CANADA NEWFOUNDLAND & LABRADOR
C-NLOPB
OFFSHORE PETROLEUM BOARD

April 17, 2019

Ms. Gretchen Fitzgerald
National Program Director
Sierra Club Canada Foundation
gretchenf@sierraclub.ca

Dear Ms. Fitzgerald:

Thank you for your correspondence of March 20, 2019 in which you raised a number of issues related to the November 2018 oil spill in the White Rose Field of the Canada-Newfoundland and Labrador Offshore Area.

As the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) has publicly stated previously, the spill demonstrated that the risks in offshore oil activity can never be underestimated, especially in our harsh environment. Those risks are only acceptable when all reasonable measures have been taken to reduce them.

In the days and weeks following the spill, the C-NLOPB continuously monitored Husky Energy's (Husky's) response. In this regard, we worked closely with a number of federal government response agencies including the Canadian Coast Guard (CCG), Fisheries and Oceans Canada (DFO), Canadian Wildlife Service (CWS) and Environment and Climate Change Canada (ECCC). We provided regular and frequent updates to the public via our website, which remain available at https://www.cnlopb.ca/incidents/. As well, Husky provided several updates to the public which can be found at https://huskyenergy.com/whiterose/.

The C-NLOPB commenced a formal investigation into this incident shortly after the spill occurred. Our investigation, which is ongoing, includes gathering and assessing relevant information along with interviews in an effort to determine the root cause. This takes considerable time to do properly and thoroughly, as would be the case with any investigation into any incident with potential enforcement implications.

On December 7, 2018 the C-NLOPB received Husky's preliminary investigation report, as per s. 76(2)(b) of the *Newfoundland Offshore Petroleum Drilling and Production Regulations*. The C-NLOPB will not be releasing the Operator's preliminary investigation report publicly at this time in light of the fact that this is an ongoing investigation, as noted above.

The C-NLOPB will release the findings of its investigation to the public when they are available and we will take whatever enforcement action is deemed appropriate in this incident. As well, we will share the learnings of this incident with the industry and other regulators in Canada and worldwide, through the International Regulators Forum and the International Offshore Petroleum Environmental Regulators.

In the meantime, the C-NLOPB has completed a review of storm impacts for all production and petroleum drilling installations in the Canada-Newfoundland and Labrador Offshore Area. The C-NLOPB's Chief Safety Officer is following up with all operators regarding the importance of lessons learned exercises and identifying opportunities for improvement in areas such as weather forecasting, post adverse weather integrity assessments and lifeboat limitations and impairment. In short, we are continuing to use our regulatory oversight to drive enhanced industry performance in the Canada-Newfoundland and Labrador Offshore Area.

With specific reference to each of the questions you posed in your correspondence, please note the C-NLOPB response in italics:

1. Full details of your oil spill response plan and how it was implemented for the November 16 SeaRose incident.

- *Your question inaccurately implies that the C-NLOPB has its own oil spill response plan. The C-NLOPB provides regulatory oversight of operator response plans. For clarity, please note that prior to the C-NLOPB issuing an authorization for Husky's oil production operations, Husky was required to provide an oil spill response plan to the C-NLOPB for review and approval.*

- *The C-NLOPB's role following the oil spill was to closely monitor all aspects of Husky's response to the spill, which we did on a daily basis. In so doing, the C-NLOPB worked closely with the CCG, CWS, ECCC and DFO regarding all aspects of Husky's oil spill response.*

2. The rationale for wildlife observations made subsequent to the spill, including your wildlife observation protocol and details of the methodology used to estimate the number of oiled seabirds and any other impacted wildlife including how detection rate for oiled birds was measured.

- *As noted above, immediately following the November 2018 oil spill, the C-NLOPB worked closely with the CCG, CWS, ECCC and DFO regarding all aspects of Husky's oil spill response, including the plan to assess wildlife impacts.*

- *With respect to wildlife observation surveys, one of the first actions was the identification and execution of search transects, in consultation with CWS and DFO. A total of 26, 9km x 9km grids were searched via a combination of aerial and vessel surveillance, with the final of 26 grids completed on November 28. Vessels in the field continued to monitor for wildlife, after wildlife observation surveys were complete.*

- *Personnel onboard supply/stand-by vessels contracted to Husky were trained seabird observers per the requirements of the Tier 1 Oil Spill Response Training and the Eastern Canada Seabirds at Sea (ECSAS) Protocol for collecting pelagic seabird data from moving platforms.*

- *In addition, Husky placed independent wildlife observers from Eastern Canada Response Corporation (ECRC) on supply/stand-by vessels.*

- *After the spill, Husky requested all assets in the offshore area to be diligent in their observations for oiled wildlife and report any observations to Husky.*

3. Number of oiled seabirds detected in the offshore area after the spill, persons or companies involved in collecting these oiled seabirds, and all chemical analysis performed on the oil/substances found on these seabirds to check for relevance to the SeaRose spill. If no analysis has occurred for oiled birds found, please indicate why.

- *From November 16 up to November 22, the last date an oiled seabird was seen, a total of 18 oiled seabirds were observed. Of those that could be recovered, four were transported to a Seabird Rehabilitation Centre in St. John's. Three of those four were transferred to the Newfoundland and Labrador Environmental Association's Wildlife Response Centre for longer-term rehabilitation. Two of those three birds were released back to the wild.*

- *The recovery of oiled seabirds took place by trained personnel on the various supply/stand-by vessels involved in response efforts.*

- *By way of background, Husky maintains a partnership agreement with Suncor Energy for the use of Suncor's Seabird Rehabilitation Centre in St. John's. Several trained responders and a wildlife veterinarian were on standby in the event that oiled seabirds were recovered. Husky also had a number of trained volunteers who supported the veterinarian in charge. Husky also brought in additional resources through TriState Bird Rescue and Research in the United States.*

- *Recovered dead seabirds were delivered to the CWS.*

- *CWS officials are coordinating the monitoring of seabird impacts and has committed to generating a mortality estimate which will provide insight into what the long-term impacts may be on seabirds.*

4. A copy of all wildlife data collected by ship-board observers up to December 1 (including numbers of birds, times of observation, locations, i.e., complete data for the ship transects used to look for wildlife).

- *Please note that due to the ongoing C-NLOPB investigation into the mid-November oil spill, the wildlife data you requested cannot be released.*

5. Rationale as to why the radar images of the size of the spill were not made publicly available sooner, and to whom these images belong (the regulator, Husky Energy, or federal agencies). As per our government's Oceans Protection Plan, we believe all of this information should be publicly available as this spill occurred while extracting a publicly-owned natural resource, and has implications for other industries and stakeholders. This information may also be useful in the prevention of future spills, future impact assessment processes, and in ensuring an improved emergency response when another spill occurs. If this information cannot be provided, please provide reasoning for why it is being withheld.

- *As the lead government agency, the C-NLOPB, in close cooperation and consultation with its partner agencies, the National Environmental Emergencies Centre (NEEC) of ECCC, CWS and CCG, monitors an operator's spill response in the event of an oil spill. In the case of the spill from Husky's SeaRose FPSO, the Board was notified appropriately and met with Husky the same day. Vessel sweeps of the area were initiated immediately following the SeaRose FPSO's loss in pressure and aerial surveillance was conducted that afternoon.*

- *Depending on sea states, the size, trajectory and density of a spill will naturally change. There are several ways estimates of the size, trajectory and density are made when observing an oil spill. Satellite monitoring assisted Husky, the C-NLOPB and its partner agencies, to monitor for the presence of anomalies in the Offshore Area. This can be useful when acquired during nighttime or when visual observation isn't feasible, however real-time observations were taken by vessel and aerial surveillance and by the deployment of tracker buoys (which follow the currents of the ocean). Because observations by vessel and by plane provide different perspectives, estimates can vary. Aerial surveillance is the most accurate, as observers can estimate the size and Marine Oil Spill Thickness Appearance Rating (TAR) (table attached) more precisely from the air. Both vessel and aerial surveillance were conducted by Husky within hours of the spill from the SeaRose FPSO.*

- *The CCG, a partner agency of the C-NLOPB, participated in aerial surveillance flights as of November 17 along with ECRC to observe and monitor any visible sheens.*

- *On the dates when sheens were visible (November 16, 17 and 18) weather conditions were not conducive to cleanup. Best practice was followed to collect data on the sheens for those days but cleanup was not possible due to sea states. This was communicated widely by both the C-NLOPB as well as the operator.*

- *As of November 18, four surveillance flights and several offshore support vessels had been deployed since November 16 to help assess the extent of the spill and look for any effects on wildlife.*

- *No oil sheens were detected after Sunday, November 18.*

- *The C-NLOPB provided regular updates on its website as well as on Twitter regarding the estimated amount of oil released, steps that Husky was taking to respond to the spill as well as the status of wildlife observations.*

- *The presence and location of the sheens were reflected in Husky's updates, and the attached map which outlines the location and shapes of the sheens was also provided to media. Any additional information that was required could have been made available. Given the information on the sheens which was made available by Husky, our C-NLOPB updates focused more so on our role in monitoring Husky's response.*

- *For reference, the presence of sheens was reported by various media:*

  https://www.cbc.ca/news/canada/newfoundland-labrador/searose-spill-containment-1.4910276
  https://www.thetelegram.com/news/local/rough-seas-hamper-containment-and-recovery-operations-at-white-rose-oilfield-260192/
  https://globalnews.ca/news/4681892/oil-spill-newfoundland-2/
  https://twitter.com/LeilaBeaudoin/status/1063801038975709184

- *The C-NLOPB received radar images pertaining to the spill from ECCC. It would be best if you followed up directly with ECCC with questions respecting access to these radar images.*

Thank you again for your correspondence and your interest in this important issue.

Regards,

Scott Tessier
Chief Executive Officer

Attachments

c: The Honourable Catherine McKenna, P.C., M.P.
The Honourable Jonathan Wilkinson, P.C., M.P.

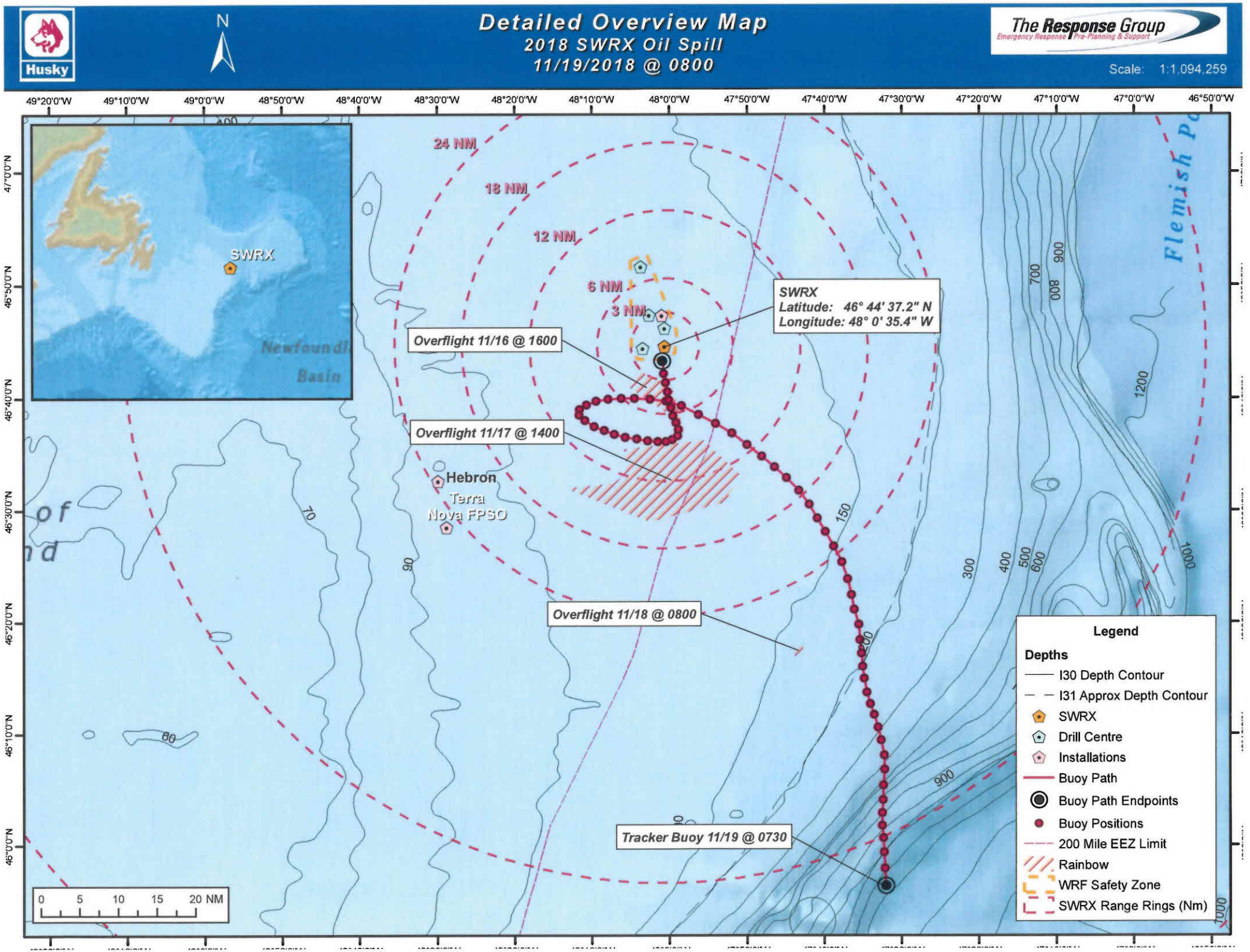
Marine Oil Spill Thickness Appearance Rating (TAR) Code

(Modified to include heavy oil spills and on-water observations)

Category	Appearance	Description	Thickness (mm)	Thickness L/m²	Quantity L/km²	If IPAR3 Multiply By
A	Barely visible	Barely visible under most favourable light conditions. Films reflect more light than does water, and looks brighter. May need adjacent water for comparison.	0.00004	0.00004	40	2
B	Silvery Sheen	Visible as a silvery sheen on water surface. A pearly or metallic luster is usually apparent	0.000075	0.000075	75	2
C	Trace of Colour	First trace of colour may be observed. First colour seen is warm tone, more bronze than yellow. As film thickens, deep violet or purple appears; these colours begin the first set of rainbow bands.	0.00015	0.00015	150	n/a
D	Bright Band of Colour	Bright band of colours. The set of bands are in the sequence bronze, purple, blue, green, in order of increasing thickness. These colours are pure and intense. As thickness increases, the set of bands are slightly less intense and have a modified colour sequence: yellow, magenta (reddish violet), blue, green. They are quite pure.	0.0003	0.0003	300	n/a
E	Dull Colours	Colours begin to turn dull. There is a reduction in the number and purity of colours. Colours are a rich terra cotta (brick red) and turquoise (rather bright blue-green). As thickness increases these colours are progressively duller or less pure looking. These sets of bands may also contain a trace of white or pale yellow. With increased thickness, any colour present is merely a tint in the light and dark alternating bands, The contrast between light and dark bands remains strong but weakens as thickness increases	0.001	0.001	1,000	2
F	Dark Colours	Colours are much darker. It is apparent that interference effects are weak and they will quickly disappear as thickness increases.	0.003	0.003	3,000	2
G	Yellowish Brown	Original TAR Code is extended to include oil thicknesses included in the CCG Oil Spill Response Guide	0.01	0.01	10,000	n/a
H	Light Brown of Black		0.1	0.1	100,000	n/a
I	Thick Dark Brown or Black		1.0	1.0	1,000,000	n/a
J	Heavy oil near the source of a crude or bunker spill		10.0	10.0	10,000,000	n/a

Slick thickness most amenable to chemical dispersion

Developed by the Canadian Coast Guard and Environment Canada
Collated by Cormorant Ltd.


Husky
N
Detailed Overview Map
2018 SWRX Oil Spill
11/19/2018 @ 0800
The Response Group
Emergency Response Pre-Planning & Support
Scale: 1:1,094,259
49°20'0"W
49°10'0"W
49°0'0"W
48°50'0"W
48°40'0"W
48°30'0"W
48°20'0"W
48°10'0"W
48°0'0"W
47°50'0"W
47°40'0"W
47°30'0"W
47°20'0"W
47°10'0"W
47°0'0"W
46°50'0"W
47°0'0"N
46°50'0"N
46°40'0"N
46°30'0"N
46°20'0"N
46°10'0"N
46°0'0"N
SWRX
Newfoundland Basin
24 NM
18 NM
12 NM
6 NM
3 NM
SWRX
Latitude: 46° 44' 37.2" N
Longitude: 48° 0' 35.4" W
Overflight 11/16 @ 1600
Overflight 11/17 @ 1400
Overflight 11/18 @ 0800
Tracker Buoy 11/19 @ 0730
Hebron
Terra Nova FPSO
Flemish Pass
0 5 10 15 20 NM
Legend
Depths
I30 Depth Contour
I31 Approx Depth Contour
SWRX
Drill Centre
Installations
Buoy Path
Buoy Path Endpoints
Buoy Positions
200 Mile EEZ Limit
Rainbow
WRF Safety Zone
SWRX Range Rings (Nm)