide consistent instruction in the area of fire safety while using portable hot work equipment including brazing, cutting, soldering, grinding and welding operations, or other spark producing or open flame devices.

2.0 SCOPE

This procedure applies to all Employees and Contractors.

3.0 DEFINITIONS

Hot Work – Any process that may generate an uncontrolled spark or flame that could be a danger to the workplace.

4.0 STANDARDS / PROCEDURES

Hot Work Permits are not required when the hot work is being performed in an area specifically designed for hot work.

In order to be an exempt area, the area shall be;

- Of non-combustible and fire resistant construction;
- Free of combustibles and flammables;
- Suitably segregated from adjacent areas;
- Equipped with fire extinguishers;
- Equipped with adequate ventilation; and,
- Inspected by a competent person prior to work beginning.

Prohibited Hot Work Areas:

- Areas, including those within a confined space, where explosive gases, vapors or dusts exist or could accumulate;
- On metal walls, ceilings or roofs built of composite, combustibles and sandwich-type panel construction or having combustible coverings;
- On containers where flammable liquids, solids or vapors could be present; and,
- On pipes or beams that are in contact with combustible walls, ceilings, roofs or partitions where heat can travel to and can cause ignition.

Personal Protective Equipment:

In addition to general PPE requirements for the workplace, where torching, brazing, soldering, cutting, welding and / or grinding activities are required, workers must wear the following, as a minimum:

- Fire resistant coveralls;
- 100% cotton-only clothing;
- Leather gloves
- CSA approved safety eyewear:
 - Welding goggles rated for appropriate welding task; and,
 - Full face shield for activities producing flying debris.
- Respiratory protection rated for the correct type of welding fume and any off-gassing of materials.

Prior to Hot Work:

- Before initiating hot work, decide whether the job can be done a different way so as to avoid the hot work;
- Mark the area (signs) so people are aware of the work to be performed;
- Obtain a Hot Work Permit;
- Complete the appropriate sections of the *Hot Work Permit*;
- Survey the site and ensure operational fire extinguishers 4A 40BC, and persons qualified to operate them are immediately available;
- Utilize weld screens to protect others in the area from welding flash and sparks.
- Ensure cutting and welding equipment are in good repair;
- Ensure all Personal Protective Equipment required is in good condition and worn;
- When conducting hot work near pipes containing flammable gas, ensure the section of pipe within 1 metre (3 feet) of the hot work is covered with wet non-combustible insulating material; and,
- **Ensure that within 35 feet (11 metres) of where the work is being performed;**
 - The floor is swept clean of combustibles;
 - Combustible floors (i.e. carpets) are wetted down or covered with fire resistant tarps/blankets;
 - There are no flammable liquids or materials present; and,
 - There are no dangerous or volatile vapors, mists, fumes or dusts.

When working on walls, partitions, floors and ceilings:

- Ensure that combustibles are moved away from the other side of the wall, floor, partition or ceiling;
- Ensure construction materials, insulation or coverings are non-combustible; and,
- Ensure adequate ventilation is achieved.

During Hot Work:

- Adequate fire watch is to be provided for the entire duration of the hot work including during lunch and breaks;
- Adequate fire extinguishing equipment shall be maintained in close proximity to the hot work for its entire duration; and,
- Store acetylene and other fuel in approved cylinders and in a secure and upright position.

After Hot Work:

- Fire watch must be provided for no less than two (2) hours after the work has stopped (or such time as may be prescribed by the Hot Work Permit);
- Work area must be monitored for 30 minutes after the job is completed, unless the client has other requirements;
- Fire extinguishing equipment must remain accessible in the area until the fire monitoring is complete; and,
- Persons completing the monitoring should conduct the final check, sign and return to the completed Hot Work Permit to the immediate Supervisor.

5.0 ROLES / RESPONSIBILITIES

Supervisor:

- All equipment required to perform hot work is maintained in good condition;
- Ensure that the precautions listed on the Hot Work Permit is understood by the person(s) performing the hot work;
- Inform outside contractors and service personnel of this procedure and all other applicable procedures;
- Verify that outside contractors have a Hot Work Permit if one is required for the work being conducted;
- Train affected individuals working under their direction in the provisions of the hot work procedure and all requirements of the hot work permit; and,
- Ensure there is a properly trained person designated to perform fire watch and fire monitoring.

Worker:

- They work in compliance with the provisions of the Act and the regulations;
- They use the equipment, protective devices or clothing required to be worn or used;
- They report to their immediate Supervisor the absence of or defect in any equipment or protective device of which the worker is aware and which may endanger himself, herself or another worker; and,
- They report to their immediate Supervisor any contravention of the act, regulations or this procedure or the existence of any hazard of which he / she knows.

6.0 COMMUNICATION

This procedure shall be communicated to all relevant employees through Safety Talks and is available in the Health and Safety Program.

7.0 TRAINING

All relevant employees will be required to receive training on Hot Work procedures and the Hot Work Permit.

8.0 EVALUATION / REVIEW

This procedure will be reviewed annually by Management or as deemed necessary if an incident occurs and hot work played a factor.

9.0 FORMS / RECORDS

Training Record

Hot Work Permit

10.0 REFERENCE MATERIALS

- I. Ontario Regulation 213/07 – Fire Code
- II. Ontario Regulation 851 – Industrial Establishments Section 123
- III. Ontario Regulation 213/91 – Construction Projects Sections 52-56
- IV. NFPA 10, Portable Fire Extinguishers



HOT WORK PERMIT

Title: HOT WORK PERMIT		Issue Date: September 2016
Project Safety Program Section: 30.2		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: <i>SEE ORIGINAL FOR SIGNATURE</i>	
Approved by: Ray Roth, Vice President and General Manager	Signature: <i>SEE ORIGINAL FOR SIGNATURE</i>	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: <i>SEE ORIGINAL FOR SIGNATURE</i>	

HOT WORK PERMIT (<i>Note: Permit to be issued daily</i>)			
Name Issuing Permit: _____	Date: _____	Time: _____	
Name Receiving Permit: _____		Company: _____	
Location for Permit Area: _____		Project #: _____	
Fire Safety Precautions – Check Prior to Working			
	Yes	No	N/A
1. Cutting and/or welding equipment inspected and found to be in good repair, free of damage or defects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. A multi-purpose dry chemical, portable fire extinguisher is immediately available at the work area and is fully charged and ready for use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. A means of contacting the fire department (i.e. site telephone) must be available, accessible to person(s) conducting the cutting/welding operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Floor areas below the cutting/welding operation must be swept clean of combustible and flammable materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. All combustibles must be swept clean or removed within approximately 10 meters (35ft) of the work area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. All construction equipment fueling activities and fuel storage must be relocated at least 10 meters (35ft) from the cutting/welding operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Fire resistant shields, fire retardant material, flameproof tarpaulin or meal must cover combustible floors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Spark/slag catchers such as flameproof tarpaulins must be suspended below any elevated cutting/welding operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. All floor and wall openings must be covered to prevent sparks/slag from traveling to other unprotected areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Containers in or on which cutting/welding will take place must be purged of flammable vapors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AFTER THE WORK - The following precautions will be taken:			
<ul style="list-style-type: none"> • Person(s) must be assigned to a fire watch during and for at least 30 minutes after all cutting/welding ceases. Name: _____ • Fire watch person(s) are to be supplied with multi-purpose dry chemical, Portable fire extinguisher and trained in its use. • A means of contacting the fire department (i.e. site telephone) available and accessible to fire watch person(s) 			
Signature of Person Issuing: _____		Date: _____	
Signature of Person Receiving: _____		Date: _____	
Note: Permits are to be posted in the location of work activity and returned daily to the user.			

Title: WASHROOM FACILITIES		Issue Date: November 2016
Project Safety Program Section: 31.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

WASHROOM FACILITIES

1.0 PURPOSE

To understand and comply with the regulation as they pertain to washroom and facilities on projects.

2.0 SCOPE

This procedure applies to all **Saturn Power Inc.** Employees, Contractors, Delivery Persons and Visitors.

3.0 DEFINITIONS

Facilities - means toilet, urinal and clean-up facilities;

Service - when used as a verb, means to have waste pumped out and to have the facilities replenished where necessary.

Non-sewered flush toilet facilities - means water flush toilets or chemical flush toilets.

Chemical flush toilet – means toilets in which the toilets are not connected to a sanitary sewer system, they are equipped with a trap or a positive seal separating stored waste from the bowl, and the waste is first flushed from the bowl with water or with water containing chemical additives. Then the waste is deposited into a container and chemically treated sufficiently for the container’s maximum capacity.

Sewered toilet facilities - means water flush toilets that are connected to a sanitary sewer system and equipped with a trap in accordance with Part 7 of the Building Code.

4.0 STANDARDS / PROCEDURES

The features referred to in the definition of “non-sewered flush toilet facilities” are:

- The toilets are not connected to a sanitary sewer system;
- They are equipped with a trap or a positive seal separating stored waste from the bowl; and,
- The waste is first flushed from the bowl with water or with water containing chemical additives. Then the waste is deposited into a container and chemically treated sufficiently for the container’s maximum capacity.

Each toilet facility shall meet the following requirements:

- There shall be a toilet with an open-front toilet seat;
- There shall be a toilet paper holder and an adequate supply of toilet paper. If the facility is intended for use by female workers, there shall be a disposal receptacle for sanitary napkins;
- The facility shall afford the user privacy and protection from weather and from falling objects. There shall be a self-closing door that can be locked from inside the facility;
- The facility shall be illuminated by natural or artificial light, adequately heated, if that is possible, and adequately ventilated;
- If the facility is intended for use by males only or by females only, it shall have a sign indicating that fact;
- The facility shall be kept in good repair at all times; and,
- Separate toilet facilities shall be provided for male and female workers, unless the facilities are intended to be used by only one worker at a time.

When water flush toilets or non-recirculating chemical flush toilets are provided, the minimum number of toilets required at the project is as follows:

Minimum number of toilets	Number of workers regularly employed at the project
1	1-15
2	16-30
3	31-45
4	46-60
4, plus 1 additional toilet for each additional group of 15 or fewer workers	61 or more

When toilets other than water flush toilets or non-recirculating chemical flush toilets are provided, the minimum number of toilets required at the project is as follows:

Minimum number of toilets	Number of workers regularly employed at the project
1	1-10
2	11-20
3	21-30
4	31-40
4, plus 1 additional toilet for each additional group of 15 or fewer workers	41 or more

Each single-toilet facility shall be provided with its own clean-up facility.

- The facility shall have a wash basin with running water. Both hot and cold running water shall be available if reasonably possible. Soap or hand cleanser shall be provided. Paper towels or a hand dryer shall be provided. If paper towels are provided, there shall be a waste disposal receptacle nearby.
- If it is not reasonably possible to have a wash basin with running water at a clean-up facility, hand cleanser that can be used without water shall be provided instead.

5.0 ROLES / RESPONSIBILITIES

Constructor:

- Shall ensure that facilities are provided or arranged for workers before work has started at a project, and that workers at the project have reasonable access to these facilities;
- Shall ensure that the facilities are located within 180 metres horizontally of the work area of the project;
- Shall inform workers of the location of the facilities, and post the location of the facilities in a conspicuous place at the project if it is practical to do so; and,
- Shall ensure that the facilities will be serviced, cleaned and sanitized as frequently as necessary to maintain them in a clean and sanitary condition:
 - The constructor shall keep at the project for the duration of the project a record of the servicing, cleaning and sanitizing of the facilities.

Supervisor:

- Shall use the facilities as required, respectfully and hygienically; and,
- Report any deficiencies or concerns with the facilities to the Constructor.

Worker:

- Shall use the facilities as required, respectfully and hygienically; and,
- Inform the Supervisor of any deficiencies or concerns with the facilities.

6.0 COMMUNICATION

Supervisors and Workers will be provided with information regarding the washroom facilities during orientation. Information will also be posted on communication boards.

7.0 TRAINING

No training is required.

8.0 EVALUATION / REVIEW

Evaluation of this procedure will be done on an annual basis by the Project Manager in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

Record of Service, Cleaning and Sanitization.

10.0 REFERENCE MATERIALS

- I. Ontario Regulation 213/91, sec. 29.
- II. Ontario Building Code, part 7.

Title: SIGNAGE		Issue Date: November 2016
Project Safety Program Section: 32.1		Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE	
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE	

SIGNAGE

1.0 PURPOSE

To define what signage is required on Saturn Power Inc. construction projects.

2.0 SCOPE

This procedure applies to all **Saturn Power Inc.** Employees, Contractors, Delivery Persons and Visitors.

3.0 DEFINITIONS

N/A

4.0 STANDARDS / PROCEDURES

- A sign shall contain the word “DANGER” written in legible letters that are at least 150 millimetres in height and shall state that entry by any unauthorized person to the area where the hazard exists is forbidden.
- Signs meeting the requirements above shall be posted in prominent locations and in sufficient numbers to warn workers of a hazard on a project.
- Without limiting the generality of the location of signs, signs shall be posted:
 - adjacent to a hoisting area;
 - under a boatswain’s chair, a suspended scaffold or a suspended platform;
 - at the outlet from a chute;
 - at a means of access to a place where there may be a noxious gas, vapour dust or fume, noxious substance or a lack of oxygen; and
 - where there is a potential hazard from an energized overhead electrical conductor at more than 750 volts.
- No person shall enter an area in which a sign is posted other than a worker authorized to work in the area.
- Temporary barricades, safety tape and signs will be erected to warn or protect workers whenever hazards are encountered on the project, including:
 - Floor or wall openings;
 - Working above other workers;
 - Open excavations/trenches;
 - Startup of operations and testing equipment/procedures;
 - Working from a suspended platform;
 - Overhead work/loads;

- Possible exposure to electricity;
- Hazardous chemical processes;
- Falling material;
- Areas of high noise;
- Vehicle travel routes / Exposure to vehicular traffic;
- Areas where an elevated work platform will be used;
- Low light work areas; or,
- Unguarded equipment.
- The type of barrier and signage shall be secured in order to appropriately protect workers from risks associated with the particular hazard. All barriers shall use a color and size appropriate to identify and warn of the nature of the hazards.
- **Yellow Caution Tape around an area:** A hazard exists in the area and only those working within the area can cross the boundary.
- **Red Warning Tape across an area:** A hazard exists in the area where no one is permitted to enter.
- Signs shall be posted on site to communicate:
 - The location of the site trailer (if applicable);
 - Muster points;
 - First Aid stations;
 - Speed Limits on site;
 - Any mandatory PPE requirements for the site; and,
 - Any other hazards that may require awareness throughout site.

5.0 ROLES / RESPONSIBILITIES

Employer:

- Take every precaution reasonable in the circumstances for the protection of a worker, including providing appropriate signage where applicable; and
- Adjust signage requirements as hazards on site change.

Supervisor:

- Ensure all signage is maintained in good condition.
- Ensure all workers, visitor, contractors and delivery persons follow posted signage on site.

Worker:

- Follow all and obey signage on site.

6.0 COMMUNICATION

This procedure shall be communicated to all relevant employees of **Saturn Power Inc.** through orientations, Safety Talks and is available in the Health and Safety Manual.

7.0 TRAINING

Training shall be provided to all employees during orientation, and updated as required.

8.0 EVALUATION / REVIEW

Evaluation of this procedure will be done on an annual basis by the Project Manager in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee.

9.0 FORMS / RECORDS

N/A

10.0 REFERENCE MATERIALS

- I. Occupational Health and Safety Act, sec. 25, 26, 27 and 28
- II. Ontario Regulation 213/91, sec. 44.



SIGN LIST – CONSTRUCTION

Title: SIGN LIST - CONSTRUCTION	Issue Date: November 2016
Project Safety Program Section: 32.2	Revision Date: N/A
Approved by: Doug Wagner, President	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Ray Roth, Vice President and General Manager	Signature: SEE ORIGINAL FOR SIGNATURE
Approved by: Jeremy Goertz, Vice President Construction/Business Development	Signature: SEE ORIGINAL FOR SIGNATURE

SIGNS TO BE POSTED ON SITE UNDER CONSTRUCTION

- Site office located... (details to be provided)
- Report to site office upon entering
- First Aid Station located...(details to be provided)
- Truck Drivers **DO NOT** back up without a signal person
- **DANGER**
Entry by any unauthorized person onto this site is prohibited





saturnpower



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

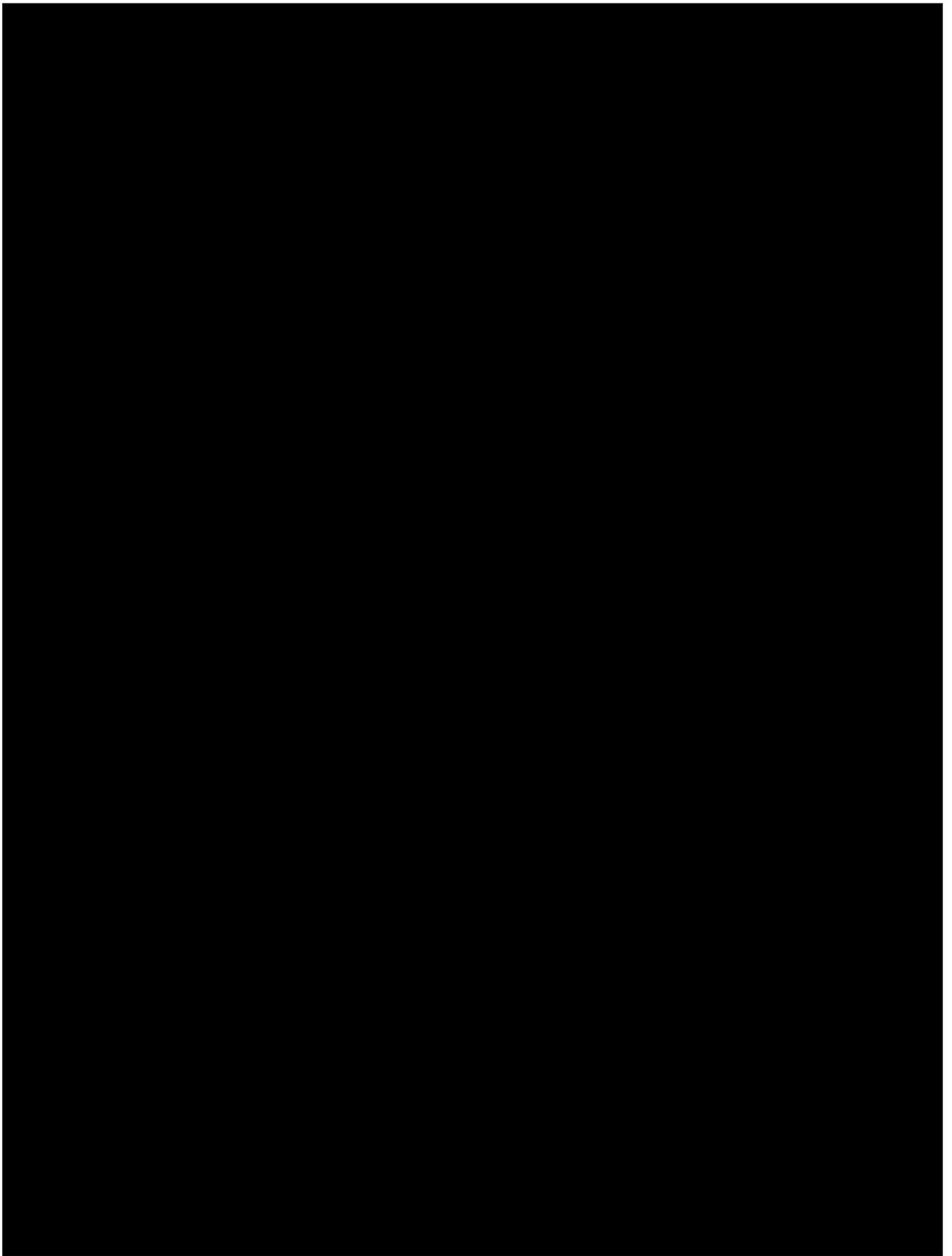
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



[REDACTED]

[Redacted text block]

[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]	[Redacted]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



saturnpower



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[REDACTED]

[Redacted text block]

		[Redacted]	[Redacted]
[Redacted]		[Redacted]	[Redacted]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]
------------	------------	------------

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



saturnpower





[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]







[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



saturnpower





[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



saturnpower



████████████████████
████████████████████
████████████████████

"Private and Confidential"

[Redacted]

[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]

"Private and Confidential"



Execution Copy

Power Purchase Agreement

For

Solar Energy

from 6 MW_{AC} Facility at the Finger Point Location

St. David's Island, Bermuda

Between

[REDACTED]

[REDACTED]

And

Saturn Solar Bermuda 1 Ltd.

(Seller)

Table of Contents

1. Definitions and Interpretation	4
2. Consequences of Signature Date and Conditions to Effective Date	11
3. Achievement of Commercial Operation Date	13
4. Failure to Achieve Commercial Operation Date	13
5. Connection Agreement	14
6. Construction and Development of the Facility	14
7. ██████ Verification	14
8. Payment of Taxes	14
9. Metering System	14
10. Meter installation and sealing	15
11. Meter Reading.....	15
12. Meter Testing	15
13. Insurance	16
14. Performance Bond	16
15. Sale and Purchase of Energy Output	16
16. Compliance with Technical Quality Requirements	16
17. ██████ Bears Risk of Grid Events.....	17
18. Billing	17
19. Notification and Reporting	18
20. Warranties of the Parties	18
21. Term of Agreement and Clauses Surviving Termination.....	19
22. Events of Default.....	20
23. Termination by Seller after ██████ Event of Default	21
24. Termination by ██████ after Seller Event of Default.....	21
25. Force Majeure Event	22
26. Termination for Continuing Force Majeure Event.....	25
27. Extraordinary Adjustments to the Energy Output Price	25
28. Limitation on Liability	26
29. Dispute Resolution Provisions	27
30. Technical Disputes	27
31. Arbitration.....	29
32. Amendment.....	29
33. Waivers	30
34. Confidential information.....	30
35. Notices	31
36. Severability.....	32
37. Assignment and Successors	32
38. Relationship of the Parties.....	33

39. Governing law	33
Schedule 1: Key Terms and Conditions	34
1. The Energy Output Price.....	34
2. Term and Key Milestones	34
3. Liability, Interest Rates and Similar Matters	34
Schedule 2: Authorisations	36
Schedule 3: Technical Schedule	37
1. Defined terms	37
2. Technical Obligations.....	37
Schedule 4: Timing Sheet.....	38
Schedule 5: Meter Specifications and Telecommunications.....	40
1. Main Metering System and Check Metering System Requirements	40
2. Interpretation of Metering System Readings	41
3. Testing	41
Schedule 6: Determination of Energy Output	42
1. Reading of Meters.....	42

Execution Copy

Preamble

This Power Purchase Agreement (the "Agreement") relating to the solar photovoltaic generation facility to be developed on property known as the Finger on St. David's Island, Bermuda (the "Project") is made and entered into on [REDACTED] between:

- [REDACTED] (herein referred to as "[REDACTED]" and
- Saturn Solar Bermuda 1 Ltd. (herein referred to as the "Seller"),

herein referred to as the Parties.

Introduction

- A. [REDACTED] invited proposals from certain qualified developers to undertake the Project;
- B. The Seller is the successful tenderer;
- C. The Seller will:
 - i. Obtain finance for the Project;
 - ii. Design and construct the Facility;
 - iii. Operate and maintain the Facility; and
 - iv. Supply electrical energy to [REDACTED] on the terms and conditions of this Agreement;
- D. [REDACTED] will purchase such electrical energy generated by the Seller under the terms and conditions of this Agreement;
- E. This Agreement shall be a Power Purchase Agreement for the purposes of the Electricity Act 2016.

The Parties agree as follows:

1. Definitions and Interpretation

1.1 Definitions

"Act" means the Electricity Act 2016;

"Agreement" means this power purchase agreement, inclusive of all schedules, as may be amended from time to time as provided herein;

"Agreement for Lease" means the agreement for lease between [REDACTED] and the Seller dated [REDACTED];

"Arbitration" means arbitration proceedings pursuant to Clause 31;

"Authorisations" means the authorisations listed in Schedule 2;

"[REDACTED]" has the definition given to that term in the preamble to this Agreement;

- (b) any change in Control in respect of the Seller;
- (c) any other arrangements that have or that result in the same effect as those described above;

“Check Metering System” means the meter used to check the measurement and recording of Energy Output, described further in Schedule 5;

“Commercial Operation” has the definition given to that term in Clause 3.1;

“Commercial Operation Date” means the date on which Commercial Operation occurs;

“Commercial Operation Delay Payment” has the definition given to that term in Schedule 1;

“Conditions” means the Seller Conditions and [REDACTED] Conditions;

“Connection Agreement” means the solar PV plant connection agreement to be entered into between the Seller and [REDACTED]

“Connection Facilities” has the definition given to that term in the Connection Agreement;

“Control” means, in relation to a body corporate (of any kind):

- (a) control or influence of, or having the capacity to control or influence, the composition of the board of directors;
 - (b) being in a position to cast, or control the casting of, more than 20 percent of the maximum number of votes that may be cast at a general meeting,
- of that body corporate (whether alone or together with any related company).

“Deemed Generated Energy” [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

“Default Interest Rate” has the definition given to that term in Schedule 1;

“Delivery Point” has the definition given to that term in Schedule 3;

“Dispute” means any difference, disagreement, failure to perform or deliver, or failure to resolve any contentious issue of whatever nature and howsoever arising under, out of or in connection with or relating to this Agreement between [REDACTED] and Seller;

“Dispute Resolution Provisions” means the dispute resolution provisions in this Agreement, including Clauses 29 to 31;

“Effective Date” means the date on which notice is given pursuant to Clause 2.10;

“Energy Output” means Net Energy delivered from the Facility by Seller for sale to [REDACTED] at the Delivery Point, determined in accordance with this Agreement;

“Energy Output Price” has the definition given to that term in Schedule 1;

“EPC Contract” means the agreement in relation to the Project dated on or about the date of this Agreement;

“Escrow Account” has the definition given to that term in Schedule 1;

“Expert” is the expert appointed pursuant to Clause 30.1 who must satisfy the requirements of Clause 30.2;

“Expiry Date” means the end of the Term of the Agreement, measured from the Commercial

Operation Date, or the date the Agreement is terminated if terminated earlier pursuant to its terms;

“Extraordinary Adjustment Threshold” has the definition given to that term in Schedule 1;

“Facility” has the definition given to that term in Schedule 3;

“Financial Close” means the date on which the Financing Agreements shall have been entered into by the Seller and the other parties thereto, and all conditions for the initial borrowing by the Seller under the Financing Agreements shall have been satisfied or waived by the relevant parties thereunder;

“Financing Agreements” means any debt facility agreement or other agreement for the provision of financing to the Seller;

“Force Majeure Event” has the definition given to that term in Clause 25;

“~~██████████~~” means the ██████████;

“██████████” means any department, authority, instrumentality, agency or other relevant entity of the ██████████

“Grid” means the transmission and distribution system operated by ██████████ (having the same definition as the BETDN in the Connection Agreement);

“Grid Code” means the Grid Code as published and amended by ██████████ from time to time or in the absence of a published code, the standards as approved by ██████████ and the Regulatory Authority;

“Grid Event” means any constraint, curtailment, unavailability, interruption, breakdown, inoperability, or failure of or disconnection from the whole or any part of the Grid, including as a result of any instruction received by Seller from ██████████ to reduce or limit the Energy Output of the Facility, that is not caused or contributed to by any Force Majeure Event or act or omission of the Seller or its contractors;

“Improper Payment” means any payment not expressly contemplated by a Project Agreement made to any employee or agent of the ██████████ with the intention of influencing a ██████████ decision related to or in connection with a Project Agreement;

“Implementation Agreement” means the agreement between Seller and the ██████████ in relation to the Project dated on or about the date of this Agreement;

“Invoice” means an invoice sent by Seller to ██████████ pursuant to Clause 18 ;

“kV” means kilovolts or 1,000 volts;

“kW” means a kilowatt or 1,000 watts;

“kWh” means one (1) kilowatt hour or one unit;

“Laws” means any of the following applying to ██████████: national laws, local law orders, rules regulations, bye-laws, statutory orders, statutory reversionary orders, executive orders, decrees, policies, judicial decisions, notifications, administrative decisions or other similar directives made pursuant thereto, or legally binding instructions, policies, guidelines, codes (industry or otherwise) or standards issued by any ██████████, as any of them may be amended from time to time;

"Late Payment Period" means [REDACTED]

"Lease" means the lease related to the land required for the Project to be entered between [REDACTED] and the Seller pursuant to the Agreement for Lease;

"Lender" means the banks and other financial institutions party to the Financing Agreements including any security agent or trustee;

[REDACTED]

[REDACTED]

"Main Metering System" means the main metering system used to measure and record Energy Output, described further in Schedule 5;

"Metering System" means the Main Metering System and Check Metering System and all associated equipment;

"Month" means a calendar month and "Monthly" refers to the same;

"MW" means a megawatt or 1000 kilowatts or 1,000,000 watts;

"MWh" means one (1) megawatt hour;

"Net Energy" means the sum of the electrical energy, measured in kWh or MWh, generated by the Facility and delivered by the Seller to [REDACTED] at the Delivery Point, less any imports of electricity similarly measured;

"Performance Bond" has the definition given to that term in Schedule 1;

"Permitted Grid Event Threshold" has the definition given to that term in Schedule 1;

"Price Adjustment Application" means a price adjustment application made pursuant to Clause 27;

"Project Agreements" means

- (a) this Agreement;
- (b) the Agreement for Lease;
- (c) the Lease;
- (d) the Implementation Agreement;
- (e) the Connection Agreement;
- (f) the EPC Contract;

"Prudent Utility Practice" means, in relation to either Party, generally accepted design, practices, methods and operation of electrical power, generation, transmission and distribution systems and related systems, to achieve safety, dependability, efficiency and economy and to meet utility and industry codes, standards and regulations;

"Reactive Power" is the product of voltage and current and the sine of the phase angle between them measured in units of volt-amperes reactive and standard multiples thereof;

"Regulatory Authority" is the entity created pursuant to the Regulatory Authority Act of 2011, or any successor agency or entity of similar jurisdiction.

"Required Insurance" has the definition given to that term in Schedule 1;

"SCADA" means Supervisory Control and Data Acquisition, in the context of this Agreement being a system capable of monitoring the Facility and remotely retrieving data recorded by the Metering System;

"Scheduled Commercial Operation Date" shall have the definition given to that term in Schedule 1, as amended pursuant to this Agreement including pursuant to Clauses 4.4., and 25.13(a);

"Scheduled Outage" shall have the same meaning as set forth in the Connection Agreement;
"Seller" has the definition given to that term in the preamble to this Agreement;

"Seller Bank Account" has the definition given to that term in Schedule 1, or as otherwise nominated from time to time.

"Seller Conditions" has the definition given to that term in Clause 2.5;

"Signature Date" means the date on which both Parties have validly signed and executed this Agreement;

"Site" means the area of land that is the subject of the Agreement for Lease and the Lease;

"Target Effective Date" has the definition given to that term in Schedule 1;

"Taxes" means all taxes, duties, imposts and excises, and all other charges of a similar nature to the foregoing;

"Technical Dispute" has the definition given to that term in Clause 29.4;

"Technical Quality Claim Threshold" has the definition given to that term in Schedule 1;

"Tender Process" means the tender process for the Project through which the Seller was selected to enter into this Agreement;

"Term" has the definition given to that term in Schedule 1;

"Termination Notice" means a notice that effects the Termination of this Agreement pursuant to Clause 23.1(e), 24.1(e), or 26.1 setting out full particulars of the event leading to the termination;

"US Dollars" means the lawful currency of the United States of America.

1.2 Interpretation

- (a) References in the singular shall include references in the plural and vice versa, and words denoting natural persons shall include corporations and any other legal entity and vice versa;
- (b) References to the word "including" are to be construed without limitation;
- (c) References to this Agreement shall include a reference to all Schedules and

Appendixes hereto, as the same may be amended, modified, supplemented or replaced from time to time; and

- (d) References to any agreement, document, instrument or Law shall mean such agreement, document, instrument or Law as the same may be amended, modified, supplemented or replaced from time to time;
- (e) The headings and paragraph numbers are inserted for convenience only and are to be ignored for the purposes of construction; and
- (f) Calculations carried out pursuant to this Agreement shall unless otherwise stated be rounded to two (2) decimal places.

“US Dollars” means the lawful currency of the United States of America.

2. Consequences of Signature Date and Conditions to Effective Date

- 2.1 Each Party shall use all reasonable endeavours to satisfy the Conditions for which it is responsible prior to the Target Effective Date.
- 2.2 The obligations in this Clause 2 shall be binding on the Parties from the Signature Date, and any Dispute shall be settled in accordance with the Dispute Resolution Provisions.
- 2.3 Clause 20 (warranties of the Parties) shall be binding on the Parties from the Signature Date.
- 2.4 Except as provided in this Clause 2, this Agreement shall come into full force and effect on the Effective Date.
- 2.5 Each of the following is a “Seller Condition”:

- (a) [Redacted]
- (b) [Redacted]
- (c) [Redacted]
- (d) [Redacted]
- (e) [Redacted]
- (f) [Redacted]
- (g) [Redacted]

2.12 Where the Effective Date does not occur on or before [REDACTED] either Party may terminate this Agreement.

2.13 Each Party shall use all reasonable endeavours to execute the Connection Agreement no later than [REDACTED] following the date of execution of this Agreement. In the event that this does not occur, either Party may terminate this Agreement.

3. Achievement of Commercial Operation

3.1 Commercial Operation shall occur on the completion of the following:

- (a) The satisfaction of the Conditions Precedent in Clause 4.1 of the Connection Agreement; and
- (b) Completion pursuant to the Agreement to Lease, as defined in the Agreement for Lease.

4. Failure to Achieve Commercial Operation Date

4.1 In the event that the Commercial Operation Date does not occur on or prior to the Scheduled Commercial Operation Date, liquidated damages shall be payable by the Seller to [REDACTED] in the amount of the Commercial Operation Delay Payment for each day that the Commercial Operation Date is delayed beyond the Scheduled Commercial Operation Date. For clarity, this obligation is subject to:

- (a) Any amendment of the Scheduled Commercial Operation Date pursuant to this Agreement; and
- (b) The occurrence of a Force Majeure Event.

4.2 [REDACTED] shall have the right to draw amounts owing pursuant to Clause 4.1 from the Performance Bond.

4.3 The Parties acknowledge and confirm that the liquidated damages payable under Clause 4.1 represent a genuine pre-estimate of the likely cost to and losses suffered by [REDACTED] as a result of the Commercial Operation Date occurring after the Scheduled Operation Date.

4.4 If [REDACTED] breaches its obligations under the Connection Agreement related to the occurrence of the Commercial Operation Date, the Scheduled Commercial Operation Date shall be extended until such time as [REDACTED] has complied with such obligations. For the period of any such extension, [REDACTED] shall pay Seller for Deemed Generated Energy as if the period of the extension was a Grid Event (using Formula 3 of the definition of Deemed Generated Energy); provided, however, that [REDACTED] will only be liable for such Deemed Generation if Seller's Facility otherwise would have been able to commence Commercial Operation in respect of the relevant day in the period of the extension. For clarity, the payment by the Seller to [REDACTED] of amounts pursuant to Clause 4.1 is subject to Clauses 28.2 and 28.3.

4.5 If Commercial Operation is not achieved by [REDACTED] [REDACTED] either Party may terminate this Agreement with the effect that no further amounts shall arise and be owing pursuant to Clause 4.1 (Liquidated Damages) or Clause 4.4 on and from the date of such termination. For clarity, any amounts

owing prior to the date of termination, including without limitation liquidated damages, remain owing and payable.

5. Connection Agreement

- 5.1 All costs associated with the design, procurement, construction, installation, operation and maintenance of the Connection Facilities shall be the responsibility of the Seller.
- 5.2 Any future changes, relocations, additions or modifications whatsoever to the Connection Facilities, or any rearrangements or reinforcement of the Connection Facilities that may become necessary to meet the changing requirements or conditions required due to the operation of the Facility, shall be the Seller's responsibility and at its expense.
- 5.3 For the avoidance of doubt, the provisions of this Clause 5 are subject to the provisions related to Change in Law in the Agreement.

6. Construction and Development of the Facility

- 6.1 Seller shall, prior to the Scheduled Commercial Operation Date:
 - (a) design, construct, erect, commission, complete and test the Facility and the Connection Facilities in accordance with this Agreement, the Agreement for Lease, the Connection Agreement, and Prudent Utility Practices;
 - (b) at its own cost, obtain all Authorisations required and not already obtained pursuant to Clause 2.5(b) and maintain all Authorisations in full force and effect during the Term of this Agreement;
 - (c) commence the supply of Energy Output.
- 6.2 The Seller shall share with █████ all information with regard to the Connection Facilities as is reasonably necessary to enable █████ to satisfy its obligations under the Project Agreements.

7. █████ Verification

- 7.1 The Seller shall provide entry to the Facility at reasonable times to █████ or █████ representative for inspection and verification of the Facility and for █████ to confirm the Seller's compliance with its obligations under this Agreement.
- 7.2 █████ indemnifies the Seller from any direct loss caused by any act of █████ or its representatives that enter the Facility pursuant to Clause 7.1.

8. Payment of Taxes

- 8.1 The Seller shall pay all Taxes imposed on the sales of Energy Output.

9. Metering System

- 9.1 The Seller and █████ shall follow and be bound by the Grid Code installation, testing, calibration, and reading of meters and all related matters.

10. Meter installation and sealing

- 10.1 [REDACTED] shall, at its own cost and expense, install, own, maintain, replace, test and calibrate the Metering System at the Delivery Point.
- 10.2 The Metering System shall have the functional capability to determine the Energy Output as set out in Schedule 5 of this Agreement.
- 10.3 [REDACTED] undertakes to provide Seller access to the Metering System for the installation of any SCADA monitoring equipment that Seller may at its own expense install.
- 10.4 The Metering System shall be jointly sealed. A Party shall give at least [REDACTED] [REDACTED] advance notice to the other Party of its intention to break a seal on any part of the Metering System, and may only break such a seal when the relevant part of the Metering System is inspected, tested or adjusted in accordance with this Agreement. If the other Party when served with the notice does not appear at the designated time in the notice, the Party wishing to break the seals may proceed but shall provide written explanation to the other Party within [REDACTED] of such breaking of the seals.

11. Meter Reading

- 11.1 The Main Metering System and Check Metering System shall be read Monthly by the Parties in accordance with Schedule 6.
- 11.2 The Monthly meter readings shall be used to determine Energy Output in accordance with Schedules 5 and 6.

12. Meter Testing

- 12.1 [REDACTED] shall initially test the Metering System at the Delivery Point for accuracy in accordance with Schedule 5 at least [REDACTED] prior to Commercial Operation.
- 12.2 [REDACTED] shall have the Metering System tested in accordance with the requirements of Schedule 5 and, if necessary, re-calibrated [REDACTED] [REDACTED] whenever either Party has reason to believe that the equipment is no longer performing within the standards of accuracy prescribed and has given notice to the other Party of such concern.
- 12.3 Either Party may on reasonable notice to the other request a test of either or both of the Main Metering System or Check Metering System. Testing and re-calibration shall be carried out in the presence of both Parties' duly authorised person or persons appointed in writing at a time agreed between the Parties. The Party that requests such a test shall bear the costs of that test.
- 12.4 After completion of any testing in accordance with Clause 12, [REDACTED] shall prepare and promptly submit to Seller a statement which shall be a record of the results of the testing, and the extent to which the Main Metering System or Check Metering System, as applicable, were performing outside the limits of accuracy prescribed under Schedule 5.
- 12.5 If, at any time, it is determined by the Parties, as a consequence of a test or as is otherwise manifest, that the Main Metering System or Check Metering System

should be replaced, then ██████ shall replace such meter at its own expense.

13. Insurance

- 13.1 The Seller at its own cost and expense shall obtain and maintain in full force and effect the Required Insurance.
- 13.2 The Seller shall provide to ██████ copies of all policies obtained by it and evidence that the premiums payable thereunder have been paid, including the normal waivers of subrogation, and a written certification from a reputable, independent insurance broker that such coverages comply with this Clause 13 and are usual in the extent of their coverage:
- (a) prior to Commercial Operation Date;
 - (b) annually prior to each anniversary of Commercial Operation Date; and
 - (c) each time insurance coverages are changed in any material respect.
- 13.3 If the Seller fails to procure or maintain any insurance which is required in accordance with this Clause 13, ██████ shall have the right (but not the obligation) to procure such insurance at the Seller's expense, and to set off against any amounts otherwise owed and due Seller the cost of procuring such insurance, pursuant to Section 18.5 hereof, provided that ██████ shall give ██████ prior notice to the Seller of its intention to exercise such rights.

14. Performance Bond

- 14.1 ██████ may only utilise the Performance Bond for amounts due from Seller under this Agreement in respect of the Seller's obligations prior to the Commercial Operation Date.
- 14.2 The Performance Bond is released and ██████ may no longer call on the Performance Bond on the date that is ██████ after the Commercial Operation Date.

15. Sale and Purchase of Energy Output

- 15.1 Beginning on the Commercial Operation Date, the Seller shall operate the Facility in accordance with Schedule 3, the Connection Agreement, the Grid Code and Prudent Utility Practice to generate and deliver Energy Output at the Delivery Point to ██████ who accepts and purchases that Energy Output determined in accordance with Schedule 6 at the Energy Output Price.
- 15.2 Seller shall exclusively sell ██████ generated by the Facility to ██████ and ██████ shall take and purchase ██████
- 15.3 If Seller supplies Energy Output prior to the Commercial Operation Date as part of commissioning the Facility pursuant to the Connection Agreement, ██████ shall accept and purchase that Energy Output determined in accordance with Schedule 6 at the Energy Output Price.

16. Compliance with Technical Quality Requirements

- 16.1 If Seller breaches Schedule 3 or the Connection Agreement in a way that causes

direct loss to ██████ in any ██████ period (measured from the Commercial Operation Date) that exceeds the Technical Quality Claim Threshold, ██████ is entitled to compensation for that loss (including the amount of loss falling under the Technical Quality Claim Threshold). If ██████ believes, acting reasonably, that this Clause applies, ██████ must give written notice to Seller and the Parties must resolve the matter in accordance with the Dispute Resolution Procedures. For clarity, ██████ is not entitled to claim for such losses if they do not exceed the Technical Quality Claim Threshold.

17. ██████ Bears Risk of Grid Events

- 17.1 Subject to Clause 17.2, if a Grid Event occurs on or from the Commercial Operation Date, ██████ shall pay Seller for Deemed Generated Energy for the period of the Grid Event at the Energy Output Price. Any such amounts will be invoiced by Seller as if they were Energy Output. ██████ shall not be liable for or otherwise required to pay any other amounts in connection with any such Grid Event for which it is required to pay Deemed Generated Energy pursuant to this Clause.
- 17.2 No payments for Deemed Generated Energy shall be made in any 365-day period (measured from the Commercial Operation Date) until the duration of the Grid Events in that 365-day period exceed the Permitted Grid Event Threshold. For clarity, no payments shall be due under Clause 17.1 for the period of Grid Events in that 365-day period that is below the Permitted Grid Event Threshold.
- 17.3 The Seller must provide notice to ██████ of any Scheduled Outage, pursuant to the terms and conditions of the Connection Agreement.

18. Billing and Payment

- 18.1 On or before the ██████ of each Month after the Commercial Operation Date, Seller shall prepare and send to ██████ an Invoice showing the Energy Output and Deemed Generated Energy (if applicable) for the preceding Month. Each such Invoice shall provide information and calculations, with sufficient detail, to permit ██████ to confirm the validity of the Invoice.
- 18.2 ██████ must as soon as practicable notify Seller of its receipt of an Invoice and whether ██████ disputes any aspect of the Invoice in good faith. If ██████ in good faith disputes any aspect of an Invoice:
- (a) It must provide information and calculations, with sufficient detail, to permit Seller to ascertain whether there has been an error or to justify its original Invoice; and
 - (b) The Dispute shall be resolved pursuant to the Dispute Resolution Provisions.
- 18.3 ██████ shall pay all amounts due ██████ under each Invoice except any amounts disputed in good faith pursuant to Clause 18.2 not later than the Late Payment Period following ██████ receipt of the relevant Invoice. Such payment will be made by direct bank transfer to Seller Bank Account or such other bank account nominated by Seller, such details to be provided to ██████ in writing.
- 18.4 For all amounts disputed in good faith pursuant to Clause 18.32, ██████ shall pay such amounts due under each Invoice not later than the Late Payment Period by

direct transfer to the Escrow Account.

- 18.5 If ██████ does not pay an amount due under an Invoice within the time period specified in Clause 18.3 (excluding amounts disputed in good faith), such outstanding amounts will incur interest at the Default Interest Rate from the end of the time period specified in Clause 18.3 until the date Seller receives payment of those amounts. Any amounts outstanding pursuant to this Clause shall be compounded Monthly.
- 18.6 If an amount disputed in good faith is subsequently found to not be owing, that amount shall be returned from the Escrow Account to ██████. If an amount disputed in good faith is subsequently found to be owing, such amount shall be transferred from the Escrow Account to Seller, and ██████ shall additionally pay to Seller the interest that would have been payable on that amount as if it were an amount not paid pursuant to Clause 18.5.
- 18.7 ██████ is entitled to set-off any amounts owing from the Seller to ██████ against any amounts owing under an Invoice.

19. Notification and Reporting

- 19.1 The Seller must as soon as reasonably possible notify ██████ if an unscheduled outage occurs or any other event occurs, of which a generator following Prudent Utility Practice would notify ██████. If ██████ requests, the Seller will provide further information (such as in a report) on the matter reported within the time requested by ██████ (acting reasonably).
- 19.2 Each Party shall keep complete and accurate records of all data required by each such Party for the purposes of proper administration of this Agreement and the operation of the Facility. In the case of the Seller, this must include the maintenance of an accurate and up-to-date operating log at the Facility for the full Term of the Agreement with records of the following (which may be kept electronically):
- (a) hourly logs of real and reactive power generation, Frequency, transformer tap position, bus voltage(s) and any other data mutually agreed;
 - (b) any unusual conditions found during operation/inspections;
 - (c) chart and printout of event loggers, if any, for system disturbances/outages;
 - (d) relevant renewable energy resource data and other weather parameters;
 - (e) invoices sent (including identifiers such as the invoice number) and amounts paid related to each such invoice, filed with a copy of each such invoice.

20. Warranties of the Parties

- 20.1 Seller warrants that, on the Signature Date and each day until the Expiry Date:
- (a) it is a company incorporated in Bermuda;
 - (b) it is complying with all relevant laws, and will provide any information required by ██████ as evidence of this (acting reasonably);

- (c) it is complying with its obligations under the Connection Agreement, Agreement to Lease, or the Lease (as applicable and when executed), but excluding the Implementation Agreement (to the extent the compliance with those obligations impact to a material extent on Seller's ability to perform its obligations under this Agreement);
- (d) there is no action, suit or proceedings existing, pending or to its knowledge, threatened against or affecting it before any court or administrative body or arbitral tribunal which might materially and adversely affect its ability to perform its obligation under this Agreement. In addition, if any action, suit or proceedings arises that would be a breach of this Clause, Seller must notify ██████ as soon as reasonably practicable;
- (e) all necessary action has been taken to authorise the execution, delivery and performance of this Agreement and such execution, delivery and performance does not contravene any provision of, or constitute a default under, any other agreement or instrument to which it is a Party or by which it or its property may be bound;
- (f) all information provided in written form as part of the Tender Process was accurate and correct at the time of provision (including by omission) in all material respects.

20.2 ██████ warrants that, on the Signature Date and each day until the Expiry Date:

- (a) it is complying with all relevant laws, and will provide any information required by Seller as evidence of this (acting reasonably), and is complying with the Connection Agreement (as applicable and when executed);
- (b) there is no action, suit or proceedings existing, pending or to its knowledge, threatened against or affecting it before any court or administrative body or arbitral tribunal which might materially and adversely affect its ability to perform its obligation under this Agreement. In addition, if any action, suit or proceedings arises that would be a breach of this Clause, ██████ must notify Seller as soon as reasonably practicable;
- (c) all necessary action has been taken to authorise the execution, delivery and performance of this Agreement and such execution, delivery and performance does not contravene any provision of, or constitute a default under, any other agreement or instrument to which it is a Party or by which it or its property may be bound.

21. **Term of Agreement, Effect of Termination and Clauses Surviving Termination**

21.1 This Agreement shall remain in full force and effect until the Expiry Date.

21.2 This Agreement may only be terminated by following an express process for termination provided in this Agreement. Termination shall not affect the rights, remedies and obligations that a Party may have against the other Party in respect of a breach of this Agreement prior to such termination.

21.3 Notwithstanding the occurrence of the Expiry Date, the following Clauses will continue in full force and effect:

- (a) Clause 28 (Limitation of Liability);

- (b) Clause 29 (Dispute Resolution Provisions);
- (c) Clause 34 (Confidentiality);
- (d) Clause 39 (Governing Law); and
- (e) Any other Clause which, by its nature, is intended to survive termination.

22. Events of Default

22.1 The occurrence of any of the following shall constitute a Seller Event of Default:

- (a) The Seller breaches any of its material obligations under this Agreement;
- (b) The Seller creates any encumbrance or assigns any of its rights and/or obligations under this Agreement in breach of Clause 37;
- (c) The Seller is adjudged bankrupt, suffers dissolution, or is liquidated (or any similar event);
- (d) The wilful and unexcused failure by the Seller to operate or make available the Facility after the Commercial Operation Date, if operable, in accordance with the provisions of this Agreement, for more than [REDACTED] without [REDACTED] written consent;
- (e) The Seller or its employee or agent wilfully tampers with the Metering System;
- (f) The Seller breaches the Connection Agreement in a way that is material and persistent;
- (g) Re-entry by the Landlord under the Lease (as that term is defined in the Lease);
- (h) The Seller makes any warranty under Clause 20.1 that is incorrect, in any material respect, when made or when reaffirmed and such incorrect warranty has a material adverse effect on the Seller's ability to perform its obligations under this Agreement or has a material adverse effect on the rights or obligations of [REDACTED] hereunder;
- (i) The Seller made or attempted to make or makes or attempts to make (whether before or after the execution of this Agreement) any Improper Payment in relation to the Tender Process, or the execution or amendment of a Project Agreement;
- (j) A Seller Event of Default occurs under any other Project Agreement (excluding the Implementation Agreement);

22.2 The occurrence of any of the following shall constitute a [REDACTED] Event of Default:

- (a) [REDACTED] breaches any of its material obligations under this Agreement;
- (b) [REDACTED] or its employee or agent wilfully alters or tampers with the Connection Facilities without the prior written consent of Seller, except in situations where such actions are taken to prevent immediate injury, death or damage to property and the [REDACTED] uses its best efforts to provide Seller

with advance notice of the need for such actions;

- (c) [REDACTED] fails to pay an Invoice for Energy Output when due, and this failure is not rectified within [REDACTED] following the end of the applicable Late Payment Period;
- (d) [REDACTED] or its employee or agent wilfully tampers with the Metering System;
- (e) [REDACTED] makes any warranty under Clause 20.2 that proves to be incorrect, in any material respect, when made or when reaffirmed and such incorrect warranty has a material adverse effect on the [REDACTED] ability to perform its obligations under this Agreement;
- (f) A [REDACTED] Event of Default occurs under the Connection Agreement;

23. Termination by Seller after [REDACTED] Event of Default

23.1 Separate from the termination rights existing under Clauses 2.12 and 4.5, if a [REDACTED] Event of Default occurs:

- (a) Seller may give written notice to [REDACTED] requiring [REDACTED] to provide a written plan for remedying the [REDACTED] Event of Default;
- (b) [REDACTED] must provide Seller with the written plan referred to in Clause 23.1(a) within [REDACTED];
- (c) The Parties must meet to discuss the written plan referred to in Clause 23.1(a) within [REDACTED] of the Seller's receipt of the written plan;
- (d) Seller must provide all reasonable efforts to [REDACTED] to assist [REDACTED] to implement the written plan referred to in Clause 23.1(a) to remedy the [REDACTED] Event of Default;
- (e) If [REDACTED] does not remedy the [REDACTED] Event of Default within [REDACTED] of the date of the Parties discussing the written plan pursuant to Clause 23.1(c), Seller shall be entitled to terminate this Agreement by sending a Termination Notice to [REDACTED];

24. Termination by [REDACTED] after Seller Event of Default

24.1 Separate from the termination rights existing under Clauses 2.12 and 4.5, if a Seller Event of Default occurs:

- (a) [REDACTED] may give written notice to Seller, requiring Seller to provide a written plan for remedying the Seller Event of Default;
- (b) Seller must provide [REDACTED] with the written plan referred to in Clause 24.1(a) within [REDACTED];
- (c) The Parties must meet to discuss the written plan referred to in Clause 24.1(a) within [REDACTED] of [REDACTED] receipt of the written plan;
- (d) [REDACTED] must provide all reasonable efforts to Seller to assist Seller to implement the written plan referred to in Clause 24.1(a) to remedy the Seller Event of Default;

- (e) If Seller does not remedy the Seller Event of Default within [REDACTED] of the date of the Parties discussing the written plan pursuant to Clause 24.1(c), [REDACTED] shall be entitled to terminate this Agreement by sending a Termination Notice to [REDACTED]

25. Force Majeure Event

Definition of Force Majeure Event

- 25.1 Subject to Clause 25.5, for the purposes of this Agreement, "Force Majeure Event" means any circumstance, event or condition or combination thereof beyond the reasonable control, directly or indirectly, of the affected Party (the "Affected Party") that materially and adversely affects the Affected Party's ability to perform its obligations, but only to the extent that:
 - (a) Such circumstance, event or condition, despite the exercise of diligence, cannot be prevented, avoided or overcome by the Affected Party;
 - (b) Such circumstance, event or condition prevents the performance by the Affected Party of its obligations under this Agreement;
 - (c) The Affected Party has taken all reasonable precautions, due care and measures to prevent, avoid or overcome the effect of such circumstance, event or condition on its ability to perform its obligations under this Agreement and to mitigate its consequences;
 - (d) Such circumstance, event or condition is not the direct or indirect result of a breach or failure by the Affected Party to perform any of its obligations under this Agreement;
 - (e) Such circumstance, event or condition is without fault or negligence of the Affected Party.
- 25.2 Force Majeure Events shall include the following events or circumstances to the extent that they satisfy the definition in Clause 25.1:
 - (a) An act of God including but not limited to lightning, earthquakes, volcanic activity, floods or storms;
 - (b) Acts of vandalism despite the diligent efforts of Seller to protect against vandalism;
 - (c) Accidents of navigation or breakdown or injury of vessels, accidents to harbours, docks, canals or other assistances to, or adjuncts of, shipping or navigation, perils of the sea, air crash, shipwreck, train wrecks or other failures or delays of transportation;
 - (d) Disaster, fire, explosion, epidemics, plagues or quarantines; or
 - (e) Political Force Majeure Events, defined in Clause 25.4.

Duty to Report Force Majeure Event

- 25.6 The Affected Party, when claiming relief for Force Majeure Event, shall notify the other Party in writing of the occurrence of a Force Majeure Event as soon as reasonably practicable, and in any event within [REDACTED] after the Affected Party becomes aware of its occurrence and that Force Majeure Event would be likely to have an impact on its performance of its obligations under this Agreement.
- 25.7 Any notice pursuant to Clause 25.6 shall set out full particulars of:
- (a) The nature of the events or circumstances constituting Force Majeure Event which is the subject of any claim for relief under this Agreement;
 - (b) The effect which such Force Majeure Event is having on the Affected Party's performance of its obligations under this Agreement; and
 - (c) The measures which the Affected Party is taking, or proposes to take, to mitigate the impact of Force Majeure Event.
- 25.8 For so long as the Affected Party continues to claim to be affected by Force Majeure Event, it shall provide the other Party with progress reports at reasonable intervals describing:
- (a) The measures which the Affected Party is taking, or proposes to take, to mitigate the impact of Force Majeure Event; and
 - (b) Such other information as the other Party may reasonably request about the Affected Party's claim.

Duty to Mitigate

- 25.9 For so long as a Force Majeure Event which is the subject of any claim under this Agreement is continuing, the Affected Party shall take such steps as are reasonably practicable in accordance with Prudent Utility Practices to minimize the duration and severity of the impact of such Force Majeure Event and to restore the Affected Party's ability to perform its obligations under this Agreement as soon as reasonably practicable following the cessation of such Force Majeure Event.
- 25.10 With respect to the Seller only, if a Force Majeure Event occurs that impacts the Seller, such event may be invoked only with respect to any unit or units within the Facility affected by such event and not with respect to any other unit or other part of the Facility not so affected if it is capable of independent or partial operation in accordance with Prudent Utility Practices.

Consequences during Force Majeure Event

- 25.11 Subject to 25.12 (Payments During Force Majeure Event), if the Affected Party validly claims relief in respect of a Force Majeure Event in accordance with the provisions related to Force Majeure Event, then the Affected Party shall be deemed not to be in breach of its obligations under this Agreement to the extent that the events or circumstances constituting such Force Majeure Event prevent, delay or impede the Affected Party from performing such obligations.

25.12 Payments during Force Majeure Event:

- (a) Upon the occurrence of any Force Majeure Event after the Commercial Operation Date affecting the Seller and not ██████ then during such Force Majeure Event, ██████ shall be required to make payments to the Seller for Energy Output delivered to the Delivery Point.
- (b) Immediately upon the occurrence of any Force Majeure Event after the Commercial Operation Date affecting the Seller and not ██████ then during such Force Majeure Event, the Seller shall be required to notify ██████ of such event and declare to ██████ the quantum of Energy Output it anticipates it will be capable of producing over the period the Seller believes it will be affected by the Force Majeure Event and as a result of the occurrence of the Force Majeure Event.
- (c) ██████ shall not be entitled to claim relief due to the occurrence of a Force Majeure Event in respect of its payment obligations in connection with Energy Output delivered prior to the Force Majeure Event or pursuant to this Clause 25.12.

25.13 Where a Force Majeure Event affecting ██████ or the Seller occurs:

- (a) Before ██████ or the Scheduled Commercial Operation Date, ██████ and Scheduled Commercial Operation Date shall be revised automatically on a day-for-day basis (as applicable) to new dates which reflect the period of delay resulting from such Force Majeure Event;
- (b) After the Commercial Operation Date, the Term shall be extended automatically on a day-for-day basis to the extent of delay resulting from such event.

25.14 Once a Force Majeure Event ends, the Parties shall resume the performance of their obligations under this Agreement.

26. Termination for Continuing Force Majeure Event

26.1 Either Party may terminate this Agreement if a Force Majeure Event occurs and continues for ██████ by sending a Termination Notice to the other Party. This Clause shall not apply where an adjustment to the Energy Output Price is or may be made pursuant to Clause 27 unless there is no reasonable prospect of one or both Parties being able to continue the performance of their material obligations under this Agreement.

27. Extraordinary Adjustments to the Energy Output Price

27.1 Subject to Clause 27.2:

- (a) The Seller shall be entitled to compensation by way of either or both an adjustment to the Energy Output Price and an extension of the Term upon the occurrence of a Change in Law or Political Force Majeure Event where such event either or both:
 - (i) Increases Seller's costs of performing its obligations under this Agreement;

- 28.2 Each Party must, to the extent reasonably possible, mitigate the losses they incur as a result of the other Party breaching this Agreement.
- 28.3 If either Party is found liable to the other (whether in contract, tort or otherwise), and the claiming Party has contributed to the loss or damage, the amount of the liable Party's liability to the claiming Party shall be reduced to the extent that the claiming Party has contributed to the loss or damage.

29. Dispute Resolution Provisions

- 29.1 Any Dispute arising between the Parties in connection with or arising out of this Agreement shall be resolved pursuant to the Dispute Resolution Provisions.
- 29.2 The Parties shall attempt to settle all Disputes in good faith in the first instance within [REDACTED] or within such other timeframe as agreed between the Parties.
- 29.3 Upon completion of the period pursuant to Clause 29.2, either Party may, by notice in writing, refer:
- (a) A Dispute that is a Technical Dispute to the Expert and nominate that Party's proposed Expert; or
 - (b) A Dispute (including a Technical Dispute that has not been referred to the Expert) to Arbitration.
- 29.4 For the purposes of this Agreement, a Technical Dispute is a Dispute regarding:
- (a) The Seller's compliance with technical specifications or performance standards in this Agreement;
 - (b) The impact of an event (including a Force Majeure Event) on the Seller's ability to perform or cost of performing its obligations under this Agreement; or
 - (c) Other matters which are customarily resolved by persons with engineering expertise.

30. Technical Disputes

- 30.1 Upon a Party (the "Initiating Party") notifying the other Party (the "Responding Party") pursuant to Clause 29.3(a), the Responding Party shall, within [REDACTED] of receiving such notice, notify the Initiating Party whether the Initiating Party's proposed Expert is acceptable. If the Responding Party fails to respond or notifies the Initiating Party that the person is not acceptable, the Parties shall discuss in good faith for a period of [REDACTED] to agree upon the identity of the Expert. If the Parties are unable to agree, the Responding Party shall by the end of such [REDACTED] period nominate a person to be the Expert, whereupon the two nominated experts shall meet and agree upon a third person who shall be the Expert for the purposes of the Technical Dispute.
- 30.2 The Expert must:

- (a) Have demonstrated expertise in the area to which the Technical Dispute relates, including at least fifteen (15) years of relevant professional experience and at least a Master's degree in the relevant field;
 - (b) Not currently be or recently have been an agent, employee, or contractor of either Party.
- 30.3 Within [REDACTED] of the appointment of the Expert, the Initiating Party must send to both the Expert and the Responding Party written materials setting forth:
- (a) a description of the Technical Dispute;
 - (b) a statement of the Initiating Party's position; and
 - (c) copies of records and data supporting the Initiating Party's position.
- 30.4 Within [REDACTED] of the date upon which the Initiating Party has submitted the materials described in Clause 30.3, the Responding Party may submit to the Expert (and, if the Responding Party does so, the Responding Party shall also submit to the Initiating Party) written materials setting forth:
- (a) a description of the Technical Dispute;
 - (b) a statement of the Responding Party's position; and
 - (c) copies of records and data supporting the Responding Party's position.
- 30.5 The Expert shall consider the information submitted by the Initiating Party and Responding Party and, in the Expert's discretion, any additional written materials requested from or otherwise submitted by either Party.
- 30.6 The Parties shall not be entitled to apply for discovery of documents, but any documents or information submitted to the Expert must also be simultaneously submitted to the other Party.
- 30.7 Each Party shall designate one person knowledgeable about the Technical Dispute who shall be available to the Expert to answer questions and provide any additional information requested by the Expert. Except of such person, a Party shall not be required to, but may, provide oral statements or presentations to the Expert or make any particular individuals available to the Expert.
- 30.8 Except as provided in Clause 30.11, with respect to the payment of costs, the proceedings shall be without prejudice to any Party and any evidence given or statements made in the course of this process may not be used against a Party in any other proceedings. The process shall not be regarded as an arbitration and the laws relating to commercial arbitration shall not apply.
- 30.9 Unless the Parties agree in writing signed by both Parties at the time the Expert is selected stating that the decision of the Expert shall be binding, determination of the Expert shall not be binding.
- 30.10 The Expert shall be requested to provide a recommendation within [REDACTED] after the [REDACTED] period stated in Clause 30.4. Notwithstanding any delay in the provision of the Expert's recommendation, the

Parties shall review and discuss the Expert's recommendation with each other in good faith for a period of [REDACTED] following delivery of the recommendation before proceeding with any other actions.

- 30.11 If a Party does not accept the recommendation of the Expert with respect to the Technical Dispute, it may initiate Arbitration in accordance with Clause 31, provided, however, that prior to initiating such Arbitration that Party shall have paid all costs of the Expert (including the reimbursement of any costs paid to the other expert by the other Party pursuant to Clause 30.1) and all out-of-pocket costs of the other Party.
- 30.12 Except as provided in Clause 30.11, the costs of engaging the Expert shall be borne equally by the Parties and each Party shall bear its own costs in preparing the materials for and making presentations to the Expert.

31. **Arbitration**

- 31.1 Any Dispute not resolved pursuant to Clause 29.2 or Clause 30 arising out of or in connection with this Agreement shall be settled by Arbitration in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (the "UNCITRAL Rules") as at present in force.
- 31.2 The Arbitration shall be conducted in London, England and, unless otherwise agreed by the Parties, the number of arbitrators shall be three (3) (the "Tribunal"), one arbitrator nominated by the Seller, one arbitrator nominated by [REDACTED] and one arbitrator nominated by the arbitrators appointed by each Party. If the arbitrators nominated by each Party fail to nominate an arbitrator within [REDACTED] of the date on which both arbitrators were appointed, either Party may apply to the High Court of England and Wales to appoint the third arbitrator.
- 31.3 The decision of the Tribunal shall be final and binding upon the Parties and shall not be subject to appeal.
- 31.4 If any Dispute arising out of or in connection with this Agreement raises issues which are substantially the same or connected with issues arising out of or in connection with any Dispute in connection with another Project Agreement, either Party may, by written notice to the other Party and to any arbitrators who have already been agreed or appointed pursuant hereto, require both Disputes to be heard and settled by the same arbitral tribunal, provided that if an arbitral tribunal has already been appointed in relation to one of the Disputes:
- (a) The arbitral tribunal appointed has the necessary expertise and is otherwise qualified to arbitrate both Disputes;
 - (b) Proceedings related to one of the Disputes have not been closed; and
 - (c) The Parties are given the opportunity to be heard, including (to the extent necessary) by way of amendment to the procedural timetable applicable to the existing Dispute.

32. **Amendment**

- 32.1 This Agreement may not be amended except by mutual agreement of the Parties in writing.

32.2 If either Party desires an amendment to this Agreement:

- (a) The Party desiring the amendment (the "Proposing Party") must by written notice describe the amendment it requests, and provide copies of records and data supporting that Party's request for an amendment of the Agreement;
- (b) The other Party (the 'Receiving Party') must, within [REDACTED] of receiving notice pursuant to Clause 32.2(a), respond by written notice to the other Party's request for an amendment to the Agreement, including providing copies of records and data supporting the Receiving Party's position regarding the amendment;
- (c) Within [REDACTED] of the Proposing Party receiving notice pursuant to Clause 32.2(c), the Parties shall meet to discuss the amendment in good faith.

33. **Waivers**

- 33.1 Any waiver is limited to the particular instance and is not be deemed to be a waiver of any other right or remedy, or extend to any other matter under this Agreement or in any other way affect the validity of this Agreement.
- 33.2 No delay or forbearance by either Party in exercising any right, power, privilege or remedy provided by Law or under this Agreement constitutes a waiver of such right, power, privilege or remedy unless agreed in writing.
- 33.3 Any waiver must be in writing, or if that is not practicable under exigent circumstances, reduced to writing as soon as practicable and delivered to the other Party in the same manner as a notice pursuant to this Agreement.

34. **Confidential information**

- 34.1 This Agreement and all information relating to this Agreement or to financial, commercial, technical, operational, personnel, and management aspects of the Facility or a Party, which is disclosed to, discovered or acquired by the other Party or received from the first-mentioned Party, or its auditors, professional advisers or consultants or contractors, and any disclosure made in the course of any reference of a Dispute to an Expert or arbitral Tribunal ("Confidential Information") must be treated as confidential and may not be disclosed by either Party to any third party without the prior written consent of the other Party.
- 34.2 The following shall not be Confidential Information:
 - (a) The Energy Output Price and the Currency; or
 - (b) Information that would otherwise be Confidential Information but which is in the public domain or which was already in the rightful possession of the recipient Party, or which was obtained by the recipient Party in good faith from a third party entitled to disclose it.
- 34.3 A Party may disclose Confidential Information:
 - (a) As required by Law or the rules of any applicable stock exchange;

- (b) At the request of a [REDACTED];
- (c) At the request of a lender in connection with providing a loan to the Seller or [REDACTED] as the case may be;
- (d) If it became known to the receiving Party through a source lawfully in possession of the information and owing no applicable obligation of confidentiality;
- (e) To shareholders, agents, advisers, directors, employees and contractors whose duties reasonably require such disclosure, who shall be obligated to treat such information as Confidential Information;
- (f) To prospective investors in the Seller, who shall be obligated to treat such information as Confidential Information; and
- (g) To an expert or arbitral panel appointed in accordance with this Agreement, who shall be obligated to treat such information as Confidential Information.

34.4 Notwithstanding any other provision in this Agreement, the restrictions on the disclosure of Confidential Information continue in force for [REDACTED] after the Expiry Date.

34.5 The Seller and [REDACTED] acknowledge and agree that the disclosure of Confidential information may cause serious and irreparable harm to the non-disclosing Party which could not adequately be compensated for in damages and in the event of a breach, or an anticipated breach, by a Party of any of such provisions such Party hereby consents to an injunction being issued against it restraining it from such anticipated breach or any further breach of such provision, as applicable, but such action will not be construed as limiting the remedies available to the other Party in the event of such breach or anticipated breach.

35. Notices

35.1 All notices or other communications which may be given under or in connection with this Agreement ("Notices) must be in writing.

35.2 If to the Seller, Notices shall be either delivered personally or sent by post, email, or fax to the relevant address below:

- (a) Attention: [REDACTED]
- (b) Address: [REDACTED]
- (c) Email: [REDACTED]
- (d)

with a copy to:

- (a) Attention: [REDACTED]
- (b) Address: [REDACTED]
- (c) Email: [REDACTED]

(d) Fax No.: [REDACTED]

35.3 If to [REDACTED] Notices shall be either delivered personally or sent by post, email, or fax to the relevant address below:

(a) Attention: [REDACTED]

(b) Address: [REDACTED]

(c) Email: [REDACTED]

(d) Fax No.: [REDACTED]

35.4 Notices are deemed validly delivered on the day they are sent when sent by e-mail or fax if that day is a Business Day, or if not a Business Day, on the next Business Day. If a notice is sent by post, it is deemed validly delivered [REDACTED] following the day it is sent, if that [REDACTED] or if not [REDACTED] following [REDACTED] after being sent.

35.5 Any Party may by notice of at least [REDACTED] to the other Party change an address for Notices.

36. Severability

36.1 If any provision of this Agreement is declared or found to be illegal, unenforceable or void, the legality, validity or enforceability of the other provisions of this Agreement shall be unaffected to the extent permitted by Law.

37. Assignment and Successors

37.1 Neither Party shall assign this Agreement without the other Party's consent (not to be unreasonably withheld). This Clause does not apply to (a) the assignment of this Agreement to a wholly-owned subsidiary of the Seller incorporated in Bermuda in connection with the Project and (b) the granting of any security for any loan to the Seller under the Financing Agreements. [REDACTED] shall, if requested by a Lender under the Financing Agreements, execute such documentation as may be reasonably required with respect to the assignment, provided such documents do not alter [REDACTED] rights and obligations under this Agreement. Seller shall pay all reasonable costs of [REDACTED] review of any such documentation. For the purposes of this Clause, "assign" and "assignment" include a Change of Ownership with respect to that Party.

37.2 No assignment pursuant to Clause 37.1 shall have effect unless and until the assigning Party has:

- (a) procured the proposed assignee to covenant directly with the other Party in a form reasonably satisfactory to such Party to observe and perform all the terms and conditions of this Agreement; and
- (b) provided to the other Party a certified copy of the assignment (excluding consideration paid or payable for such assignment).

37.3 This Agreement is binding upon and will be for the benefit of the Parties and their respective successors and permitted assigns.

38. Relationship of the Parties

- 38.1 It is expressly understood that the Seller and ██████ intend by this Agreement to establish the relationship of independent contractors, and do not intend to undertake the relationship of principal and agent or to create a joint venture or partnership between them or their respective successors in interests. Neither ██████ nor the Seller have any authority to create or assume, in the name or on behalf of the other Party any obligation expressed or implied, nor to act or purport to act as the agent or the legally empowered representative of the other Party hereto for any purpose whatsoever.

39. Governing law

- 39.1 The governing law of this Agreement is the ██████, and the Parties submit to the non-exclusive jurisdiction of the ██████.

Schedule 1: Key Terms and Conditions

1. The Energy Output Price

1.1 Energy Output Price: The initial Energy Output Price is [REDACTED] inclusive of taxes, rent, permit and approvals costs per kWh in the Currency as adjusted pursuant to this Agreement including pursuant to Clause 1.2 of this Schedule.

1.2 [REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1.3 Currency: [REDACTED]

2. Term and Key Milestones

2.1 [REDACTED]

2.2 [REDACTED]

2.3 [REDACTED]

2.4 [REDACTED]

2.5 [REDACTED]

2.6 Performance Bond: an on-demand performance bond in the amount of [REDACTED] drawn on an internationally-recognised bank or a recognised bank in Bermuda acceptable to [REDACTED] and in a form acceptable to [REDACTED] (acting reasonably).

3. Liability, Interest Rates and Similar Matters

3.1 Commercial Operation Delay Payment: [REDACTED] per day.

3.2 Default Interest Rate: means [REDACTED].

3.3 Extraordinary Adjustment Threshold: [REDACTED]

3.4 Permitted Grid Event Threshold: [REDACTED]

3.5 Technical Quality Claim Threshold: [REDACTED]

3.6 Required Insurance:

(a) [REDACTED];

(b) [REDACTED]

(c) [REDACTED]

3.7 Seller Bank Account:

Bank: [REDACTED]

Address: [REDACTED]

SWIFT code: [REDACTED]

ABA number: [REDACTED]

BANK ID: [REDACTED]

TRANSIT number: [REDACTED]

ACCOUNT number: [REDACTED]

Currency: [REDACTED]

3.8 Escrow Account: Bank account nominated by Seller by written notice to and approval by [REDACTED] which approval shall not be unreasonably withheld.

Schedule 2: Authorisations

1. [REDACTED]
2. [REDACTED]
3. [REDACTED]
4. [REDACTED]
5. [REDACTED]
6. [REDACTED]
7. [REDACTED]
8. [REDACTED]

Schedule 3: Technical Schedule

1. Defined terms

- 1.1 Facility: the solar photovoltaic generation facility located at the Finger on St. David's Island, with the installed capacity of 6 MW_{AC} including all ancillary equipment.
- 1.2 Delivery Point: 22kV circuit breaker at NAS Substation, St. David's Island.

2. Technical Obligations

2.1 Seller shall:

- (a) Maintain Energy Output supplied within the limits in accordance with the Grid Code as amended from time to time;
- (b) Deliver, at the Delivery Point, alternating three phase power, having Frequency of 60 Hertz and at the agreed nominal voltage;
- (c) Provide voltage and Frequency Control equipment in accordance with the Grid Code as amended from time to time; and
- (d) Comply with the standards of performance in the Grid Code, IEEE Standards and Prudent Utility Practice.

2.2 [REDACTED] shall:

- (a) Take the Energy Output at the Delivery Point in a safe manner, in accordance with Prudent Utility Practices and the Grid Code;
- (b) Take Energy Output at all times in such a manner that the current will be taken from the three phases equally as nearly as practicable, and, in any event, the difference between any two phases shall not be greater than [REDACTED]. If at any time the said difference exceeds [REDACTED], [REDACTED] shall so adjust its load as to comply with the requirements of this Clause;
- (c) Ensure that the use of the power is in such a manner that the power factor is more than [REDACTED] and
- (d) Ensure that the harmonic content of the current resulting from the design of the network or due to the operation of the network does not exceed [REDACTED] of the magnitude of the total current.

Schedule 4: Timing Sheet

This Schedule provides a summary of certain time periods specified in this Agreement for ease of interpretation. However, in the event of any inconsistency, the terms other than this Schedule 4 shall prevail.

Item	Time Period	Clause Reference
Insurance Matters		
Provision of copies of all Required Insurance policies and certification by reputable, independent insurance broker of coverages	Prior to the Commercial Operations Date, and annually prior to each anniversary of the Commercial Operation Date, and each time insurance coverages are changed in any material respect	13.2
Notice requirement for ██████ to self-procure Required Insurance	██████████	13.3
Invoicing		
Timing for Invoices	██████████ ██████████ ██████████	18.1
Breach and Events of Default		
Late Payment Period for unpaid amounts	██████████	Definitions
Time period for Seller Event of Default for wilful and unexcused failure to perform	██████████	22.1
█████ Event of Default for non-payment of Invoice	██████████ ██████████ ██████████	22.2(c)
Time period for relevant Party to provide written plan related to ██████ Event of Default or Seller Event of Default	██████████ ██████████	23.1(b) or 24.1(b)
Time period within which Parties must meet to discuss written plan related to ██████ Event of Default or Seller Event of Default	██████████	23.1(c) or 24.1(c)
Seller or ██████ eligibility to terminate this Agreement following Event of Default	██████████ after occurrence of ██████ Event of Default or Seller Event of Default (respectively) if not remedied within that time	23.1(e) or 24.1(e)
Force Majeure Events		
Duty to report Force Majeure Event	Within ██████ of becoming aware of its occurrence	25.6
Ability to terminate for Force Majeure Event	Where Force Majeure Event occurs and continues for longer than ██████	26.1
Extraordinary Adjustments to Energy Output Price		
Time period within which Parties must use best efforts to resolve the Price	██████████	27.4

Adjustment Application		
Dispute Resolution		
Period within which Parties must use best efforts to resolve a Dispute before either Party may request the Dispute be settled by an Expert or by Arbitration	██████████	29.2
Time period within which Responding Party must notify Initiating Party of whether the Initiating Party's proposed Expert is acceptable	██████████	30.1
Time period for discussing in good faith the selection of the Expert	██████████	30.1
Time period for Initiating Party in a Technical Dispute to provide particulars regarding the Dispute	██████████	30.3
Time period within which the Responding Party in a Technical Dispute must provide particulars regarding the Dispute	██████████	30.4
Time period within which Expert's opinion on a Technical Dispute is requested to be provided	Within ██████████ of the end of the period stated in Clause 30.4 or as soon as practicable thereafter	30.10
Confidentiality		
Continuing obligations of confidentiality	██████████ after the expiration or termination of the Agreement	34.4

Schedule 5: Meter Specifications and Telecommunications

1. Main Metering System and Check Metering System Requirements

- 1.1 The Main Metering System and Check Metering System shall consist of a set of three current transformers and potential transformers feeding the primary and another set feeding a backup three phase four wire metering instrument.
- 1.2 The Main Metering System and the Check Metering System shall be designed such that the overall error of the installation, (including instrument transformers, wiring, and metering instruments) shall be no less or greater than [REDACTED] for power flows through the metering installation.
- 1.3 The Main Metering System and Check Metering System shall be selected to have rated error no less or greater than [REDACTED] over the equivalent load range.
- 1.4 The Main Metering System and Check Metering System shall be electronic.
- 1.5 The energy meters supplied shall be equipped with modems necessary to enable remote energy meter reading.
- 1.6 The Main Metering System and Check Metering System shall be capable of separately accumulating and presenting on the register display the following data:
 - (a) kWh into the Grid;
 - (b) kWh into the Facility;
 - (c) kVArh into the Grid;
 - (d) kVArh into the Facility;
 - (e) kW into the Grid; and
 - (f) kW into the Facility.
- 1.7 The Main Metering System and Check Metering System current and voltage transformers will measure current and voltage as near as practicable to the Delivery Point, as described or shown in Schedule 3.
- 1.8 The Main Metering System and Check Metering System shall consist of the following meters:

Main Metering System

Description	Meter Tag or Identifying Information
22 kV output from Seller	[REDACTED]

Check Metering System

Description	Meter Tag or Identifying Information
22 kV output from Seller	[REDACTED]

- 1.9 Both the Main Metering System and Check Metering System shall be installed in weatherproof enclosures, which shall include test switches and shorting blocks to allow removal of either meter instrument without taking the other out of service. The

Schedule 6: Determination of Energy Output

1. Reading of Meters

- 1.1 For the purpose of each Invoice, the Main Metering System and the Check Metering System, shall be read at [REDACTED] of each successive Month (or such other Day as may be mutually agreed upon by the Parties).
- 1.2 The readings of the Main Metering System shall be used to determine Energy Output and in the preparation of all Invoices unless the Main Metering System was not in service for a portion of the Month in question as a result of maintenance, repairs or testing, or is otherwise known to be inaccurate by more than [REDACTED] [REDACTED] or is otherwise functioning improperly. In such event, the following procedures will be followed in the stated order:
 - (a) The readings of the Check Metering system shall be utilised to calculate the Energy Output for the relevant period, unless a test of such Check Metering System as requested by either Party, reveals that the Check Metering System is inaccurate by more than [REDACTED] [REDACTED]), or is otherwise functioning improperly.
 - (b) If the Check Metering System is found to be inaccurate by more than [REDACTED] [REDACTED] or is otherwise functioning improperly, then the Energy Output shall be calculated as if it were a Grid Event utilizing the definition of Deemed Generated Energy.
- 1.3 In the event that the readings of either the Main Metering System or the Check Metering System have been relied upon for the preparation of Invoices and such meter is subsequently found to have been inaccurate by more than [REDACTED] [REDACTED], or is otherwise functioning improperly, the Invoices which relied upon the erroneous meter shall be corrected for the inaccurate readings by reference to a meter whose readings were known to be accurate within plus or minus [REDACTED] for the period during which the meter was inaccurate, if such period can be determined. In the event there is no alternative meter whose reading can be relied upon, the erroneous readings shall be corrected by the error in excess of [REDACTED] determined by testing of the erroneous meter. If the period of inaccuracy cannot be accurately determined, it shall be deemed to be half the period between the date the meter was found to be inaccurate and the date of the last meter reading accepted by the Parties as accurate, or by taking the average of the last [REDACTED] [REDACTED], if the generation pattern remains fairly the same over the period.

IN WITNESS whereof this Agreement has been executed on date set out on page 4 hereof

EXECUTED for and on behalf [redacted]
[redacted]
[redacted]
[redacted]
[redacted]

[Handwritten Signature]
[redacted]

in the presence of:

[redacted]

Signature of Witness

Name:

[redacted]

Address:

EXECUTED for and on behalf SATURN
SOLAR BERMUDA 1 LTD.:

[redacted]

Duty Authorised Signatory

Name:

[redacted]

Title:

[redacted]

in the presence of:

[redacted]

Signature of Witness

Name:

[redacted]

Address:

[redacted]
[redacted]



Saturn Solar Bermuda 1 Ltd.
First Amendment to Power Purchase Agreement

**FIRST AMENDMENT TO
POWER PURCHASE AGREEMENT**

THIS FIRST AMENDMENT TO POWER PURCHASE AGREEMENT (this "Amendment") is made effective as of [REDACTED], by and between [REDACTED], a company formed under the laws of the [REDACTED], and SATURN SOLAR BERMUDA I LTD., a company formed under the [REDACTED] ("Saturn"). [REDACTED] and Saturn are sometimes referred to individually as a "Party" and collectively as the "Parties."

RECITALS

A. Saturn and [REDACTED] entered into that certain POWER PURCHASE AGREEMENT dated [REDACTED] (the "PPA Agreement").

B. The Parties have determined that certain amendments and modifications thereto are necessary to achieve the objectives of the PPA Agreement;

C. The Parties mutually desire to amend the PPA Agreement as further described in this Amendment.

NOW, THEREFORE, in consideration of good and valuable consideration, the receipt and sufficiency which are hereby acknowledged, the Parties agree as follows:

1. Capitalized terms not otherwise defined in this Amendment shall bear the meanings assigned to them in the PPA Agreement.
2. Paragraph 2.1 of Schedule 1 of the PPA Agreement shall be amended by deleting the words "[REDACTED]" and replacing them with the words "[REDACTED]".
3. Paragraph 2.3 of Schedule 1 of the PPA Agreement shall be amended by deleting the words "[REDACTED]" and replacing them with the words "[REDACTED]".
4. Paragraph 2.4 of Schedule 1 of the PPA Agreement shall be amended by deleting the words "[REDACTED]" and replacing them with the words "[REDACTED]".
5. Paragraph 2.5 of Schedule 1 of the PPA Agreement shall be amended by deleting the words "[REDACTED]" and replacing them with the words "[REDACTED]".
6. Paragraph 1.2 of Schedule 3 of the PPA Agreement shall be amended by deleting the words "NAS Substation, St. David's Island" and replacing them with the words "[REDACTED]".
7. On or after the effective date of this Amendment, each reference in the PPA Agreement to "this Agreement", "hereunder", "hereof", or words of like import referring to the PPA Agreement, shall mean and be a reference to the PPA Agreement, as amended by this Amendment. The PPA Agreement as amended by

this Amendment contains the entire understanding and agreement of the Parties with respect to its subject matter, and supersedes any prior understandings or agreements, whether written, oral or otherwise.

8. The PPA Agreement, as specifically amended by this Amendment, is and shall continue to be in full force and effect, and is hereby ratified, confirmed and affirmed. Except as specifically amended by this Amendment, the terms of the PPA Agreement shall not otherwise be deemed amended, altered or revised.
9. The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a waiver of any right, power or remedy of any Party under the PPA Agreement, nor constitute a waiver of any provision of the PPA Agreement.
10. This Amendment may be executed in any number of counterparts each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.
11. This Amendment shall be governed by the [REDACTED]

[SEPARATE SIGNATURE PAGE ATTACHED]

**SEPARATE SIGNATURE PAGE
TO FIRST AMENDMENT
TO POWER PURCHASE AGREEMENT**

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment as of the day and year first above written.

EXECUTED for and on behalf of [REDACTED]
[REDACTED]

[REDACTED]
Duly Authorised Signatory

Name: [REDACTED]

Title: President

Signature of Witness [REDACTED]

Name: [REDACTED]

Address: [REDACTED]

**EXECUTED for and on behalf of SATURN
SOLAR BERMUDA 1 LTD.**

[REDACTED]
Duly Authorised Signatory

Name: [REDACTED]

Title: President



Signature of Witness

Name:  _____

Address: 



Saturn Solar Bermuda 1 Ltd.
Second Amendment
to Power Purchase Agreement

**SECOND AMENDMENT TO
POWER PURCHASE AGREEMENT**

THIS SECOND AMENDMENT TO POWER PURCHASE AGREEMENT (this “**Amendment**”) is made effective as of [REDACTED], by and between [REDACTED], a limited liability company formed under the laws of Bermuda ([REDACTED]), and SATURN SOLAR BERMUDA 1 LTD., a company formed under the laws of Bermuda (“**Saturn**”). [REDACTED] and Saturn are sometimes referred to individually as a “**Party**” and collectively as the “**Parties**.”

RECITALS

A. Saturn and [REDACTED] entered into that certain Power Purchase Agreement made and entered into on [REDACTED] (the “**Power Purchase Agreement**”) and that certain First Amendment to Power Purchase Agreement made effective as of [REDACTED] (the “**First Amendment**”) and together with the Power Purchase Agreement, the “**PPA Agreement**”).

B. The Parties have determined that certain amendments, and modifications thereto are necessary to achieve the objectives of the PPA Agreement;

C. The Parties mutually desire to amend the PPA Agreement as further described in this Amendment.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Capitalized terms not otherwise defined in this Amendment shall bear the meanings assigned to them in the PPA Agreement.
2. Paragraph 2.1 of Schedule 1 of the PPA Agreement shall be amended by deleting the words “[REDACTED]” and replacing them with the words “[REDACTED]”.
3. Paragraph 2.3 of Schedule 1 of the PPA Agreement shall be amended by deleting “[REDACTED]” and replacing them with the words “[REDACTED]”.
4. The wording of paragraph 3.7 of Schedule 1 following the words “Seller Bank Account:” shall be deleted in its entirety and replaced with the following:

“Bank: [REDACTED]”

Address: [REDACTED]”

Currency: [REDACTED]”

Account #: [REDACTED]”

5. On or after the effective date of this Amendment, each reference in the PPA Agreement to “this Agreement”, “hereunder”, “hereof”, or words of like import referring to the PPA Agreement, shall mean and be a reference to the PPA Agreement, as amended by this Amendment. The PPA Agreement as amended by this Amendment contains the entire understanding and agreement of the Parties with

- respect to its subject matter, and supersedes any prior understandings or agreements, whether written, oral or otherwise.
6. The PPA Agreement, as specifically amended by this Amendment, is and shall continue to be in full force and effect, and is hereby ratified, confirmed and affirmed. Except as specifically amended by this Amendment, the terms of the PPA Agreement shall not otherwise be deemed amended, altered or revised.
 7. The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a waiver of any right, power or remedy of any Party under the PPA Agreement, nor constitute a waiver of any provision of the PPA Agreement.
 8. This Amendment may be executed in any number of counterparts each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.
 9. This Amendment shall be governed by the laws of Bermuda.

[SEPARATE SIGNATURE PAGE ATTACHED]

**SEPARATE SIGNATURE PAGE
TO SECOND AMENDMENT
TO POWER PURCHASE AGREEMENT**

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment as of the day and year first above written.

EXECUTED for and on behalf of [REDACTED]
[REDACTED]

[REDACTED] _____

Duly Authorised Signatory

Name: [REDACTED]

Title: [REDACTED]

Signature of Witness

Name: [REDACTED]

Address: [REDACTED]

**EXECUTED for and on behalf of SATURN
SOLAR BERMUDA 1 LTD.**

Duly Authorised Signatory

Name: [REDACTED]

Title: [REDACTED]

Signature of Witness

Name: _____

Address: _____

**SEPARATE SIGNATURE PAGE
TO SECOND AMENDMENT
TO POWER PURCHASE AGREEMENT**

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment as of the day and year first above written.

EXECUTED for and on behalf of [REDACTED]

Duly Authorised Signatory

Name: [REDACTED]

Title: [REDACTED]

Signature of Witness

Name: _____

Address:

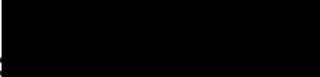
**EXECUTED for and on behalf of SATURN
SOLAR BERMUDA 1 LTD.**

[REDACTED]

Duly Authorised Signatory

Name: [REDACTED]

Title: [REDACTED]



Signature of Witness

Name: 

Address: 





Appendix A: Attestation of Probity

Name of Person: Douglas Wagner

Name of Applicant: Saturn Solar Bermuda 1 Ltd

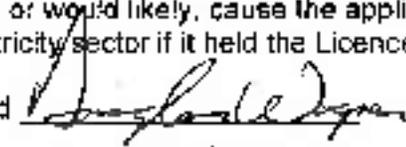
Name of Project: Bermuda Regulatory Authority LF Wade Airport Solar Project (6MW)

Title: President

I certify that I am a fit and proper person to participate in electricity generation in Bermuda. I make this certification as part of Saturn Solar Bermuda 1 Ltd's application for a Bulk Generation Licence.

Specifically, I have not been convicted of any criminal conduct (within the meaning of the Proceeds of Crime Act 1997) that suggests that my participation in electricity generation is not in the best interests of Bermuda

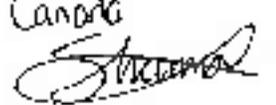
Further, I do not have any interest or affiliation that would, or would likely, cause the applicant to be in conflict with the best interest of Bermuda or the electricity sector if it held the Licence.

Signed 

Dated May 23rd 2019

Signed in front of Shanna Li;

a notary public in the province
of Ontario, Canada



Attestation of Probity

Name of Person: Raymond George Roth

Name of Applicant: Saturn Solar Bermuda 1 Ltd.

Name of Project: 6 MW AC Solar PV Facility at the land known as the "Finger" on St. David's Island

Title: Director

I certify that I am a fit and proper person to participate in electricity generation in Bermuda. I make this certification as part of Saturn Solar Bermuda 1 Ltd.'s application for a Bulk Generation Licence

Specifically, I have not been convicted of any criminal conduct (within the meaning of the Proceeds of Crime Act 1997) that suggests that my participation in electricity generation is not in the best interests of Bermuda.

Further, I do not have any interest or affiliation that would, or would likely, cause the applicant to be in conflict with the best interest of Bermuda or the electricity sector if it held the Licence.

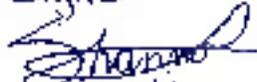
Signed



Dated

JUN 13 / 2019

Signed in front of



Shanna Li
2019/06/13

a notary public in
the province of Ontario.

Attestation of Probity

Name of Person: Tai Nguyen

Name of Applicant: Saturn Solar Bermuda 1 Ltd.

Name of Project: 6 MW AC Solar PV Facility at the land known as the "Finger" on St. David's Island

Title: CIO and Vice President of Strategic Capital

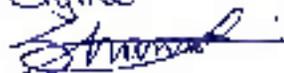
I certify that I am a fit and proper person to participate in electricity generation in Bermuda. I make this certification as part of Saturn Solar Bermuda 1 Ltd's application for a Bulk Generation Licence.

Specifically, I have not been convicted of any criminal conduct (within the meaning of the Proceeds of Crime Act 1997) that suggests that my participation in electricity generation is not in the best interests of Bermuda.

Further, I do not have any interest or affiliation that would, or would likely, cause the applicant to be in conflict with the best interest of Bermuda or the electricity sector if it held the Licence

Signed 

Dated June 3/2019

Signed in front of

Shanna Li
2019/06/03
A notary public in
the province of Ontario

Attestation of Probity

Name of Person: Karen Bertram

Name of Applicant: Saturn Solar Bermuda 1 Ltd.

Name of Project: 6 MW AC Solar PV Facility at the land known as the "Finger" on St David's Island

Title: Vice President of Finance, Controller

I certify that I am a fit and proper person to participate in electricity generation in Bermuda. I make this certification as part of Saturn Solar Bermuda 1 Ltd.'s application for a Bulk Generation Licence.

Specifically, I have not been convicted of any criminal conduct (within the meaning of the Proceeds of Crime Act 1997) that suggests that my participation in electricity generation is not in the best interests of Bermuda.

Further, I do not have any interest or affiliation that would, or would likely, cause the applicant to be in conflict with the best interest of Bermuda or the electricity sector if it held the Licence

Signed Karen Bertram
Dated June 30 2019

Signed in front of
Shanna Li
Shanna Li
2019/06/03
a notary public in
the province of Ontario

Attestation of Probity

Name of Person: Michael Brugge

Name of Applicant: Saturn Solar Bermuda 1 Ltd.

Name of Project: 6 MW AC Solar PV Facility at the land known as the 'Finger' on St. David's Island

Title: Vice President of Engineering

I certify that I am a fit and proper person to participate in electricity generation in Bermuda. I make this certification as part of Saturn Solar Bermuda 1 Ltd's application for a Bulk Generation Licence.

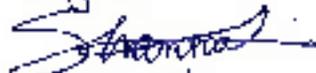
Specifically, I have not been convicted of any criminal conduct (within the meaning of the Proceeds of Crime Act 1997) that suggests that my participation in electricity generation is not in the best interests of Bermuda.

Further, I do not have any interest or affiliation that would, or would likely, cause the applicant to be in conflict with the best interest of Bermuda or the electricity sector if it held the Licence.

Signed

Dated


June 3, 2019

Signed in front of

Shanna Li
2019/020103
a notary public in
the province of Ontario

Attestation of Probity

Name of Person: Neel Bungaroo

Name of Applicant: Saturn Solar Bermuda 1 Ltd

Name of Project: 6 MW AC Solar PV Facility at the land known as the "Finger" on St. David's Island

Title: Vice President and General Counsel

I certify that I am a fit and proper person to participate in electricity generation in Bermuda. I make this certification as part of Saturn Solar Bermuda 1 Ltd.'s application for a Bulk Generation Licence.

Specifically, I have not been convicted of any criminal conduct (within the meaning of the Proceeds of Crime Act 1997) that suggests that my participation in electricity generation is not in the best interests of Bermuda.

Further, I do not have any interest or affiliation that would, or would likely, cause the applicant to be in conflict with the best interest of Bermuda or the electricity sector if it held the Licence.

Signed Bungaroo
Dated JUNE 3, 2019

Signed in front of
[Signature]
Shirley Li
a notary public in
the province of Ontario