VB STATISTICAL STION

MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN THE CANADIAN NUCLEAR SAFETY COMMISSION AND ENVIRONMENT CANADA

WHEREAS the Canadian Nuclear Safety Commission (hereinafter, "the Commission") and Environment Canada (hereinafter, "the Department") have independent but related mandates do to the protection of the environment and activities carried out under their respective mandates have the potential to affect the programs and responsibilities of the other:

WHEREAS the Government of Canada requires that federal departments and agencies take full advantage of opportunities to coordinate their activities with each other;

WHEREAS the Commission regulates, pursuant to the *Nuclear Safety and Control Act* (NSCA), the development, production and use of nuclear energy and the production and use of nuclear substances, prescribed equipment and prescribed information in order to:

- prevent unreasonable risk to the environment, health and safety of persons, and national security and;
- (ii) achieve conformity with measures of control and international obligations to which Canad has agreed.

WHEREAS the Department under the *Department of the Environment Act* has powers, duties and functions relating to the preservation and enhancement of the quality of the natural environment, including water, air and soil quality; renewable resources, including migratory birds and other non-domestic flora and fauna; water; meteorology; the enforcement of rules and regulations made by the International Joint Commission relating to boundary waters and questions arising between the United States and Canada in so far as they relate to the preservation and enhancement of environmental quality;

WHEREAS the Department, pursuant to the Canadian Environmental Protection Act, 1999 (CEPA 1999), has the mandate to:

- (i) ensure that preventive and remedial measures are taken to protect the environment,
- (ii) establish nationally consistent levels of environmental quality,
- (iii) apply knowledge, science and technology to resolve environmental problems,
- (iv) protect the environment from the release of toxic substances, and
- (v) assess whether substances new to Canadian commerce or in use in Canada or present in or released to the Canadian environment are toxic or capable of becoming toxic;
- (vi) enforce CEPA 1999 and associated regulations.

WHEREAS the Department has been assigned responsibility for the administration and enforcement of subsection 36(3) of the *Fisheries Act* (FA), which prohibits the deposit of a deleterious substance into water frequented by fish and subsections 38(4) and (5) of that Act, which mandate reporting and remedial measures in response to such a deposit;

WHEREAS the Department, pursuant to the *Migratory Birds Convention Act* 1994 (MBCA), has the mandate to enforce the prohibitions set out in section 5 of that Act for the purpose of preventing damage to migratory birds;

WHEREAS the Department pursuant to the *Species at Risk Act* (SARA), has the mandate to prevent wildlife species from becoming extinct and secure the necessary actions for their recovery (i.e. protecting their critical habitat); and

WHEREAS the Department and the Commission both must comply with the requirements under the *Canadian Environmental Assessment Act*, when applicable;

THEREFORE, the Commission and the Department (individually a "participant" or together "the participants") agree to consult and cooperate in accordance with the following sections of this Memorandum of Understanding in order to minimize regulatory duplication and to use government resources effectively.

I PRINCIPLES

- 1. The participants, in carrying out their respective mandates will cooperate and support each other, as appropriate, in meeting their responsibilities in relation to environmental conservation and protection and in other areas of mutual interest.
- 2. The participants will take all reasonable steps, consistent with their respective mandates, to see that their environmental protection policies and measures are complementary and designed to provide effective environmental protection.
- 3. The participants will provide each other the opportunity to advise on policies and programs that may affect the mandate of the other, in a manner that allows for timely and substantive advice.
- 4. The participants will foster strong working relations by establishing mechanisms and links to share information, taking into account legal constraints on the sharing of confidential business information.
- 5. This Memorandum is a declaration of intentions by the Participants, and will not create any binding legal obligations between the Participants.

II IMPLEMENTATION

The participants agree to:

- 1. Inform and advise each other on their current policies, programs, standards and regulations or legislation concerning the protection of the environment, and the management of toxic substances in relation to nuclear facilities and activities of concern to each other;
- 2. Provide the opportunity for each participant to provide guidance, information and advice prior to developing, amending or terminating the policies, programs, standards or regulations referred to in the above paragraph that may involve the use, release or management of substances designated as toxic under CEPA 1999 or identified/defined as hazardous under the NSCA and other contaminants of mutual environmental concern that may affect the facilities and activities regulated by the Commission;
- 3. Cooperate with each other on regulatory matters of mutual concern involving the nuclear industry, including:
 - a) developing and managing programs and processes for the implementation of obligations pursuant to CEPA, FA, SARA, MBCA as they relate to facilities and activities regulated by the Commission under the *Nuclear Safety and Control Act* (NSCA) or as they relate to facilities and activities regulated by the Department;
 - b) providing the Department, where appropriate, with the opportunity to consult with the Commission in the review of applications and associated environmental assessments before the Commission and providing the Commission advice on matters concerning the protection of the environment;
 - c) providing the Commission, where appropriate, with the opportunity to consult
 with the Department in the review of assessments, including environmental
 assessments, programs and processes and provide advice on matters
 concerning the protection of the environment as they relate to nuclear
 facilities and activities;
 - d) promoting awareness among licensees of the Commission of the Department's mandated requirements;
 - e) promoting awareness among the Department's program staff of the Commission's mandated requirements;
 - f) verifying licensee compliance with the regulatory requirements of either the Commission or the Department;

- g) sharing environmental information with each other in support of the Department's and the Commission's activities including regulatory assessment activities:
- h) providing each other with any relevant information to support any enforcement actions considered by the Department under CEPA 1999, FA, MBCA, and SARA or by the Commission under the NSCA;
- i) the Commission providing the Department with the opportunity, on request and where appropriate, to participate in joint compliance inspections of facilities and activities licensed by the Commission;
- j) informing each other of any inspection, investigation or assessment by a participant of an incident under its jurisdiction that may constitute a contravention of CEPA 1999, FA, MBCA or SARA that may have occurred at a facility or activity regulated by the Commission; and where appropriate, consulting and coordinating with each other prior to taking regulatory enforcement actions at facilities or on activities licensed by the Commission;
- k) reporting by the Commission of any spill or incident of which it is aware that may constitute a contravention of CEPA 1999, FA, MBCA, or SARA to the Department's designated spills reporting centre. It should be noted that Commission communications with the Department under this MOU does not replace the licensee requirements to report incidents to the Department pursuant to CEPA 1999, FA, MBCA or SARA; and
- I) reporting by the Department's designated spills reporting centre to the Commission any spill or incident of which it is aware from facilities or activities regulated by the Commission that may constitute a contravention of CEPA 1999, FA, MBCA or SARA. It should be noted that the Department's communications with the Commission under this MOU does not replace the licensee requirements to report incidents to the Commission pursuant to the NSCA.
- 4. Consult and cooperate with each other in the development of any national or international standard, agreement, convention, assessment or commitment concerning protection of the environment that could affect the regulation of the nuclear industry by the Commission;
- 5. Cooperate with each other in matters of mutual interest related to nuclear emergency preparedness and response;
- 6. Cooperate in the sharing of key information and expertise where such activity would help each participant to better carry out its mandate, such as support in

- accessing the information to run atmospheric transport models and the enhancement of laboratory services;
- 7. Cooperate with each other where resources permit on the conduct of environmental studies, assessments or research projects of potential interest to the regulation of the nuclear industry, and in the sharing of expert assistance and financial resources for such purpose; and
- 8. Coordinate public communication and consultation activities with each other on matters of mutual interest and responsibility.

III TERMS OF THE MOU

- 1. The primary points of contact under this MOU, and responsible for its administration, are the Director-General, Directorate of Environmental and Radiation Protection and Assessment, Canadian Nuclear Safety Commission (CNSC), and the Director General, Environmental Protection Operations Division (EPOD) / Environmental Stewardship Branch (ESB), Environment Canada.
- 2. The points of contact named above will meet annually during the normal planning process. The operation of this MOU shall be reviewed annually by the participants at this meeting.
- The participants will exchange and maintain appropriate lists of contacts at the working level(s) to facilitate the implementation of activities described in this MOU.
- 4. The participants will make every reasonable effort to resolve at the working level any conflicts that arise from this Memorandum of Understanding. Failing resolution at the working level, conflicts may be referred for resolution to the offices named pursuant to paragraph 1 above, or to the signatories to this Memorandum.
- 5. Subject to paragraph 6, the participants will provide or honour without charge to the other participant the services agreed to and the commitments made in this Memorandum of Understanding.
- 6. The participants recognize that the delivery of certain services agreed to in this Memorandum of Understanding, or the honouring of certain commitments made in this Memorandum, may be subject to cost recovery regulations or may require, on a case by case basis, financial arrangements between the Commission and the Department to offset, in whole or part, the associated costs. Where such arrangements are necessary, the participants agree to consult and cooperate to develop mutually satisfactory arrangements.

- 7. The participants agree to consult in advance concerning any significant changes in the level or nature of service that either participant may request, or intends to request, of the other participant pursuant to this Memorandum of Understanding.
- 8. The participants agree to collaborate on identifying opportunities for training and staff exchanges in areas of mutual interest.
- 9. The participants hereby mutually agree to terminate the Memorandum of Understanding (MOU) Between the Canadian Nuclear Safety Commission (CNSC) and Environment Canada (EC) signed in 2003 and the Annex 1 to the Memorandum of Understanding (MOU) Between Environment Canada and the Canadian Nuclear Safety Commission Risk Management Process for Radionuclides as Assessed Under the Canadian Environmental Protection Act, 1999 signed in 2004.
- 10. This Memorandum of Understanding becomes effective on the date of the last signature, and shall remain in effect until modified or withdrawn. The Memorandum may be revised by the mutual consent of the Department and the Commission. Either participant may withdraw from the agreement by providing at least six (6) months notice in writing to the other participant, specifying its intention to withdraw and the effective date of withdrawal.
- 11. The participants may develop further agreements as Annexes to this Memorandum of Understanding as deemed necessary to facilitate the implementation of the arrangements made herein as required or appropriate.
- 12. Annex 1 to this MOU, Environmental Occurrence Cooperation Protocol (attached), forms part of this MOU document and the participants agree to abide by its provisions.

Signed in duplicate in the English an	
Signed on:	JUN 0 8 2012 Signed on:
For the Canadian Nuclear Safety Commission:	For Environment Canada:
L. Bridger	Park Booker Deputy Minister

ANNEX 1 TO THE MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN CANADIAN NUCLEAR SAFETY COMMISSION AND ENVIRONMENT CANADA

Environmental Occurrence Cooperation Protocol

Purpose

This Annex is governed by the understandings as described in the MOU between the Canadian Nuclear Safety Commission and Environment Canada.

Pursuant to paragraphs 3(j), (k) and (l) under section II (Implementation) and paragraph 11 under section III (Terms of the MOU) of the MOU between Environment Canada ("the Department") and the Canadian Nuclear Safety Commission ("the Commission") and under the terms of this Annex, the Department and the Commission (each a "participant" or jointly "the participants") agree to develop protocols for environmental occurrence cooperation. The purpose of the protocol is to ensure that both the Department and the Commission are aware of, and have current information, when an environmental occurrence or release of either nuclear substances or hazardous substances occurs at a Commission-licensed nuclear facility. This includes ongoing information exchange and collaboration on scientific needs arising as a result of emergency situations that have, or potentially will, impact the environment and / or human health.

Definitions

An "environmental occurrence" is a discharge into the natural environment, from or out of a structure, vehicle or other container that is abnormal in quality or quantity in light of all circumstances of the discharge or is out of the normal course of events.

Scope

This Annex will broadly apply to communication and cooperation concerning actual or potential environmental occurrence situations involving major nuclear facilities regulated under the *Nuclear Safety and Control Act* (NSCA) and which are located within all current operational regions of the Department as referenced in Table 1.

The roles and responsibilities of the Commission and of the Department relating to regulation of the nuclear industry, protection of the environment as well as the relevant legislation relating thereto are as contained in the MOU.

The General Nuclear Safety and Control Regulations include a requirement that every licensee "take all reasonable precautions to control the release of radioactive nuclear

substances or hazardous substances within the site of the licensed activity and into the environment as a result of the licensed activity." Also, every licensee that becomes aware of "a release, not authorized by the licence, of a quantity of radioactive nuclear substances into the environment" shall make a preliminary and full report to the Commission.

The Commission has implemented Regulatory Standard S-99, *Reporting Requirements* for Operating Nuclear Power Plants, which includes reporting requirements for releases and emergencies at Commission-licensed operating nuclear power plants.

As such, the Commission and the Department agree to consult and cooperate in accordance with the following protocols in order to maximize government response and protection of environment and human health, while minimizing regulatory duplication and resources.

Annex Protocols

Notification

The Department and the Commission agree that notification of environmental occurrences is critical for the protection of the environment and human health.

The Commission and the Department will each identify a point of contact (POC) to coordinate correspondence between the two organizations for environmental occurrences. These identified POCs will ensure that each party is aware of any environmental occurrences and will work together to ensure ongoing information transfer during and after environmental occurrences. The Commission POC is the Commission Duty Officer. The Department's POC is the Environmental Emergencies Duty Officer for the region in which the incident occurs.

The Department and Commission will ensure POC and Duty Officer availability at all times (24 hours a day, 7 days a week). Each participant will ensure that up-to-date contact information for the Department POC and the Commission POC is made available to each other.

The Commission Duty Officer will contact a designated Commission responder, who will forward any received S-99 preliminary and detailed reports on an environmental occurrence to the Department POC.

The designated Commission responder will forward any information received from the Department to the appropriate Commission branch(es) and directorate(s).

Technical expertise required of either party will be requested through the POC as per this Annex. The Commission Duty Officer will contact an appropriate designated responder to provide the technical expertise.

The Department POC will notify the Commission Duty Officer when it becomes aware of an environmental occurrence at a Commission-licensed nuclear facility. The Commission Duty Officer will contact an appropriate designated responder.

Ongoing Information Exchange

The Department and the Commission:

- (1) will cooperate in sharing ongoing information with each other at regular intervals to ensure both parties have current and up-to-date information concerning the status of incidents and/or projects of mutual interest. The participants will provide each other the opportunity to advise on legislation, policies, responsibilities, advice, science or other relevant information as they pertain to the mandate of each participant and the situation at hand;
- (2) will work together on the assessment of the consequences of an environmental occurrence; and
- (3) will work together to verify that the Commission-licensed facility has implemented adequate corrective actions.

Both participants agree to cooperate and share scientific and technical information in matters of mutual interest related to occurrences. Established points of contact, as outlined in the notification and ongoing information exchange sections of this Annex, shall be the route via which information and collaboration is requested and exchanged. Where the Commission Duty Officer has contacted a designated responder, information requested and exchanged shall be between the designated responder and the Department POC.

The Commission has a responsibility for technical expertise on assessment of environmental and human health impacts for radionuclide and hazardous occurrences and will share this information with the Department.

The Department has a responsibility for technical expertise on the fate and effects of toxic substances and conventional chemicals, meteorological conditions and forecasts and the atmospheric transport of radioactive materials and will share this information with the Commission where applicable.

Table 1 – Types and Locations of Commission-Licensed Major Nuclear Facilities

Commission Licensee	Type of Nuclear Facility	Location
Cameco Corporation	Uranium Conversion	Port Hope, Ontario
Cameco Corporation	Uranium Refining	Blind River, Ontario
Cameco Corporation	Nuclear Fuel Manufacturing	Port Hope, Ontario
GE-Hitachi Nuclear Energy Canada inc.	Nuclear Fuel Manufacturing	Toronto, Ontario
GE-Hitachi Nuclear Energy Canada inc.	Nuclear Fuel Manufacturing	Peterborough, Ontario
SRB Technologies Inc. Pembroke	Nuclear Substance Processing (Tritium)	Pembroke, Ontario
Shield Source Inc. Peterborough	Nuclear Substance Processing (Tritium)	Peterborough, Ontario
MDS Nordion	Nuclear Substance Processing	Kanata, Ontario
McMaster University	Non-Power Reactor (McMaster Nuclear Reactor)	Hamilton, Ontario
Royal Military College	Non-Power Reactor (SLOWPOKE)	Kingston, Ontario
University of Alberta	Non-Power Reactor (SLOWPOKE)	Edmonton, Alberta
Saskatchewan Research Council	Non-Power Reactor (SLOWPOKE)	Saskatoon, Saskatchewan
Ecole Polytechnique	Non-Power Reactor (SLOWPOKE)	Montreal, Quebec
Dalhousie University	Non-Power Reactor (SLOWPOKE)	Halifax, Nova Scotia
Ecole Polytechnique	Sub-critical Assembly	Montreal, Quebec
TRIUMF Accelerators Inc.	Particle Accelerator	Vancouver, British Columbia
Canadian Light Source Inc.	Particle Accelerator	Saskatoon, Saskatchewan
OPG/Pickering A&B	Nuclear Power Plant	Pickering, Ontario
Bruce Power/Bruce A&B	Nuclear Power Plant	Tiverton, Ontario
OPG/Darlington	Nuclear Power Plant	Bowmanville, Ontario
Hydro-Québec/Gentilly-2	Nuclear Power Plant	Bécancour, Quebec
NB Power/Point Lepreau	Nuclear Power Plant	Maces Bay, New

		Brunswick
Cameco Corporation/Key Lake	Uranium Mine & Mill	Athabasca Basin, Saskatchewan
Cameco Corporation/Rabbit Lake	Uranium Mine & Mill	Athabasca Basin, Saskatchewan
Cameco Corporation/McArthur River	Uranium Mine	Athabasca Basin, Saskatchewan
Cameco Corporation/Cigar Lake	Uranium Mine	Athabasca Basin, Saskatchewan
AREVA/McClean Lake	Uranium Mine	Athabasca Basin, Saskatchewan
AECL/Chalk River Laboratories	Nuclear Research	Chalk River, Ontario
AECLWhiteshell Laboratories	Nuclear Research	Pinawa, Manitoba