Dear [Redacted],

Re: Your request for access to information under Part II of the Access to Information and Protection of Privacy Act (Act) [Our file #:ENV/035/2014]

On September 19, 2014, the Department of Environment and Conservation received your request for access to the following information:

"Records related to environmental liabilities at the North Atlantic Refining Ltd. Come By Chance refinery site. Request includes briefing materials, any internal or external reports commissioned on the topic, and any cost estimates prepared for existing liabilities and/or potential clean-ups."

On October 2, 2014, the Department of Environment and Conservation received your modified request for access to the following information:

"A report on the current state of existing liabilities at the North Atlantic Refining Ltd. Come By Chance refinery site. What did the province do to determine the liability it was taking on given the indemnity to the new owner and what are the financial implications in the event of a clean-up of existing environmental liabilities? Request includes briefing materials, any internal or external reports commissioned on the topic, and any cost estimates prepared for existing liabilities and/or potential clean-ups from September 1, 2013 to present (September 30, 2014)."

On October 10, 2014, the Department advised you that the 30-day time period for responding to your request had been extended for an additional 30 days, in accordance with subsection 16(1)(c) of the Act, as a preliminary review of the records you requested indicated that notification be given to a third party before the Department could determine whether or not to grant access to the requested records.

On November 20, 2014, the Department advised you that, in accordance with paragraph 16(2)(c) of the Act, the Information and Privacy Commissioner approved the time limit for responding to your request for an additional 6 days and that we expected to respond to your request by November 25, 2014.
The Department has reviewed your request in the context of the Act and I am pleased to inform you that your request for access to records has been granted in part. Please note that, with respect to the first portion of your request, the Department has not produced a report on the current state of existing liabilities at the North Atlantic Refining Ltd. Come By Chance refinery site. Portions of the attached documents, responsive to the remainder of your request, have been severed in accordance with the following exceptions to disclosure:

1. Section 18(1): In this section
   (a) "cabinet record" means
       (viii) a record created during the process of developing or preparing a submission for the Cabinet;
   (d) "supporting cabinet record" means a Cabinet record referred to in paragraph (a) which informs the Cabinet process, but which is not an official cabinet record.

2. Section 18(2)(c): The head of a public body shall refuse to disclose to an applicant a Cabinet record, including a supporting Cabinet record.

3. Section 20(1): The head of a public body may refuse to disclose to an applicant information that would reveal
   (a) advice, proposals, recommendations, analyses or policy options developed by or for a public body or minister; and
   (c) consultations or deliberations involving officers or employees of a public body, a minister or the staff of a minister;

4. Section 21: The head of a public body may refuse to disclose to an applicant information
   (a) that is subject to solicitor and client privilege;

5. Section 23(1): The head of a public body may refuse to disclose information to an applicant if the disclosure could reasonably be expected to
   (a) harm the conduct by the government of the province of relations between that government and the following or their agencies:
       (i) the government of Canada or a province;
(b) reveal information received in confidence from a government, council or organization listed in paragraph (a) or their agencies.

6. Section 24(1): The head of a public body may refuse to disclose to an applicant information which could reasonably be expected to disclose

(f) positions, plans, procedures, criteria or instructions developed for the purpose of contractual or other negotiations by or on behalf of the government of the province or a public body, or considerations which relate to those negotiations;

7. Section 27(1): The head of a public body shall refuse to disclose to an applicant information that would reveal

(b) commercial, financial, labour relations, scientific or technical information of a third party, that is supplied, implicitly or explicitly, in confidence and is treated consistently as confidential information by the third party; or

(c) commercial, financial, labour relations, scientific or technical information the disclosure of which could reasonably be expected to

(i) harm the competitive position of a third party or interfere with the negotiating position of the third party,

Please note that pages 10-11 have been fully redacted under Section 18(1)(a)(viii) and (d) and Section 18(2)(c).

As required by subsection 7(2) of the Act, we have severed information that is exempted from disclosure and have provided you with as much information as possible. In accordance with your request for a copy of the records, the appropriate copies have been enclosed.

Section 43 of the Act provides that you may ask the Information and Privacy Commissioner to review this response or you may appeal to the Supreme Court Trial Division. A request to the Information and Privacy Commissioner shall be made in writing within 60 days of the date of this letter or within a longer period that may be allowed by the Commissioner.

To appeal records that are refused on the basis of section 21 (legal advice) or section 18(2)(a) (official cabinet record), you must appeal directly to the Supreme Court Trial Division within 30 days after you receive the decision of the public body, pursuant to section 60. You may also contact the Office of the Information and Privacy Commissioner who may decide to initiate an appeal pursuant to subsection 60(1.1).
The address and contact information of the Information and Privacy Commissioner is as follows:

Office of the Information and Privacy Commissioner  
2 Canada Drive  
P. O. Box 13004, Stn. A  
St. John's, NL. A1B 3V8  
Telephone: (709) 729-6309  
Facsimile: (709) 729-6500

In the event that you choose to appeal to the Trial Division, you must do so within 30 days of the date of this letter. Section 60 of the Act sets out the process to be followed when filing such an appeal.

Please be advised that responsive records will be published following a 72 hour period after the response is sent electronically to you or five days in the case where records are mailed to you. It is the goal to have the responsive records posted to the Office of Public Engagement's website within one business day following the applicable period of time. Please note that requests for personal information will not be posted online.

If you have any further questions, please feel free to contact Ms. Courtney Blundon by telephone at (709) 729-7183 or by email at courtneyblundon@gov.nl.ca

Sincerely,

JAMIE CHIPPETT  
Deputy Minister
Information Note
Department of Environment and Conservation

Title: NARL Refinery Environmental Issues and Liabilities

Issue: This note is to inform on past and current environmental obligations and liabilities for the North Atlantic Refining Limited (NARL) refinery at Come By Chance.

Background and Current Status:

Executive Summary:

• The NARL refinery has outstanding environmental obligations pertaining to their fuel storage and handling. These obligations are not due to new regulatory requirements, but rather are the result of the refinery falling behind in its regulatory obligations over the past 20 years.

• There are additional potential environmental obligations pertaining to refinery air emissions. These obligations are the result of pending new air emission regulations.

• The refinery has estimated closure costs to be approximately This estimate does not cover any remediation of soil or groundwater, long-term maintenance of the hazardous waste landfill, or the removal of existing on-site hazardous materials.

Refinery Ownership History:

• The NARL refinery was built in 1973 and operated by Shaheen Resources until 1976. The refinery was purchased by Petro-Canada in 1980 but they did not operate it. The refinery was sold to Newfoundland Energy Ltd. (NEL) in 1986, who operated it from 1986 until 1994. In 1994 Vitol Refining Group B.V. acquired the refinery and continued operations after significant upgrades (~US$600 million). Harvest Energy Trust purchased the refinery in 2006. Korea National Oil Corporation purchased Harvest Energy in 2009.

Summary and Assessment of 1986 and 1994 Agreements

• Prior to the sale of the refinery in 1986, the Province and NEL entered into an Agreement dated October 1986 that provided environmental indemnity to NEL for existing environmental liabilities at the refinery site. Key provisions of the agreement included:
o NEL were required to implement a capital rehabilitation program and perform any necessary mothballing to prevent deterioration of the facility.

o NEL were responsible for the establishment, operation and post-closure maintenance of an on-site hazardous waste landfill that would be used for the disposal of new refinery waste.

o The Province was responsible for the cleanup or containment of all environmental hazards which existed at the refinery site as of October 1986.

o The Agreement has no expiry date. Either party may transfer this Agreement to future successors, provided that the other party provides written consent.

• Prior to the sale of the refinery to Vitol in 1994, the Province (Dept. of Environment and Lands and Dept. of Finance), Newfoundland Processing Limited (wholly-owned subsidiary of NEL) and Vitol signed an Agreement dated August 15, 1994. Key provisions of the agreement included:

  o The Agreement confirmed transfer of the 1986 Agreement to Vitol.

  o The Agreement placed many additional requirements for environmental protection and monitoring on Vitol.

  o This Agreement had an expiry date of August 2004.

• In a general sense, the commitments of the 1986 agreement were met by both parties. NEL rehabilitated the refinery to the extent that they were able to successfully operate it for nearly 8 years. NEL established an on-site hazardous waste landfill that they operated until 1997. Today, NARL monitors and maintains the closed landfill. The Province removed hazardous materials from the site and disposed of them in a newly constructed off-site hazardous waste landfill. The Province did not however conduct any detailed environmental site assessments to detect and characterize any existing soil or ground water contamination.

• ENVC staff are currently in the process of going through the 1994 Agreement in a detailed manner to determine whether each of the original environmental obligations were fulfilled by Vitol. Preliminary indications are that the obligations were either met or are no longer relevant as they have been superseded by the requirements specified in the current Certificate of Approval (CofA) and Compliance Agreement (CA) as issued to NARL.

• The provisions of the 1986 Agreement were transferred to the 1994 Agreement, which in turn has since expired.
Background and Summary of Current CofA and Compliance Agreement

- ENVC’s current regulatory requirements for the operation of NARL’s refinery are specified in the CofA and Compliance Agreement that were issued on November 15, 2013. Both documents are valid until December 31, 2016.

- The CofA specifies requirements for the following areas: sulphur recovery unit (SRU) operations; waste management; storage and handling of petroleum and other chemicals; product loading; effluent treatment and monitoring; spill response; hazardous waste landfill monitoring and maintenance; air emissions and monitoring thereof, monitoring of marine and terrestrial effects; and submission of reports to ENVC.

- A Compliance Agreement specifies measures that are to be enacted over a set period to address areas of non-compliance. The current Compliance Agreement specifies requirements for petroleum storage tank inspection and repair, and dyking; sulphur dioxide emission limits, opacity monitoring, and the site drainage system inspection and repairs:

- The CofA and Compliance Agreement were the culmination of nearly 2 years of assessment and negotiations between ENVC and NARL. These documents outline ENVC’s expectations for the refinery owner over the next 3 years to address areas of environmental concern. These expectations would not change should ownership of the refinery change in the near future. As such, ENVC would be agreeable to reissuing the existing CofA and Compliance Agreement to a new refinery owner, with all existing terms and conditions remaining the same.

- From ENVC’s perspective, the greatest environmental concern associated with the refinery operations is their non-compliance with the inspection requirements for their petroleum storage tanks.

- To address these fuel storage concerns, NARL has committed to spending approximately $75 million over the next 3 years to inspect, repair and upgrade their crude storage tanks along with several other product tanks. This commitment has been included in the current Compliance Agreement.

- Beyond 2016, NARL has indicated its intention to become up-to-date with inspection and repair requirements for all remaining tanks by 2022. It should be noted that these expenses are not due to new regulatory requirements, but rather are the result of the refinery falling behind in its regulatory obligations over the past 20 years. The implementation schedule for these tanks will be addressed through future Compliance Agreement negotiations.

- The other significant non-compliance issue that the refinery faces is the atmospheric emissions of sulphur dioxide (SO₂). Results from ambient air monitoring stations and computer emissions dispersion modeling have shown SO₂ levels to periodically exceed provincial ambient air standards at the refinery fence line.

- NARL’s SO₂ non-compliance has previously been dealt with under Compliance Agreements having annual emission caps that decreased incrementally each year. These emission caps were established as a means of progressing towards compliance with the ambient air standards.

- For the current Compliance Agreement, the Department has agreed to a static SO₂ emission cap of 17,000 tonnes per year, along with daily SO₂ emission caps of 50-60 tonnes for each of the next
three years. These caps are roughly equivalent to current operating conditions, expanded to peak production 365 days per year.

- The Department has agreed to this 'status quo' approach over the next three years on the following basis:
  - Results from ambient air monitoring and computer modeling have shown SO\textsubscript{2} levels to be consistently well below regulatory limits within nearby communities.
  - With these caps, ambient air levels of SO\textsubscript{2} are expected to remain below regulatory limits within these communities.
  - Inspection and repair of the petroleum storage tanks presents a more pressing environmental concern from ENVC's perspective.
  - New federal Base Level Industrial Emission Standards (BLIERS) are currently being developed for the petroleum refining sector. By the end of 2016, it is expected that these standards will be in place thereby allowing ENVC and the refinery to be in a position to negotiate an appropriate plan for meeting these BLIERS.

- NARL's SO\textsubscript{2} emissions are attributable to process emissions (SRU and miscellaneous sources) and fuel combustion.

- Upon expiry of the current CofA and Compliance Agreement in 2016, ENVC expects to have negotiated terms and conditions for another Compliance Agreement that will further progress towards compliance with the fuel storage and SO\textsubscript{2} requirements.

**Summary and Assessment of Environmental Report Supplied by NARL**

- In October 2013, Pilko & Associates prepared a report for NARL.
This estimate does not include potential costs for compliance requirements related to air emissions.
Identification and Order of Magnitude Assessment of Environmental Liabilities

Operations:

- Outstanding environmental obligations presented in the previous section may be summarized as follows:

  - Closure:
    - In 2009 NARL 
      - s.27(1)(b)
      to provide an estimate for the demolition and removal of infrastructure on the refinery site.

    - In 2009, NARL estimated the costs associated with cleaning up their impounding basin and holding basin to be 
      - s.27(1)(b)
      
    - Other potential closure liabilities not covered by these estimates include: cleaning or purging of piping and tanks, disposal of any on-site hazardous waste (including tank sludge, used catalyst material and stored sour water) and remediation of any soil and/or groundwater contamination. The potential costs associated with these activities are unknown.

    - NARL excluded the removal of tank sludge from their estimates based on their assertion that removal of tank sludge is part of the refinery regular maintenance program. 
      - s.20(1)(c), s.20(1)(a)

    - NARL excluded disposal of hydrocarbon impacted soil from its closure cost estimates based on their assertion that the refinery is continuously completing remedial work as any leaks or spills to the environment occur. 
      - s.20(1)(a), s.20(1)(c)

    - Based on the above, the costs associated with removal of site infrastructure and clean-up of the wastewater basins is estimated to be Additional costs associated with disposal of hazardous waste and soil/groundwater remediation are unknown. 
      - s.27(1)(b)

    - According to “Petroleum Refining Vol. 5, Refinery Operation and Management, Jean-Pierre Favennec (1998),” refinery closure and dismantlement costs are typically in the range of $15-$25 million, while site clean-up costs are in the range of $40-$200 million.
- Adjusting this reported range of closure and dismantlement costs for inflation yields present-day values of approximately $20-$34 million. 

- Adjusting the reported range of site clean-up costs for inflation yields present-day values of approximately $34-269 million.

Prepared / Approved by: D. Pittman / D. Maddocks / M. Goebel, ADM
Approved by:
February 6, 2014
Title: NARL Refinery Environmental Issues and Liabilities

Issue: This note is to inform on past and current environmental obligations and liabilities for the North Atlantic Refining Limited (NARL) refinery at Come By Chance.

Background and Current Status:
• The NARL refinery was sold by Petro-Canada to Newfoundland Energy Ltd. (NEL) in 1986. Prior to the sale, the Province and NEL entered into an Agreement that provided environmental indemnity to NEL for existing environmental liabilities at the refinery site. The Agreement had no expiry date, and was transferrable to successors with mutual written consent.

• NEL sold the refinery to Vitol Refining Group in 1994. Prior to the sale, the Province, NEL and Vitol signed an Agreement that transferred the 1986 Agreement to Vitol. The 1994 Agreement then expired in 2004.

• ENVC’s current regulatory requirements for the operation of NARL’s refinery are specified in the Certificate of Approval (CofA) and the Compliance Agreement that were issued in November 2013. Both documents are valid until December 31, 2016.

• There are currently two major regulatory concerns associated with the operation of the refinery — the condition of NARL’s fuel storage tanks, and atmospheric emissions of sulphur dioxide (SO₂).

• To achieve compliance with current and future provincial and federal regulatory requirements in these areas will cost the refinery an estimated $75 million. Beyond 2016, an additional $75 million will be needed to bring the tank work up-to-date. Plans and commitments to address tanks and air emissions after 2016 would be addressed through future Compliance Agreement negotiations.

• In the event of refinery closure, the following environmental liabilities would need to be addressed:
  o removal of site infrastructure,
  o clean-up of contaminated wastewater basins,
  o cleaning and purging of piping and tanks,
  o disposal of any on-site hazardous waste (most notably tank sludge) and
  o remediation of any soil and/or groundwater contamination.
NARL have engaged consultants (Pilco & Associates LP)

As a frame of reference, the document “Petroleum Refining Vol. 5, Refinery Operation and Management, Jean-Pierre Favennec (1998)” estimates the typical range of site clean-up costs for a refinery site to be $34-269 million (adjusted for inflation to present-day values). This is over and above infrastructure dismantlement costs, which Favennec has cited to typically be in the range of $20-$34 million.

Action Being Taken:

Should the refinery be sold, ENVC would be agreeable to reissuing the existing CofA and Compliance Agreement to a new refinery owner, with all existing terms and conditions remaining the same.

Prepared / Approved by: D. Pittman / D. Maddocks / M. Goebel, ADM
Approved by: February 6, 2014
Information Note
Department of Environment and Conservation

Title: Potential Acquisition of North Atlantic Refining Limited (NARL) by SilverRange

Issue: This note is to inform on the environmental and associated financial implications of SilverRange’s proposed acquisition of NARL.

Background and Current Status:
- On February 24, 2014 SilverRange Financial Partners submitted, on a confidential basis, a presentation to Government representatives on the proposed acquisition of NARL.
- SilverRange is in negotiations with current refinery ownership (KNOC) and are seeking support from the Province on some environmental issues.

SO\textsubscript{2} versus Petroleum Storage

- There are two main areas of environmental focus associated with the refinery operations: atmospheric sulphur dioxide (SO\textsubscript{2}) emissions and the condition of petroleum storage tanks. SO\textsubscript{2} levels periodically exceed provincial regulatory limits near the refinery. The majority of NARL’s storage tanks are overdue for internal inspection, and these inspections need to be completed by 2022.

- NARL is currently operating under a 3-year Certificate of Approval (CofA) and Compliance Agreement (CA) that were issued by ENVC in November 2013. Through these documents, NARL can maintain ‘status quo’ on their SO\textsubscript{2} emission intensity with an annual cap of 17,000 tonnes. In return, NARL are required to inspect and repair certain crude tanks along with select other tanks over the next 3 years. NARL has further indicated a long term plan to bring all other tank inspections up to date by 2022.

- NARL currently processes a high-sulphur Basrah crude and combusts heavy fuel oil having significant sulphur content. SilverRange proposes to process a low-sulphur WTI crude and use sulphur-free butane and propane for refinery fuel. SilverRange estimates that this will reduce refinery SO\textsubscript{2} emissions by at least 33%.

- This is a very substantial SO\textsubscript{2} reduction. For comparison, ENVC has required an overall refinery SO\textsubscript{2} reduction of 20% over the past 11 years.

- This proposal will not bring the refinery into compliance with proposed federal limits (BLIERs). As the tentative implementation deadline for these BLIERs is 2025, the refinery should have sufficient time to implement the necessary upgrades for BLIERs compliance during 2019-2025.
Many of NARL's tanks have not been inspected since their installation 40 years ago. The onsite containment system (tank berms, collection ditches and holding basin) is designed to handle one tank failure.

- The towns near the refinery have expressed to ENVC that air emissions from the refinery are their top concern.

**Liabilities**

- SilverRange does not wish to assume any responsibility for pre-existing liabilities. KNOC does not wish to grant SilverRange any environmental indemnity for these liabilities. To ENVC’s knowledge, liabilities include: removal of site infrastructure, contamination of refinery treatment basins, maintenance of an on-site hazardous waste landfill, on-site hazardous waste (including tank sludge, used catalyst material and stored sour water) and remediation of any soil and/or groundwater contamination.
NARL’s current plan would bring all tank inspections up to date by 2022.