CANADA-NEWFOUNDLAND and LABRADOR OFFSHORE PETROLEUM BOARD

Canada-Newfoundland and Labrador Offshore Petroleum Board
Core Storage and Research Centre
Building Expansion
30-32 Duffy Place, O'Leary Industrial Park,
St. John's, NL

Canadian Environmental Assessment Act
Screening Report

Prepared by:
Canada-Newfoundland and Labrador Offshore Petroleum Board
Environmental Affairs Department
St. John's, NL

For more information, contact:
C-NLOPB
5th Floor, TD Place, 140 Water Street
St. John's, NL, A1C 6H6
Tel: (709) 778-1400
Fax: (709) 778-1473

ISBN: 978-1-897101-69-8

October 2, 2009

Part A: General Information

Screening Date	**October 2, 2009**
EA Title	Canada-Newfoundland and Labrador Offshore Petroleum Board Core Storage and Research Centre Building Expansion.
Proponent	Canada-Newfoundland and Labrador Offshore Petroleum Board Fifth Floor, TD Place 140 Water Street St. John's, NL A1C 6H6
Project Contact	Mike Baker Manager, Support Services Canada-Newfoundland and Labrador Offshore Petroleum Board Fifth Floor, TD Place 140 Water Street St. John's, NL A1C 6H6
C-NLOPB File No.	7705 C7
CEAR No.	09-01-49976
Referral Date	**September 17, 2009**
EA Start Date	September 17, 2009
Location	30-32 Duffy Place O'Leary Industrial Park, St. John's, NL.

Establishment of Responsibility

__X__ at least one activity/component does not appear in the *Exclusion List Regulations*.
and, (one or more of the following applies)

____ the Activity relates to a physical work,

__X__ the Activity appears in the *Inclusion List Regulations*;
and, (one or more of the following applies)

__X__ the Federal Authority is the Project Proponent *(S.5.(1)(a))*;

____ the Federal Authority provides Financial Assistance to the project *(S.5.(1)(b))*;

____ the Federal Authority leases, sells or disposes of Federal Land for the purpose of enabling the project *(S.5.(1)(c))*;

or

___ the Federal Authority will exercise a regulatory duty for the purpose of enabling the project, such as issue a permit or license that is included in the *Law List Regulations (S.5.(1)(d)).*

Part B: Project Information

The Core Storage and Research Centre building is located at 30-32 Duffy Place, O'Leary Industrial Park, in St. John's, Newfoundland. The Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) is proposing to expand the building by approximately 800 square metres to accommodate the storage of core samples. This expansion will be on the west side of the existing building.

1. Description of Project

The new extension will be a single storey, steel framed building comprising a building footprint of approximately 790 square metres (8,500 square feet) all of which will be dedicated to the storage of core samples. The extension has been designed to blend with the appearance of the existing building. Typically, construction will include:

- The removal of the west wall between the present building and the expansion area;
- The opening up of the corridor into the receiving area;
- The addition of air conditioning for the front reception, office, and conference rooms; and
- General repair of existing deficiencies.

In addition to the proposed extension, there will be a number of general modifications carried out in the existing building to improve the building functionality and the general working environment

.

The building will include the following:

- A steel frame with metal decking for the roof;
- Reinforced concrete foundations and floor slab to accommodate the loading requirements of the core storage;
- Building exterior finish will be comprised of brick and metal siding, to match existing facility;
- A roof assembly consisting of 2-ply modified overlying 100 mm of rigid insulation and vapour barrier on the metal roof deck.
- A sprinkler system to meet fire code requirements;
- Ventilation to meet minimum air change requirements; and
- Heating system.

The present parking lot has a capacity for eight (8) cars. This lot will be expanded to provide a parking capacity for fifteen (15) cars. The site will be appropriately graded and landscaped around the extension and a drainage ditch and sub-drain system will be added at the north and west sides of the extension to accommodate potential run-off requirements.

2. Description of Environment

2.1 Physical Environment

The city of St. John's is located in the Maritime Barrens ecoregion. It extends westward across the southern half of the uplands of Newfoundland to the Long Range Mountains. Its climate is affected by the Atlantic Ocean, which makes it susceptible to long periods of fog. It is characterized by cool summers and short, somewhat moderate winters along the coast and colder inland. The mean annual temperature is around 5.5°C, with a mean summer temperature of 11.5°C and a mean winter temperature of -1°C. The mean annual precipitation ranges from 1200 mm to over 1600 mm.

Balsam fir (*Abies balsamea*) is the dominant tree species. Fires have led to the replacement of fir by sparse stands of black spruce (*Picea mariana*), balsam fir, tamarack (*Larix laricina*), and shrubs, along with mosses and lichen. *Kalmia* species and sphagnum moss grow on blanket and flat bogs. The elevation rises from sea level to approximately 250 m above sea level, and is composed of a mixture of sedimentary rocks and granites. The uplands are rugged and rocky due to erosion while lower areas have a rolling topography.

2.2 Biological Environment

This area, a developed industrial park, does not contain any significant or environmentally sensitive physical or biological components. The nearest water body is a brook and small pond, located approximately 500 m south-east of the proposed site and activities will not occur within 30 m of any watercourses.

Species at Risk that may occupy the project area include the Newfoundland subspecies of the Red Crossbill (*Loxia curvirostra percna*) and the Monarch Butterfly (*Danaus plexippus*). The Red Crossbill is placed in the endangered category by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The Newfoundland subspecies of the Red Crossbill is listed on Schedule 1 of the *Species at Risk Act* (SARA). The Red Crossbill is a medium sized finch dull red in colour with no white wing bars and a bill that is thicker than other North American Red Crossbills. The breeding range of this subspecies is unknown, but observations have occurred throughout much of the island, with most occurring in the older mature forests of western Newfoundland. The population is thought to have declined dramatically over the last 50 years. The limiting factors and threats to the Red Crossbill are poorly understood. Habitat loss can reduce cone crops that make up the Red Crossbill's food source, and Red Squirrels (an introduced species) may be out-competing the bird for food resources.

The Monarch Butterfly has been designated as Special Concern on Schedule 1 of the SARA. The adult Monarch is a bright orange butterfly with heavy black veins and a wide black border containing two rows of white spots and a wingspan of 10 cm. This butterfly exists primarily wherever milkweed and wildflowers grow and can include abandoned farmland, along roadsides, and other open spaces. The distribution of the Monarch has gradually shifted eastward over the past century, due to a combination of clearing of deciduous forests in eastern USA and southeastern Canada. Increasing use of herbicides is another significant threat.

Part C: Environmental Assessment Process

3. Procedures

The C-NLOPB developed a project description and as the Responsible Authority (RA) forwarded the *Federal Coordination Regulations* Section 5 Notification on September 17, 2009. Responses were received from Environment Canada, Transport Canada, Health Canada, Fisheries and Oceans Canada, Natural Resources Canada, Newfoundland Departments of Natural Resources, Fisheries and Aquaculture, and Environment and Conservation. All federal departments determined that this project would not require an environmental assessment and the provincial Department of Environment and Conservation have determined that this project is a non-registerable undertaking.

3.1 Scope of Project

The new extension will be a single storey, steel framed building comprising a building footprint of approximately 790 square metres (8,500 square feet) all of which will be dedicated to the storage of core samples. The west wall of the existing building will be opened up to provide direct access into the new extension.

The building will be constructed with the following:

- A steel frame with metal decking for the roof;
- Reinforced concrete foundations and floor slab to accommodate the loading requirements of the core storage; and
- Building exterior finish will be comprised of brick and metal siding, to match existing facility.

The proposed expansion of the Core Storage and Research Centre is located at 30-32 Duffy Place, O'Leary Industrial Park, in St. John's, Newfoundland.

3.2 Boundaries

Site preparation and construction activities are anticipated to begin in October 2009 and continue until June 2010. For the purposes of the environmental assessment, it is anticipated that the facility will be operated for 25 years.

3.3 Scope of Assessment

For the purpose of meeting the requirements of the *Canadian Environmental Assessment Act* (CEA Act) the factors that were considered to be within the scope of an environmental assessment are those set out in subsection 16(1) of the CEA Act and those listed in the "*Canada-Newfoundland and Labrador Offshore Petroleum Board Core Storage and Research Centre Building Expansion Scoping Document*" (C-NLOPB 2009).

4. Consultation

Information relating to the proposed project was made available on the C-NLOPB website (www.cnlopb.nl.ca), the Telegram Classifieds of Saturday, September 19th and Saturday, September 26th, the NOIA Bulletin on Wednesday, September 15th, the September edition of the Business Post, and the CSRC Contact List via e-mail.

5. Environmental Effects

The scope of the assessment includes the effects of building construction, and all associated activities, on the following valued ecosystem components (VECs):

- Groundwater quality/quantity;
- Soils;
- Air Quality/Noise;
- Vegetation;
- Wildlife/Birds; and
- Human Health.

Project activities under assessment are: site preparation and construction including the clearing of vegetation and trees, site grading, pouring concrete, paving activities, air emissions and landscaping. Accidental events are also considered.

5.1 Effects of Environment on Project

While infrequent, severe weather conditions, may affect the project operations, with appropriate planning and implementation of effective mitigation measures, such negative effects can be avoided. The climate (e.g. wind, temperature, precipitation) could damage or cause loss of equipment/materials, which could have an immediate negative effects on the project. Weather conditions should be assessed on a daily basis to determine the potential risk of climate on the project. The project site supervisor is encouraged to consult Environment Canada's local forecast at http://www.weatheroffice.ec.gc.ca/ to appropriately scheduled construction activities.

5.2 Groundwater Quality/Quantity

The potential exists for the contamination of local groundwater reserves from hydrocarbons due to upsets during refueling of construction equipment or from the use of contaminated fill material. While unlikely, such effects can be avoided through the application of effective mitigation measures.

Machinery must be checked for leakage of lubricants or fuel and must be in good working order. Refueling must be done at least 30 metres from any water body and on an impermeable surface. Basic petroleum spill clean-up equipment should be on-site and all spills or leaks should be promptly contained, cleaned up and reported to the 24-Hour Environmental Emergencies Reporting System (1-800-563-9089). Fuel levels must be inspected on a daily basis to ensure there is no leakage to the surrounding environment. Fill material is to be non-toxic, free of fines and sediments, and obtained from an approved quarry site. All drainage and washwater from concrete production should be directed to a settling pond for control and treatment, as appropriate. All construction and operational wastes must be recycled, where possible, or otherwise disposed of appropriately. Hazardous waste (i.e. fuels, lubricants) is to be stored in sealed, labeled containers and disposed of in accordance with applicable regulations.

5.3 Soils

Construction activities could result in the mobilization of on-site soils, especially during precipitation events. Such runoff events are likely to be of short duration and confined to the project site. The implementation of effective mitigation measures can reduce such effects to insignificant levels.

Work should be scheduled to avoid periods of heavy precipitation. Erosion control structures (temporary matting, geotextile filter fabric) are to be used, as appropriate, to prevent erosion and release of sediment and/or sediment laden water during the construction phase. These erosion control structures are to be left in place until vegetation is re-established and/or all exposed soils are stabilized. The exposed soil area must be minimized by limiting the area that is exposed at one time and by limiting the time that any one area is exposed. All stockpiled soil must be covered and/or dyked to prevent erosion and release of sediment-laden water. Wherever possible, exposed soil should be replanted or sodded to ensure soil stabilization. Machinery must be checked for leakage of lubricants or fuel and must be in good working order. Refueling must be done at least 30 m from any water body and on an impermeable surface. Basic petroleum spill cleanup equipment should be on-site and all spills or leaks should be promptly contained, cleaned up and reported to the 24-hour environmental emergencies reporting system (1-800-563-9089). Fuel levels must be inspected on a daily basis to ensure there is no leakage to the surrounding environment. All fill and stone material is to be non-toxic, free of fines and contaminants, and from an approved quarry site. All construction and operational wastes must be recycled where possible or otherwise disposed of appropriately. Any hazardous waste (i.e. fuels, lubricants) is to be stored in sealed, labeled containers and disposed of in accordance with applicable regulations.

5.4 Air Quality/Noise

Construction related activities could result in an increase in noise and dust on the project site and surrounding area. Dusting conditions related to machinery use will be of short duration and confined to the project site. While negative in nature, such effects are generally avoidable with appropriate mitigation measures. Similarly, any increase in noise levels related to the operation of construction equipment will be of short duration and confined to the project area.

All construction equipment must be fitted with standard and well-maintained noise suppression devices. Construction activities must respect appropriate time restriction and use smaller, less disturbing equipment where possible. Appropriate dust suppression methods are to be employed, when required. The project site supervisor shall determine locations where water is to be applied, the amount of water to be applied, and the times at which it shall be applied. Waste oil is not to be used for dust control under any circumstances. Engines must not be allowed to idle between work periods and air filtration/ventilation equipment is to be properly maintained and kept in good working order. Filters are to be replaced as per the manufacturer requirements and a ventilation system is to be installed and maintained to meet occupational health and safety requirements and codes. All chemicals are to be labeled, handled and stored according to the appropriate guidelines and regulations, and as outlined on their Material Safety Data

Sheets (MSDS). In addition, the facility should be operated in accordance with the "*Chemical Substances" Regulations* under the *Occupational Health and Safety Act.*

5.5 Vegetation

Construction activities could result in disturbance to vegetation and natural features at the project site as a result of the use of heavy equipment. The implementation of effective mitigation measures can reduce such effects to insignificant levels.

If necessary, the project site supervisor will conduct a walk around of the site to identify all vegetation and natural features that are not to be disturbed by on-site activities. Vegetation and natural features will be identified by flagging tape or other suitable and non-damaging means. The project site supervisor will implement protection measures such as barriers, signs, fencing, stakes, and/or marking tape to designate the location of these vegetation and natural features. Any new personnel or sub-contractors to the site will be alerted by the project site supervisor to the presence and location of vegetation and natural features that require protection. Removed vegetation should be reused where possible and the remainder left in place or chipped and used as mulch. Machinery must be checked for leakage of lubricants or fuel and must be in good working order. Refueling must be done at least 30 m from any water body and on an impermeable surface. Basic petroleum spill cleanup equipment should be on-site and all spills or leaks should be promptly contained, cleaned up and reported to the 24-hour environmental emergencies reporting system (1-800-563-9089). Fuel level must be inspected on a daily basis to ensure there is no leakage to the surrounding environment.

5.6 Wildlife and Birds

The potential exists for the disturbance of wildlife and birds due to an increase in noise and dust around the project site. Such effects are likely to be of short duration, confined to the project site, and can be avoided through the application of effective mitigation measures.

All machinery should be well muffled. Project activities are to take place outside sensitive nesting, breeding and migration periods. All work is to be conducted in accordance with the *Migratory Birds Convention Act*, which outlines that no migratory bird nests or eggs will be moved or obstructed during the construction or operational phase of the project. It is recommended that vegetation clearing not take place during the breeding season until fledglings have left parental territories. Proponents and Contractors should ensure that food scraps and garbage are not left at the project site. Activities should avoid disturbances to all birds in and near the project area. Basic petroleum spill cleanup equipment should be on-site and all spills or leaks should be promptly contained, cleaned up and reported to the 24-hour environmental emergencies reporting system (1-800-563-9089). Fuel levels must be inspected on a daily basis to ensure there is no leakage to the surrounding environment.

Given the developed nature of the proposed project site, it is not likely to provide critical or limiting habitat for species at risk and does not contain any environmental components

that are considered to be important, sensitive, threatened or endangered that are likely to be affected by the project.

5.7 Human Health

While workers may be exposed to hazardous materials, the exposure can be limited through the use of appropriate personal protective equipment. In addition, workers are to follow the Provincial *Occupational Health and Safety Act.*

Workers in contact with hazardous materials must be provided with and use appropriate personal protective equipment. Paints and other chemicals are to be stored in a designated area that has an impermeable floor and dykes or curbs and does not have a floor drain or discharge into the environment. All chemicals are to be labeled, handled and stored according to the appropriate guidelines and regulations, and as outlined on their MSDS. Air filtration/ventilation equipment is to be properly maintained and kept in good working order. Filters are to be replaced as per the manufacturer requirements. A ventilation system is to be installed and maintained to meet occupational health and safety requirements and codes.

5.8 Follow-up Monitoring: Required ___**Yes** __**X**__**No**

The C-NLOPB does not require follow-up monitoring, as defined in the CEA Act.

6. Other Considerations

It is reasonable to conclude that, with appropriate mitigation in place and good work practices, impacts will be of short duration and the potential zone of influence will be confined to the immediate vicinity of the work.

Part D: Screening Decision

7. Decision/Decision Date

The Canada-Newfoundland and Labrador Offshore Petroleum Board is of the opinion that, taking into account the implementation of proposed mitigation measures set out in the conditions above, the Project **is not likely to cause significant adverse environmental effects.** This represents a decision pursuant to Section 20(1)(a) of the CEA Act.

Responsible Officer *Original signed by Elizabeth Young* Date: October 2, 2009

Elizabeth A. Young
Environmental Assessment Officer