May 27, 2019

Dear [Redacted]:

Re: Your request for access to information under Part II of the Access to Information and Protection of Privacy Act (File # NR-95-2019)

On May 14, 2019, the Department of Natural Resources received your request for access to the following records/information:

The information note entitled "Oil Seeps in the Shoal Point Area on the Port au Port Peninsula ".

I am pleased to inform you that a decision has been made by the Department of Natural Resources, confirmed by the Deputy Minister, to provide access to the requested records. The records are attached.

We are providing access to the most information possible but have made redactions in accordance with Section 29(1)(a) of ATIPPA, 2015 as follows:

29. (1)(a) The head of a public body may refuse to disclose to an applicant information that would reveal advice, proposals, recommendations, analyses or policy options developed by or for a public body or minister.

Please be advised that you may ask the Information and Privacy Commissioner to review the processing of your access request, as set out in section 42 of the Access to Information and Protection of Privacy Act (the Act). A request to the Commissioner must be made in writing within 15 business days of the date of this letter or within a longer period that may be allowed by the Commissioner.

The address and contact information of the Information and Privacy Commissioner is as follows:

P.O. Box 8700, St. John's, NL, Canada A1B 4J6 t 709.729-1466
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
Toll-Free: 1-877-729-6309
Facsimile: (709) 729-6500

You may also appeal directly to the Supreme Court Trial Division within 15 business days after you receive the decision of the public body, pursuant to section 52 of the Act.

Please be advised that this letter will be published following a 72 hour period after it is sent electronically to you or five business days in the case where records are mailed to you. It is the goal to have the letter posted to the Completed Access to Information Requests website within one business day following the applicable period of time.

If you have any questions, please feel free to contact me at 709-729-0463 or rhynes@gov.nl.ca.

Sincerely,

Rod Hynes
Rod Hynes
ATIPP Coordinator
Information Note
Department of Natural Resources

Title: Oil Seeps in the Shoal Point Area on the Port au Port Peninsula

Issue: Provide a history of the natural seepage in the area and the work AMEC Foster Wheeler (AMEC) has completed to-date.

Background and Current Status:

- Woods Hole Oceanographic Institute (WHOI), the world’s leading independent non-profit organization dedicated to ocean research, exploration, and education, reported “As much as one half of the oil that enters the coastal environment comes from natural seeps of oil and natural gas.” And “Seeps are generally very old and flow at a very low rate. The material that flows out is still very often toxic, but organisms some that live nearby are adapted to conditions in and around seeps.”

In addition, the Natural Research Council (NRC) separates petroleum releases into categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Seeps</td>
<td>46%</td>
</tr>
<tr>
<td>Discharge from consumption</td>
<td>37%</td>
</tr>
<tr>
<td>(ships, land-based sources)</td>
<td></td>
</tr>
<tr>
<td>Accidental spills</td>
<td>12%</td>
</tr>
<tr>
<td>Extraction of oil</td>
<td>3%</td>
</tr>
</tbody>
</table>

- Oil extraction activities are still usually located in the proximity to oil seeps. The presence of surface hydrocarbons along the coastline in Port au Port Bay was first reported by Alexander Murray (first government geologist for Newfoundland) in his 1865 Report of Activities to the Newfoundland government.

- The first known drilling for hydrocarbons on the Port au Port Peninsula took place on land in 1898. In that year and intermittently up to 1901, records indicate the Western Oil Company Limited (from New Brunswick) drilled at least four shallow holes at Shoal Point which reportedly produced anywhere from 10 to 20 barrels of oil per day.

- In 1928, subsea seeps were reported in the General report of the Government geologist as follows: "I have no doubt that a submarine seepage does exist, for on the occasion of my visit, I was able to stand and watch the waves breaking in, each one of which would, on receding, leave a characteristic oily foam amongst the beach boulders".

- The last episode of historic drilling commenced in 1965, when British Newfoundland Exploration Limited (Brinex) and Golden Eagle Oil and Gas Limited undertook a joint exploration program throughout the Port au Port Peninsula. Two wells were drilled, Shoal Point #1 and Shoal Point #2 with both encountering non-commercial oil shows.

AMEC Background:

- AMEC was retained mid 2015 by Department of Environment and Conservation and produced a report dated August 7, 2015 (Project # TF1512739). It states that ‘although the visible well casings have been damaged from being exposed to wind, wave and ice pressures, they do not appear to be the source of the current oil sheen this is evident on the water in the area’.

- On behalf of MAE, AMEC was retained to remediate oil seepage along the western shore of Shoal Point. In November 2015, a project was implemented in an attempt to temporarily stop the seep by conducting repair work to Well #1 and Well #2, which was successful. In May of 2016, it was reported that the oil seepage had resumed.
• A Science Panel was assembled by Environment Canada in June 2015 to examine a request from MAE to assess the seepage. Based on aerial reconnaissance, it was concluded that the seep was very small in volume and intermittent. It was noted that a sheen of 50 parts per million can be seen with the naked eye and that ships are allowed to discharge up to 15 ppm.

• On a related matter, a paper presented at the 2017 GAC Annual General Meeting titled “Investigation into the impact of a leaking oil exploration well on the scallop fishery in Port au Port Bay, Newfoundland” concluded “No evidence of hydrocarbon or metal contamination in the sediments, water, or mussels was detected. These results suggest the decline of the scallop fishery in Port au Port Bay cannot be explained by petroleum hydrocarbons from the leaking oil exploration well.”

Analysis:
• In 2016, AMEC Foster Wheeler was retained again by MAE to further investigate the ongoing oil seepage at Shoal Point. AMEC, in its 2017 report (TF1612741), identified 3 options for consideration: (1) Monitoring, (2) Capping ($300k), and (3) Well abandonment ($1M+). It was stated that the probability of reduced oil seepage increases with the cost but even the $1 million option states “Seeps may recur and continue”.

• In the context of oil seeps being noted along the point for more than a century, it seems unlikely that the suspected effects are a recent phenomenon.

• DNR staff provided comments on the draft of the AMEC report and with regard to options for future actions, additional data collection was suggested. With sufficient data on seep frequency, location, volume, duration, seasonality, tide effects, whether there are more seeps in the same general area, etc. a more effective cost benefit analysis could be performed. Suggestions for gathering additional data include:
  o Tasking ServiceNL field personnel to include regular site visits to the location to collect a sample and to record and photograph current conditions;
  o Take advantage of any available fly overs to gather aerial photos, slick visibility etc;
  o Review and analyze historic and current aerial photos of the area and note presence, location and extent or absence of slicks;

• It is probable that, even if successful, plugging any of the old well casings could cause the oil seep to migrate and emerge at surface elsewhere along the coast.

• On July 7, 2017¹, the Deputy Minister of MAE wrote his counterpart in Natural Resources (NR) requesting that NR assume the lead role in the development of a long term strategy to address concerns related to the Shoal Point wells and onshore orphaned and abandoned wells in general. The memo also made reference to seeking funding from the Federal Government similar to that obtained recently from Alberta related to well abandonment and reclamation.

• A correspondence from NRCan² received Nov 29, 2017, to the Minister of NR indicated that ‘oil and gas companies to either provide upfront security deposits or contribute into an orphan well fund’ and therefore ‘cleanup of orphan wells is borne by industry’. The letter also

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¹ OCOR-29122- Letter to NRCan re Decommissioning of Legacy Wells; Western Newfoundland
² COR-39929- Response from NRCan to Minister Coady. RE: Decommissioning of Legacy Wells; Shoal Point, Port au Port Peninsula; Western Newfoundland
referred that further discussions are needed to explore potential federal programs that could support the province’s efforts.

- Further to this correspondence, in early 2018 the Department contacted Tim Gardiner at NRCan who confirmed that funds may be available within the federal system for allocation to the orphan well situation. NRCan indicated that these funds would be transferred to ACOA who would work with the Province in securing funds for the project.

- As this seep remains mainly in the sea, the shore area does not seem to be affected. This small volume intermittent seep is one of many natural petroleum occurrences at the earth’s surface on the west coast of the island. Since the wells are below the low water, the C-NLOPB should be consulted for input into any future activities related to the seeps.

**Action Being Taken:**
- Department staff will continue to liaise with MAE as further updates become available.
- DNR are in communication with MUN to look at the oil seeps.
- A decision is required to determine who carries the responsibility both to oversee the work (if required) and also which Department would be responsible for providing regulation.

**Prepared/Approved by:** I. Boddy / P. Molloy / D. Corkey

March 28, 2019
Port au Port Peninsula Showing Location of Seeps and Documented Wells.
Photos from site visit in November 2018

http://www.whoi.edu/oil/natural-oil-seeps
http://research.library.mun.ca/12586/