Safe Work Management System (SWMS)	*Element:* 4.0 Control and Protection
Sub-element: 4.5 Contractor Safety Management	*Procedure:* n/a
Title: **SWMS 4.5.2 CONTRACTOR HEALTH AND SAFETY OBLIGATIONS**	version 2
Reviewed by: Joint Health and Safety Committee	*Review Date:* 29-Dec-2016
Approved by: Duane Fecteau, General Manager	*Approval Date:* 20-Jan-2017
	Next Review Date: 20-Jan-2019

RECORD OF CHANGE

Version #	Description of Change	Changed By	Date
0	Original	n/a	10-Sep-2010
1	Updated to reflect GLPT revised SWMS	D. Davies	01-Aug-2016
2	Updated and changed to Hydro One SSM	D. Davies	29-Dec-2016

TABLE OF CONTENTS

1.0 PURPOSE

The purpose of this procedure is to provide Contractors with a comprehensive description of the management of Health, Safety, Security and Environment (HSSE) when working for Hydro One Sault Ste. Marie (SSM). The procedure must be used by Contractors in the execution of their legal and corporate responsibilities throughout the contract life cycle.

2.0 SCOPE

This procedure describes the HSSE management requirements for contracted Work from qualification of Contractors and the requisition of the Work through to the contract closure and Contractor evaluation. The procedure applies to all the Contractors involved in the contracting process, and Contractors interested in performing Work for Hydro One SSM.

NOTE: This procedure is not intended to be an all-inclusive in the management of contracts or Contractors but rather is focused only on the HSSE aspects of contracted work.

3.0 DEFINITIONS

NOTE: For definitions not included here within; see SWMS 1.1.3 Health, Safety, Security and Environmental Definitions (HSSE).

4.0 RESPONSIBILITIES

The Responsible Authority or his/her Delegate is responsible for implementing and maintaining this procedure. Managers and Employees, Contractors also have responsibilities outlined in this procedure.

5.0 PROCEDURES

5.1 Standards of Performance

5.1.1 The Contractor shall maintain a high regard for safety while performing the Work**.**

5.1.2 The Contractor shall ensure that the Work shall be carried out in compliance with these ***SWMS 4.5.2 Contractor Health and Safety Obligations***. Prior to commencement and during execution of the Work, the Contractor shall satisfy Hydro One SSM that the Contractor and/or Subcontractor(s) Employees have the skills and knowledge to perform the Work safely. Hydro One SSM may require the Contractor Employees to participate in safety training or orientation sessions in order to have the skills and knowledge necessary to comply with the requirements laid out in this document.

5.1.3 The Contractor shall comply with all applicable requirements of all federal, provincial health and safety acts and regulations. The Contractor shall ensure that the Work shall be carried out in compliance with such acts and regulations and that all Workers shall Work in the manner prescribed therein and use the protective equipment, and take all measures and follow all procedures required. The Contractor shall report promptly to Hydro One SSM any situations such as the reception of a notice or an order from an agency.

5.1.4 Each subcontract with Subcontractors shall expressly state in the agreement that the Subcontractor is bound by the provisions of these ***SWMS 4.5.2 Contractor Health and Safety Obligations*** insofar as such provisions are applicable to any or all of the Work being performed under any such subcontract. The Contractor shall ensure compliance by the Subcontractor with such provisions and the Contractor shall be fully responsible for the acts and omissions of Subcontractors and other Contractors Employees.

5.1.5 The Contractor shall ensure that all Workers employed in the execution of the Contract are fully briefed on and advised of the location of all electrically energized apparatus in the vicinity of the Work and that they are fully briefed and instructed on the correct and safe working procedures, including but not limited to isolation, de-energizing, grounding, and maintaining safe distances for Work in proximity to energized equipment.

5.1.6 The Contractor shall further ensure that every On-site Supervisor and every Worker is fully conversant with the correct Work methods to be used in order to prevent electrical contact or encroaching on safe working distances and the procedures to be followed in case of an electrical contact.

5.1.7 In the event that the Contractor or any of its On-site Supervisor is unsure of a proper working procedure, this person shall immediately request guidance from Hydro One SSM prior to proceeding with the Work.

5.1.8 The Contractor shall ensure that all equipment is checked regularly to establish that it is in safe working condition, that any defect is rectified before equipment use is resumed and that the equipment is approved for the purpose for which it is being used by the American National Standards Institute, the Canadian Standards Association and/or any other applicable governing body.

5.1.9 The Contractor shall ensure that safety ropes, tools, equipment and aerial lifts are handled in such a way as to prevent them from coming within approved safe working distances or into contact with energized equipment.

5.1.10 The Contractor shall promptly and suitably correct all safety related deficiencies and hazards, including those that may, from time to time, be identified by Hydro One SSM. All deficiencies and hazards shall be reported to Hydro One SSM.

5.1.11 The Contractor shall make available to Hydro One SSM, upon demand, all Work related health and safety documentation for audit.

5.2 Site Hazard Assessment

5.2.1 Prior to the commencement of the Work on-site, Hydro One SSM will perform an assessment of the known high-risk hazards associated with the site that could arise during the Contractor's site mobilization and preparation, using form ***SWMS 2.2.1 F01 Hazard Assessment*** and provide a copy to the Contractor. The Contractor shall complete the ***SWMS 2.2.1 F01 Hazard Assessment*** form to identify any additional hazards specific to the Work and describe the specific barriers and work methods to be employed to control all identified hazards and shall provide a copy to Hydro One SSM for review and comment.

5.2.2 The Contractor shall be responsible for controlling the hazards and implementing the specific barriers and Work methods identified in the completed ***SWMS 2.2.1 F01 Hazard Assessment*** Form.

5.2.3 The Contractor shall ensure that all hazard controls and barriers are in place and functional prior to commencement of the Work, and are maintained and functional at all times until completion of the Work.

5.2.4 Refer to ***SWMS 2.2.1 Job Planning*** for further details.

5.3 Project Planning Decision Tree

5.3.1 ***SWMS 2.2.1 F02: Project Planning Decision Tree*** and a ***SWMS 2.2.1 F04 Project Safety Plan*** shall be used by Hydro One SSM to determine the appropriate level of safety planning required by the Contractor for the Work.

5.3.2 Level 1 Planning: If the project involves a prolonged outage, complex work or work lasting more than 20 days, the Contractor shall complete a ***SWMS 2.2.1 F03 Critical Task Plan***, a ***SWMS 2.2.1 F04 Project Safety Plan*** and a ***SWMS 2.2.1 F05 Daily Job Plan.***

5.3.3 Level 2 Planning: If the project involves a brief outage, multiple crews or work lasting more than 5 days, the Contractor shall complete a ***SWMS 2.2.1 F04 Project Safety Plan*** and a ***SWMS 2.2.1 F05 Daily Job Plan.***

5.3.4 Level 3 Planning: If the project does not involve any of the above, the Contractor shall complete a ***SWMS 2.2.1 F05 Daily Job Plan*** for all tasks related to construction activities, projects, maintenance, operating, switching, service work, field studies and trouble calls.

5.3.5 Refer to ***SWMS 2.2.1 Job Planning*** for further details.

5.4 Critical Task Plan

5.4.1 When applicable as specified in 5.3.2, above, the Contractor shall provide to Hydro One SSM, prior to commencement of the Work on-site, a ***SWMS 2.2.1 F03 Critical Task Plan*** showing the sequence of tasks required to complete the Work. The ***SWMS 2.2.1 F03 Critical Task Plan*** will include the timing, resources and special equipment required for each task in the plan. Hydro One SSM will review and comment on the ***SWMS 2.2.1 F03 Critical Task Plan***. The Contractor will use the ***SWMS 2.2.1 F03 Critical Task Plan*** to complete the ***SWMS 2.2.1 F04 Project Safety Plan(s)*** required as per Section 5.5.

5.4.2 Refer to ***SWMS 2.2.1 Job Planning*** for further details.

5.5 Project Safety Plan

5.5.1 When applicable as specified in 5.3.2, 5.3.3the Contractor shall provide to Hydro One SSM, prior to the commencement of the Work on-site and every three (3) months thereafter, a ***SWMS 2.2.1 F04 Project Safety Plan***. The ***SWMS 2.2.1 F04 Project Safety Plan(s)*** shall identify the sequence of activities to be completed on-site during the next three (3) months. For each activity, the plan will identify the high-risk hazards that may be present and include a barrier analysis that identifies the control barriers, safety barriers and support barriers required for each high-risk hazard.

5.5.2 Hydro One SSM will review the ***SWMS 2.2.1 F04 Project Safety Plan(s)*** and may, at its sole discretion, require the Contractor to make modifications Hydro One SSM deems necessary to ensure compliance with these ***SWMS 4.5.2 Contractor's 's Health and Safety Obligations***. The Contractor shall revise its ***SWMS 2.2.1 F04 Project Safety Plan(s)*** to include any such modifications required by Hydro One SSM. The Contractor shall provide to Hydro One SSM

the revised ***SWMS 2.2.1 F04 Project Safety Plan(s)*** and the Contractor shall communicate to the Workers performing the Work, the details of any such revised ***SWMS 2.2.1 F04 Project Safety Plan(s)*.**

5.5.3 Notwithstanding the review of the ***SWMS 2.2.1 F04 Project Safety Plan(s)*** by Hydro One SSM, the responsibility for the accuracy, completeness, suitability, implementation and communication of such ***SWMS 2.2.1 F04 Project Safety Plan(s)*** shall remain the exclusive responsibility of the Contractor. The Contractor shall update the ***SWMS 2.2.1 F04 Project Safety Plan(s)*** to address any new major tasks that may arise during the course of the Work.

5.5.4 The Contractor shall not make changes to the ***SWMS 2.2.1 F04 Project Safety Plan(s)*** without the prior written consent of Hydro One SSM.

5.5.5 The Contractor shall ensure that the ***SWMS 2.2.1 F04 Project Safety Plan(s)*** is (are) fully implemented and complied with at all times during execution of the Work on-site.

5.5.6 Refer to ***SWMS 2.2.1 Job Planning*** for further details.

5.6 Contractor Safety Orientation

5.6.1 The Contractor shall participate in an on-site Safety Orientation meeting conducted by Hydro One SSM prior to the commencement of the Work. The Safety Orientation meeting is mandatory for the Contractor's and Subcontractors' Supervisors and all Workers who will be on-site during the startup phase of the Work. This orientation will be Site and Work specific and will identify the limits of the safe working area and all known high-risk hazards, safety issues and restrictions, and the site emergency response plan.

5.6.2 Afterwards, during execution of the Work on-site, the Contractor shall conduct on-site safety orientation meetings for new Contractor's and Subcontractor's Employees prior to them starting to Work and provide Hydro One SSM written confirmation that these meetings have taken place.

5.6.3 Refer to ***SWMS 4.5.1 Contractor Safety Management*** for further details.

5.7 Daily Job Plan

5.7.1 At the start of each work shift and prior to commencement of any work on-site, each of the Contractor's work crews shall prepare a ***SWMS 2.2.1 F05 Daily Job Plan.*** All Workers and working crews assess the critical safety issues pertaining to the work shift. The Contractor shall provide Hydro One SSM with a copy of all ***SWMS 2.2.1 F05 Daily Job Plan(s)*.**

5.7.2 The ***SWMS 2.2.1 F05 Daily Job Plan*** shall identify the sequence of tasks to be completed and the high-risk hazards and medium-risk hazards that may be present related to each task. The ***SWMS 2.2.1 F05 Daily Job Plan*** will include a barrier analysis that identifies the control barriers, safety barriers and support barriers required for each hazard. If the work conditions pertaining to the Work shift change giving rise to new safety issues the Contractor shall revise the ***SWMS 2.2.1 F05 Daily Job Plan*** before executing anymore work.

5.7.3 Every Worker shall adhere to the requirements of each applicable ***SWMS 2.2.1 F05 Daily Job Plan.***

5.7.4 Refer to ***SWMS 2.2.1 Job Planning*** for further details.

5.8 Safe Work Observations

5.8.1 If specified in the contract by Hydro One SSM, the Contractor shall conduct structured safe work observations of the Work at minimum weekly intervals and report the findings to Hydro One SSM using ***SWMS 2.2.1 F07 Safety Work Observations*** Booklet within three (3) working days of each observation.

5.8.2 Hydro One SSM may conduct regular structured safe work observations of the Work at Hydro One SSM's discretion. The Contractor shall ensure that the Workers and Supervisors cooperate with Hydro One SSM during such observations.

5.8.3 Refer to ***SWMS 5.1.1 Safe Work Observations*** procedure for further details.

5.9 Safety Meetings

5.9.1 The Contractor shall conduct on-site safety meetings with its Employees at least monthly or as requested by Hydro One SSM. These meetings should last approximately 45 minutes and may be attended by Hydro One SSM. The minutes of the meetings shall be forwarded to Hydro One SSM within three (3) working days of the meeting.

5.9.2 Refer to ***SWMS 3.2.1 Safety Meetings*** procedure for further details.

5.10 Contract Closeout

5.10.1 The Contractor shall participate in a closing meeting with Hydro One SSM to complete an evaluation of the Contractor's 's performance using form ***SWMS 4.5.1 F02 Contract Closeout***. The meeting will, in part, assist Hydro One SSM to determine whether or not, or under what circumstances the Contractor may be considered for future work. The Contractor will be provided with the completed ***SWMS 4.5.1 F02 Contract Closeout*** form

5.10.2 Refer to ***SWMS 4.5.1 Contractor Safety Management*** for further details.

5.11 Incident Reporting & Investigation

5.11.1 In the event of an incident resulting in an injury to a Contractor's 's Employee, a Hydro One SSM's Employee, or a member of the Public, or in the event of a potentially high-risk environmental incident, the Contractor shall:

- Stop work;
- Secure the site to ensure the protection of Workers and the Public and to aid with the investigation;
- Report the incident immediately to Hydro One SSM; and
- Provide notice to the proper authorities.

5.11.2 The Contractor shall complete a thorough investigation of any incident occurring during performance of the Work, whether or not the incident resulted in an occupational injury or illness to Hydro One SSM's Employee, Contractor's Employee, Subcontractor's Employee or member of the Public, or in property damage. The Contractor shall provide Hydro One SSM with a detailed written report of its findings using form ***SWMS 5.3.1 F01 Accident Incident HSE Event Reporting and Investigation.***

5.11.3 The Contractor shall assist Hydro One SSM in any investigation Hydro One SSM may undertake related to any incident, and in the implementation of any action plans relating to the incident.

5.11.4 Refer to ***SWMS 5.3.1 Incident Reporting and Investigation*** procedure for further details.

5.12 Emergencies

5.12.1 Hydro One SSM has the authority and the Contractor has the obligation to stop work whenever in the opinion of either party such stoppage may be necessary to ensure the safety of a life, or any equipment, structure or property. This includes the authority to make changes and to order the Contractor to stop working.

5.13 Removal of Worker

5.13.1 The Contractor shall employ in and about the execution of the Work only such persons as are careful, competent and efficient in their respective trades and callings. Hydro One SSM is at liberty to object to and to require the Contractor to remove from the site forthwith any person employed by the Contractor in or about the execution of the Work who, in the opinion of Hydro One SSM, conducts himself or herself inappropriately, is incompetent or negligent in the performance of its duties, or does not comply with applicable legislation, these ***SWMS 4.5.2 Contractor Health and Safety Obligations***, including the ***SWMS 2.2.1 F04 Project Safety Plan(s)*** or the ***SWMS 2.2.1 F05 Daily Job Plan(s).*** Such person shall not be employed again at the Work site without the prior written consent of Hydro One SSM.

5.14 Fire Prevention and Protection

5.14.1 The Contractor shall comply with all laws, bylaws and regulations and with the instructions of Hydro One SSM with respect to fires and prevention of fires.

5.14.2 The Contractor shall provide and maintain portable fire extinguishing equipment and such equipment shall remain on-site until all work is completed and accepted by Hydro One SSM.

5.14.3 The Contractor shall comply with all fire prevention requirements of the municipality and Hydro One SSM, and shall have at all times Workers on-site who are experienced in the use of the prescribed equipment.

5.14.4 The Contractor shall report immediately any escaped fires to the local municipality and to Hydro One SSM.

5.14.5 Refer to ***SWMS 2.3.1 CP07 Fire Prevention and Preparedness Plan*** procedure for further details.

5.15 Product Transportation

5.15.1 When the Contractor is shipping to or from site, or planning to use on-site, any product which is categorized as a hazardous material or dangerous good, the Contractor shall conform to the relevant federal or provincial legislations and regulations pertaining to such materials. All such materials and their transport containers and/or vehicles shall be properly identified with the required warning labels.

5.15.2 The Contractor shall provide Hydro One SSM with one copy of the Material Safety Data Sheet (MSDS) for each hazardous material brought on-site.

5.15.3 Upon completion of the Work or when a particular product is no longer required on-site, whichever shall occur first, the Contractor shall remove all remaining quantities of the product and all empty containers**.**

5.15.4 Hazardous material or dangerous goods shall not be disposed of through Hydro One SSM's waste management system or on Hydro One SSM's or third party's property (except for approved and appropriate waste disposal sites).

5.15.5 Hazardous material or dangerous goods shall not be left on-site or with Hydro One SSM without the prior written consent of Hydro One SSM.

5.16 Product Delivery Systems

5.16.1 Product delivery systems, including but not limited to, containers, valves, pumps, pipes, hoses, nozzles and vents, shall be in good working order and without leaks.

5.17 Student Employment

5.17.1 The following activities are prohibited for all students:

- Work in power plants;
- Work near energized electrical equipment;
- Work in forestry (e.g., right-of-way clearing);
- Driving a vehicle or heavy operating equipment;
- Use of mechanical equipment (e.g., chainsaws);
- Exposure to high-risk hazards or conditions such as falls greater than 3 meters (10 feet), falling objects, proximity to energized electrical equipment, rotating mechanical equipment, confined spaces, etc.

5.18 Off-Road Vehicle Operation

5.18.1 The use of straddle-type all-terrain vehicles and motorcycles is not permitted on-site or for travel to and from the site. All off-road vehicles used by the Contractor shall be designed for work travel and hauling, not recreation. The off-road vehicles shall have rollover protection that meets the regulatory design standards and shall be equipped with seat belts.

5.18.2 Operators and riders shall be belted in at all times when riding in off-road vehicles and shall wear approved CSA/DOT safety helmets securely fastened under the chin by the chin strap. Operators shall operate at prudent speeds for trail conditions and in no instance (unless approved in writing by Hydro One SSM) will exceed 50 kilometers per hour (30 mph).

5.18.3 Operators shall have completed a combination of both classroom and hands-on training regarding the safe operation of off-road vehicles.

5.18.4 The Contractor shall have an emergency plan in place for the use of off-road vehicles that includes emergency communication, survival gear appropriate for the weather and conditions, and an emergency rescue plan.

5.18.5 Refer to ***SWMS 2.2.1 CT06 Off-Road Vehicles and Snowmobile Operation*** for further details.

5.19 Snowmobile Operation

5.19.1 All snowmobiles used by the Contractor shall be designed for Work travel and towing, not recreation: for example, a long track machine or a wide track machine.

5.19.2 Snowmobile operators shall have completed a combination of both classroom and hands-on training regarding the safe operation of snowmobiles.

5.19.3 Operators and passengers shall wear approved CSA/DOT safety helmets at all times when riding on a snowmobile and shall operate at prudent speeds for conditions, and in no instance (unless specifically approved in writing by Hydro One SSM) will exceed 50 kilometers per hour (30 mph). Furthermore, operators will respect the trail conditions and the posted speed limits on groomed snowmobiles trails.

5.19.4 The Contractor shall have an emergency plan in place for the use of snowmobiles that includes emergency communication, survival gear appropriate for the weather and conditions, and an emergency rescue plan.

5.19.5 Refer to ***SWMS 2.1.2 CT06 Off-Road Vehicle and Snowmobile Operation*** for further details.

5.20 Chainsaw Operation

5.20.1 When using a chainsaw or brushsaw for Work in which the public may have access to the site, a safe work zone of 5 meters (16 feet) shall be established and delineated with caution tape. The requirement to use caution tape does not necessarily apply to all right-of-way maintenance work; its use to be determined during the Site Hazard Assessment (see completed ***SWMS 2.2.1 F01 Hazard Assessment)*** completed prior to commencement of the Work on-site.

5.20.2 When using a chainsaw or brushsaw for minor construction and bucking work, a safe work zone of 5 meters (16 feet) shall be established and marked with cones or caution tapes, or monitored by a dedicated observer.

5.20.3 When using a chainsaw or brushsaw for brush clearing work, a safe work zone of 5 meters (16 feet) shall be maintained.

5.20.4 When using a chainsaw or brushsaw for felling small or large trees on level ground, a safe work zone shall be maintained at a minimum of two (2) tree lengths of the trees being felled. For felling small or large trees on sloped terrain, the safe work zone shall be maintained greater than two (2) tree lengths.

5.20.5 All Workers performing Work involving the use of chainsaws or brushsaws shall be trained and competent for the type of work performed. The training shall include classroom sessions on the safe use of chainsaws or brushsaws, the use of personal protective equipment, and practical application related to the type of work performed.

5.20.6 Chainsaw or brushsaw operators must be deemed competent by their Supervisor prior to operating a chainsaw.

5.20.7 Chainsaw or brushsaw operators must have a chainsaw license/ticket from a recognized certification authority and regular refreshers should be completed as needed.

5.20.8 Refer to ***SWMS 2.1.2 CT02 Chainsaw Operation*** for further details.

5.21 Work in Proximity to Energized Electrical Equipment

5.21.1 Regardless of the voltage, the first alternative shall always be to de-energize, test and ground the equipment.

5.21.2 "Work in Proximity to Energized Electrical Equipment" is work where a person, or conducting tools, equipment or other objects are within the "Minimum Clearance Distance to Energized Electrical Equipment", or are physically capable of, through inadvertent movement, encroaching on the "Minimum Clearance Distance to Energized Electrical Equipment", as specified in the following tables:

Minimum Clearance Distance to Energized Equipment for **Qualified** Workers

Nominal Phase-to-Phase Voltage Range	Minimum Clearance Distance
750 V to 35 kV	0.9 meters (3 feet)
>35 kV to 50 kV	1.2 meters (4 feet)
>50 kV to 125 kV	1.5 meters (5 feet)
>125 kV to 250 kV	2.5 meters (8 feet)

Minimum Clearance Distance to Energized Equipment for **Unqualified** Workers

Nominal Phase-to-Phase Voltage Range	Minimum Clearance Distance
750 V to 150 kV	3.05 m (10 ft.)
>150 kV to 250 kV	4.58 m (15 ft.)

5.21.3 All "Work in Proximity to Energized Electrical Equipment" is subject to Hydro One SSM's prior written consent and shall comply with the following conditions:

- A documented work procedure for the specific task shall be developed that includes a control barrier to prevent contact with energized equipment. The procedure shall be approved by Hydro One SSM;
- The Workers shall be qualified pursuant to prudent industry practices to perform work in Proximity to Energized Equipment and have been trained on the specific work procedure;
- The specific task (except for switching operations) shall be monitored by a dedicated observer who is qualified and trained on the specific work procedure;

- The ***SWMS 2.2.1 F05 Daily Job Plan(s)*** prepared by the Workers involved in the Work shall specify the control barrier and the use of a dedicated observer; and

- If the task cannot be completed with the application of a control barrier, the ***SWMS 2.2.1 F05 Daily Job Plan(s)*** shall include multiple safety barriers and shall be approved by Hydro One SSM.

5.21.4 Refer to ***SWMS 2.1.2 CT12 Working in Proximity to Energized Electrical Equipment*** procedure for further details.

5.22 Work On Energized Electrical Equipment

5.22.1 Regardless of the voltage, the first alternative shall always be to de-energize, test and ground the equipment.

5.22.2 "Work on Energized Electrical Equipment" is work where contact is made with an energized conductor or equipment.

5.22.3 All "Work on Energized Electrical Equipment" is subject to Hydro One SSM's prior written consent and shall comply with the following conditions:

- A documented Work procedure for the specific task shall be developed that includes a control barrier to prevent the second point of contact. The procedure shall be approved by Hydro One SSM General Manager;

- The Workers shall be qualified to perform work on Energized Equipment and have been trained on the specific work procedure;

- The specific task shall be monitored by a dedicated observer who is qualified and trained on the specific work procedure, except for tasks limited to testing, troubleshooting and isolating at voltages less than 600v; and

- The ***SWMS 2.2.1 F05 Daily Job Plan(s)*** prepared by the Workers involved in the Work shall specify the control barrier and the use of a dedicated Observer, and shall be approved by Hydro One SSM, except for tasks limited to testing, troubleshooting and isolating at voltages less than 600v.

5.22.4 Refer to ***SWMS 2.1.2 CT12 Working in Proximity to Energized Electrical Equipment*** procedure for further details.

5.23 Heavy Equipment Pre-Use Inspection and Operation

5.23.1 "Heavy Equipment" is equipment used for construction, maintenance or transport activities, and includes but is not limited to bulldozers, mobile cranes, overhead fixed cranes, excavators, front end loaders, forklifts, manlifts, bucket trucks, digger derrick trucks, tractor trailers, dump trucks, compaction rollers, helicopters, etc.

5.23.2 The Contractor shall ensure that Operators of the Heavy Equipment have up-to-date licenses to operate the Heavy Equipment as per the regulatory requirements.

5.23.3 The Contractor shall ensure that Operators have received training within a structured program on the safe operation of the Heavy Equipment and have a

thorough understanding of the operating limitations of the specific equipment to be operated.

5.23.4 In the absence of formal training, the Contractor shall assist Hydro One SSM in conducting a formal evaluation of the Operator's skills to determine if the Operator's experience is equivalent to training provided within a structured program.

5.23.5 The Contractor shall ensure that orientation is provided to all Operators on the safe operation of any Heavy Equipment that is new to the site prior to the equipment being used on-site.

5.23.6 The Contractor shall ensure that inspection and maintenance is performed as per the manufacturer's requirements for any Heavy Equipment. The Contractor used to perform the Work shall maintain the inspection and maintenance records.

5.23.7 Operators shall conduct pre-use checks on all Heavy Equipment prior to performing Work with the equipment. A Heavy Equipment Pre-use Checklist (provided by the Contractor) shall be used by the Operators and records shall be maintained by the Contractor .

5.23.8 Operators shall prepare a separate ***SWMS 2.2.1 F05 Daily Job Plan*** (as defined in section 5.7 above). The ***SWMS 2.2.1 F05 Daily Job Plan*** shall include the details on the use of the equipment such as vehicle setup, stabilization, Work zone protection, rigging requirements, the operating limitations of the Heavy Equipment and minimum clearance distances to energized electrical equipment. Hydro One SSM's ***SWMS 2.2.1 F05 Daily Job Plan*** shall be reviewed with the other Workers on-site prior to the start of Work.

5.23.9 All Work requiring the use of mobile Heavy Equipment near electrical supporting structures, such as towers, poles and guy wires, shall comply with the following conditions, except for Work performed by qualified power line Workers on transmission and distribution circuits:

- Operators shall ensure that the mobile Heavy Equipment is maintained at a minimum safe working distance of 3 meters (10 feet) from any electrical supporting structure;
- A safe work zone shall be established around the electrical supporting structure. The perimeter of the zone and the structure shall be marked with cones, flags or caution tape;
- These visual aids shall be attached or positioned so the operator of the equipment has good visual contact with them while working in the area of the electrical supporting structures;
- For any work required within 3 meters (10 feet) of an electrical supporting structure, the first alternative shall be to use hand tools. If the use of hand tools is not feasible, the work shall require the use of physical barriers or a dedicated observer; and
- If the above conditions cannot be met, a documented work procedure shall be approved by Hydro One SSM.

5.23.10 Refer to ***SWMS 2.1.2 CT07 Heavy Equipment, Pre-Use Inspection and Operation*** procedure for further details.

5.24 Working at Heights and Fall Protection

5.24.1 Fall Protection measures must be whenever there is a potential for a High-Risk event involving gravitational energy such as a Worker:

- falling from a ladder;
- falling from a roof or platform;
- falling into operating machinery;
- falling into water or other liquid;
- falling into or onto a hazardous substance or object;
- falling through an opening on a work surface; and
- falling more than 3 meters (10 meters).

5.24.2 For all temporary and permanent work, structures, equipment and installations, where conditions such as of the ones above exist, the first alternative is to change the design in order to eliminate the hazard. If it is not practical to implement design changes, the second alternative must be to implement fall prevention measures such as a guardrail system or travel restraint system. In the cases where neither design changes nor the implementation of fall prevention measures are practical, the third alternative must be to implement a fall limiting or a fall arrest system.

5.24.3 Whenever there is a possibility of objects falling from a work platform onto persons below, an adequate safe work zone must be established to ensure that Workers are not exposed to falling objects. The work zone should be delineated with caution tape or monitored by a dedicated Observer. The work platform must have kick plates installed and the Workers should tie off the tools and equipment whenever possible.

5.24.4 Refer to ***SWMS 2.1.2 CT11 Working at Heights and Fall Protection*** for further details.

6.0 RECORDS MANAGEMENT

6.1 Forms

- Heavy Operating Equipment Pre-use Checklist (provided by the Contractor and/or Subcontractor)
- SWMS 2.2.1 F01 Hazard Assessment
- SWMS 2.2.1 F02 Project Planning Decision Tree
- SWMS 2.2.1 F03 Critical Task Plan
- SWMS 2.2.1 F04 Project Safety Plan
- SWMS 2.2.1 F05 Daily Job Plan
- SWMS 2.2.1 F07 Safe Work Observations

- SWMS 4.5.1 F02 Contract Closeout
- SWMS 5.3.1 F01 Accident / Incident HSSE Event Reporting and Investigation

6.2 Related Documentation

- For a complete list of provincial highways where on-road ATV/ORV use is permitted, refer to Ontario Regulation 316/03 schedule B
- For a list of provincial highways where on-road use is prohibited refer to Ontario Regulation 316/03 Schedule A.
- For a list of highways in Ontario where ATVs are prohibited from crossing, check Schedule 1 of Regulation 863 of the Off-Road Vehicles Act.
- For further information refer to the MTO website at: http://www.mto.gov.on.ca /english/driver/drive-ATV.html
- Smart Ride Safe Ride Guide: http://www.mto.gov.on.ca/english/driver/pdfs/ smart- ride-safe-ride-ATV.pdf
- Safe Work Management System (SWMS) Policies and Procedures Manual
- SWMS 1.1.3 Health, Safety, Security and Environmental Definitions (HSSE)

6.3 Records to be kept

- Heavy Operating Equipment Pre-use Checklist (provided by the Contractor and/or Subcontractor)
- SWMS 2.2.1 F01 Hazard Assessment
- SWMS 2.2.1 F03 Critical Task Plan
- SWMS 2.2.1 F04 Project Safety Plan
- SWMS 2.2.1 F05 Daily Job Plan
- SWMS 2.2.1 F07 Safe Work Observations
- SWMS 4.5.1 F02 Contract Closeout and Evaluation
- SWMS 5.3.1 F01 Accident / Incident HSSE Event Reporting and Investigation