

CONTRACTOR’S ENVIRONMENTAL OBLIGATIONS

TABLE OF CONTENTS

1 STANDARDS OF PERFORMANCE 3

2 SITE HAZARD ASSESSMENT 4

3 PROJECT PLANNING DECISION TREE 4

4 CRITICAL TASK PLAN..... 5

5 PROJECT ENVIRONMENTAL PLANS 5

6 SITE ENVIRONMENTAL ORIENTATION..... 6

7 DAILY JOB ENVIRONMENTAL PLAN(S)..... 6

8 WORK OBSERVATIONS..... 6

9 SITE ENVIRONMENTAL MEETINGS..... 7

10 CLOSING MEETINGS 7

11 INCIDENT RESPONSE AND REPORTING 7

12 SPILLS AND EMERGENCY PREPAREDNESS..... 8

13 INQUIRIES AND INTERACTION WITH THIRD PARTIES 8

14 EMERGENCIES 8

15 REMOVAL OF WORKERS 9

16 PRODUCT TRANSPORT 9

17 PRODUCT DELIVERY SYSTEMS 9

18 WASTE MANAGEMENT 9

19 WORK-SPECIFIC REQUIREMENTS 10

20 LIST OF APPENDICES 10

Please take note of the following:

In this document, **Environment** refers both to the natural environment (plants, animals, air earth, water, etc.) and to members of the public that could be affected by the Work. Environmental protection elements include, but are not limited to, best management practices, erosion and sedimentation prevention, oil and chemical spill prevention, waste management practices and protection of critical areas such as waterways, wetlands or designated species habitat. Public safety includes dam safety and protection of members of the public that could gain access to the Work site or that could be affected by the Work.

Environmental Protection refers to the protection of the public, of the natural environment, and of third party property.

Environment includes:

- **Public safety,**
- **Natural environment, and**
- **Third-party property.**

1 STANDARDS OF PERFORMANCE

- 1.1 The Contractor shall maintain a high regard for environmental protection while performing the Work.
- 1.2 The Contractor shall ensure that the Work shall be carried out in compliance with these **Contractor’s Environmental Obligations**. Prior to commencement and during execution of the Work, the Contractor shall satisfy the Owner that the Contractor and its Subcontractor(s) and personnel have the skills to perform the Work safely with respect to the Environment. The Owner may require the Contractor and its Subcontractor(s) and personnel to participate in environmental training or orientation sessions in order to have the skills and knowledge necessary to comply with the requirements laid out in this document.
- 1.3 The Contractor shall comply with all applicable requirements of all federal, state/provincial, and local environmental acts, regulations, rules and guidelines. The Contractor shall ensure that the Work shall be carried out in compliance with such acts, regulations, rules and guidelines and that all necessary licenses, authorizations, certificates and permits have been obtained and can be furnished upon request. The Contractor shall further ensure that all workers shall work in the manner prescribed therein, use the necessary protective equipment, and take all measures and follow all procedures required to protect the Environment. The Contractor shall report promptly to the Owner any situations such as the reception of a notice or an order from an agency.
- 1.4 Each subcontract with Subcontractors shall expressly state in the agreement that the Subcontractor is bound by the provisions of these **Contractor’s Environmental 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 Contractor personnel.

- 1.5 In the event that the Contractor or any of its on-site supervisors is unsure of a proper working procedure, this person shall immediately request guidance from the Owner prior to proceeding with the Work.
- 1.6 The Contractor shall ensure that all equipment is checked regularly to establish that it is in proper working condition to ensure the protection of the Environment, 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.
- 1.7 The Contractor shall promptly and suitably correct all environmental-related deficiencies and hazards, including those that may, from time to time, be identified by the Owner. All deficiencies and hazards shall be reported to the Owner.
- 1.8 The Contractor shall make available to the Owner, upon demand, all Work environmental related documentation for audit.

2 SITE HAZARD ASSESSMENT

- 2.1 Prior to the commencement of the Work on Site, the Owner will perform an assessment of the known high-risk hazards associated with the Site (including public safety ones) that could arise during the Contractor’s Site mobilization and preparation using **HSE Form B: Site Hazard Assessment Form** attached as Appendix 1 (or an equivalent form approved by the Owner) and provide a copy to the Contractor. The Contractor shall complete the 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 the Owner for review and comment.
- 2.2 The Contractor shall be responsible for controlling the hazards and implementing the specific barriers and work methods identified in the completed Site Hazards Assessment Form.
- 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.

3 PROJECT PLANNING DECISION TREE

- 3.1 **HSE Form A: Project Planning Decision Tree** attached as Appendix 2 shall be used by the Owner to determine the appropriate level of planning required by the Contractor for the Work.
- 3.2 Level 1 Planning: If the project involves a prolonged outage, complex Work, or Work lasting more than 20 days, the Contractor shall prepare a Critical Task Plan, a Project Environmental Plan and Daily Job Environmental Plans.
- 3.3 Level 2 Planning: If the project involves a brief outage, multiple crews, or Work lasting more than 5 days, the Contractor shall prepare a Project Environmental Plan and Daily Job Environmental Plans.

- 3.4 Level 3 Planning: If the project does not involve any of the above, the Contractor shall prepare Daily Job Safety Plans for all tasks related to construction activities, projects, maintenance, operating, switching, service work, field studies and trouble calls.

4 CRITICAL TASK PLAN

- 4.1 When applicable as specified in 3.2, the Contractor shall provide to the Owner, prior to commencement of the Work on Site, a Critical Task Plan showing the sequence of tasks required to complete the Work. The Critical Task Plan will include the timing, resources and special equipment required for each task in the plan. The Owner will review and comment on the Critical Task Plan. The Contractor will use the Critical Task Plan to prepare the Project Environmental Plan(s) required as per Section 5.

5 PROJECT ENVIRONMENTAL PLANS

- 5.1 When applicable as specified in 3.2 and 3.3, the Contractor shall provide to the Owner, prior to the commencement of the Work on Site and every three (3) months thereafter, a Project Safety Plan using **HSE Form D: Project Safety and Environmental Plan** attached as Appendix 3 (or an equivalent form approved by the Owner). The Project Safety and Environmental 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.
- 5.2 The Owner will review the Project Environmental Plan(s) and may, at its sole discretion, require the Contractor to make modifications the Owner deems necessary to ensure compliance with these **Contractor’s Environmental Obligations**. The Contractor shall revise its Project Environmental Plan(s) to include any such modifications required by the Owner. The Contractor shall provide to the Owner the revised Project Environmental Plan(s) and the Contractor shall communicate to the workers performing the Work, the details of any such revised Project Environmental Plan(s).
- 5.3 Notwithstanding the review of the Project Environmental Plan(s) by the Owner, the responsibility for the accuracy, completeness, suitability, implementation and communication of such Project Environmental Plan(s) shall remain the exclusive responsibility of the Contractor. The Contractor shall update the Project Environmental Plan to address any new major tasks that may arise during the course of the Work.
- 5.4 The Contractor shall not make changes to the Project Environmental Plan(s) without the prior written consent of the Owner.
- 5.5 The Contractor shall ensure that the Project Environmental Plan(s) is (are) fully implemented and complied with at all times during execution of the Work on Site.

6 SITE ENVIRONMENTAL ORIENTATION

- 6.1 The Contractor shall participate in a Site environmental orientation meeting conducted by the Owner prior to the commencement of the Work. This environmental orientation meeting is mandatory for the Contractor's and Subcontractors' supervisors and all personnel who will be on the Site during the startup phase of the Work. This orientation will be Site and Work specific and will identify environmental hazards, requirements, issues and restrictions, and the Site emergency response plan.
- 6.2 Afterwards, during execution of the Work on Site, the Contractor shall conduct Site environmental orientation meetings for new Contractor and Subcontractor personnel prior to them starting to work and provide the Owner written confirmation that these meetings have taken place.

7 DAILY JOB ENVIRONMENTAL PLAN(S)

- 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 Daily Job Environmental Plan using **HSE Form E: Daily Job Safety and Environmental Plan** attached as Appendix 5 (or an equivalent form approved by the Owner), where all individual employees and working crews assess the critical Environmental issues pertaining to the work shift. The Contractor shall provide the Owner with a copy of all Daily Job Environmental Plans.
- 7.2 The Daily Job Environmental 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 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 environmental issues the Contractor shall revise the Daily Job Environmental Plan before executing anymore work.
- 7.3 Every worker shall adhere to the requirements of each applicable Daily Environmental Plan.

8 WORK OBSERVATIONS

- 8.1 If specified in the contract by the Owner, the Contractor, shall conduct structured work observations of the Work at minimum weekly intervals and report the findings to the Owner using **HSE Form F: Safety and Environment Work Observation** attached as Appendix 6 (or an equivalent form approved by the Owner) within 3 working days of each observation.
- 8.2 The Owner may conduct regular structured safe work observations (environment) of the Work at the Owner’s discretion. The Contractor shall ensure that the workers and supervisors cooperate with the Owner during such observations.

9 SITE ENVIRONMENTAL MEETINGS

9.1 The Contractor shall conduct Site environmental meetings with its employees at least monthly or as requested by the Owner. These meetings should last approximately 45 minutes and may be attended by the Owner. The minutes of the meetings shall be forwarded to the Owner within 3 working days of the meeting.

10 CLOSING MEETINGS

10.1 The Contractor shall participate in a closing meeting with the Owner to complete an evaluation of the Contractor’s performance. The meeting will in part assist the Owner to determine whether or not, or under what circumstances the Contractor may be considered for future work. The Contractor will be provided with a written copy of the evaluation and closing meeting notes.

11 INCIDENT RESPONSE AND REPORTING

11.1 In the event of a high-risk or potentially high-risk environmental incident, the Contractor shall:

- Stop work,
- Secure the Site to ensure the protection of the environment and to aid with the investigation,
- Report the incident immediately to the Owner,
- Provide notice to the proper authorities.

Note: Attachment A, *Risk Level Associated with Environmental Incidents*, provides guidance on what constitutes an Environmental Incident involving or affecting:

- A member of the public,
- Third party property,
- The natural environment, or
- The Owner’s image.

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 injury or illness to a member of the public, in property damage, in damage to the natural environment or whether or not the incident negatively affects the Owner’s image. The Contractor shall provide the Owner with a detailed written report of its findings using **HSE Form G: Incident Investigation** attached as Appendix 7 (or an equivalent form approved by the Owner).

11.3 The Contractor shall assist the Owner in any investigation the Owner may undertake related to any incident, and in the implementation of any action plans relating to the incident.

12 SPILLS AND EMERGENCY PREPAREDNESS

- 12.1 The Contractor shall have available on site at all times a list of emergency phone numbers and the means to make emergency calls.
- 12.2 The Contractor shall ensure that spill kits are available at all times and are located within 300 meters (1000 feet) of the areas where a spill could occur. The spill kits shall be appropriate in content for the materials that could be spilled on site and appropriate for the area the spill may lead to (soil, water, etc.). Small kits shall be available in mobile equipment such as pick-up trucks
- 12.3 The Contractor shall immediately report to the Owner any spill that reaches the soil or the water and take appropriate actions to contain and clean up the spill. The Contractor shall complete an incident report after a spill.
- 12.4 The Contractor shall ensure that areas or equipment that present risk of leaks or spill be protected. This protection shall include, but is not limited to, the following: spill containment systems for oils, fuels and chemical storage and transfer areas; spill containment systems under stationary equipment such as generators pumps and compressors.

13 INQUIRIES AND INTERACTION WITH THIRD PARTIES

- 13.1 The Contractor shall refer any inquiry from the public or the media related to the Work to the Owner.
- 13.2 The Contractor shall maintain positive and respectful relations with third parties (including government agency representatives, as well as neighbors and other users of the area where the Work is taking place or areas near the Site).
- 13.3 The Contractor shall report problematic relations with third parties to the Owner without delay. In such situations, the Owner may stop the Work.

14 EMERGENCIES

- 14.1 The Owner has the authority and the Contractor has the obligation to stop the Work whenever in the opinion of either party such stoppage may be necessary to ensure the protection of the Environment. This includes the authority to make changes and to order the Contractor to stop working.

15 REMOVAL OF WORKERS

15.1 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. The Owner 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 the Owner, conducts himself inappropriately, is incompetent or negligent in the performance of its duties, or does not comply with applicable legislation, these **Contractor’s Environmental Obligations**, including the Project Environmental Plan or the Daily Job Environmental Plans. Such person shall not be employed again at the Work Site without the prior written consent of the Owner.

16 PRODUCT TRANSPORT

16.1 When the Contractor is shipping to Site, or from Site, or planning to use at Site, any product which is categorized as a hazardous material or dangerous good, the Contractor shall conform to the relevant federal, provincial or state legislation 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.

16.2 The Contractor shall provide the Owner with one copy of the Material Safety Data Sheet (MSDS) for each hazardous material brought on to a Site.

16.3 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.

16.4 Hazardous material or dangerous goods shall not be disposed of through the Owner’s waste management system or on the Owner’s or third party’s property (except for approved and appropriate waste disposal sites).

16.5 Hazardous material or dangerous goods shall not be left on-site or with the Owner without the prior written consent of the Owner.

17 PRODUCT DELIVERY SYSTEMS

17.1 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.

18 WASTE MANAGEMENT

18.1 The Contractor shall ensure that all waste material be separated into hazardous and non-hazardous waste. Each waste type shall be disposed of in compliance with federal, provincial, or state requirements. In some jurisdictions, certificates of classification and proof of disposal for all waste shall be available for review.

19 WORK-SPECIFIC REQUIREMENTS

This section shall be prepared by the Owner specifically for each Contract. It shall include Work-specific requirements as well as all relevant Environmental permits, licenses or other correspondence with Environmental or other agencies related to the Work and associated documentation such as permit applications. Any such documents shall become part of these Contractor’s Environmental Obligations.

Relevant Brookfield Renewable Power standards or requirements, including specific ones related to public safety, shall also be listed here and/or attached.

If no Work-specific requirements exist, section 19 shall be deleted.

20 LIST OF APPENDICES

- APPENDIX 1 - HSE Form B: Site Hazard Assessment Form
- APPENDIX 2 - HSE Form A: Project Planning Decision Tree
- APPENDIX 3 - HSE Form D: Project Safety and Environmental Plan
- APPENDIX 4 - Example of Project Safety and Environmental Plan (*for some projects*)
- APPENDIX 5 - HSE Form E: Daily Job Safety and Environmental Plan
- APPENDIX 6 - HSE Form F: Safety and Environment Work Observation
- APPENDIX 7 - HSE Form G: Incident Investigation

Attachment A
Risk Level Associated with Environmental Incidents

Use these criteria as guidance to classify and report environmental incidents that resulted in or had the potential to result in situations such as the ones presented in this table.

	High-Risk	Medium-Risk	Low-Risk
Risk to members of the public	A fatality or serious injury or illness to a member of the public.	An injury to a member of the public resulting in temporarily disability preventing him or her to conduct normal day-to-day activities for more than one day.	A very minor injury or illness (an injury or illness that has no impact on daily activities) to a member of the public.
Risk to third-party property	Damage to a third-party property (\$ > 50,000) [guideline only]	Damage to a third-party property (\$5,000 < \$ ≤ \$50,000) [guideline only]	Damage to a third-party property (\$ ≤ \$5,000) [guideline only]
Risk to natural environment	Unintended releases of petroleum products, PCB-contaminated substances, pesticides, other chemicals (including solid or gas), soil, silt, or other material into the environment where there is or may be harm to the environment that is beyond the immediate vicinity of the release, or that lasts more than a few days.	Unintended releases of petroleum products, PCB contaminated substances, pesticides, or other chemical (including solid or gas) soil, silt, or other material into the environment including any reportable spill to an agency including situations where: <ul style="list-style-type: none"> • There is only short-term harm to the environment. • A substance enters a body of water substance volume ≥ 1l or regulatory limit : 	Unintended releases of petroleum products, PCB contaminated substances, pesticides, or other chemical (including solid or gas) soil, silt, or other material into the environment including any reportable spill to an agency including situations where: <ul style="list-style-type: none"> • There is no expected harm to the environment. • A substance enters a body of water substance volume ≤ 1l or regulatory limit : • . No minimum quantity for PCBs.
Risk to Brookfield Renewable Power’s image	Formal notice or order from an agency, on a material issue (excluding situations due to uncontrollable extreme external events). Material regulatory breach brought to our attention either internally or by third party. Negative media coverage of the event.	Situation in between low and high risk descriptions.	Notice or order from an agency that is not on a material issue. Regulatory breach that has to be reported to an agency that is not material (including situations that have to be reported due to uncontrollable extreme external events). No negative media coverage of the event.