

May 29, 2019

By RESS and Courier

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
Toronto, Ontario
M4P 1E4

**RE: NOVA Chemicals (Canada) Ltd.
Kimball Pipeline Replacement Project (Project)
Ontario Energy Board File Number: EB-2015-0212 (the Order)**

Dear Ms. Walli:

Please find enclosed with this letter the following three documents, which collectively comprise the post-construction report for the Project that is required to be filed by pursuant to Condition of Approval 5(b) of the Order.

1. The certificate from a senior executive of the company pursuant to condition 5(b)(i) of the Order;
2. The Kimball Pipeline Replacement Project – Post-Construction Environmental Monitoring Report prepared by Stantec Consulting Ltd., pursuant to condition 5(b)(ii), 5(b)(iii) and 5(b)(iv) of the Order; and
3. The complaint log pursuant to condition 5(b)(v) of the Order. Please note that no new complaints have been received since our April 2018 filing pursuant to condition 5(a) of the Order. Therefore, the log has not changed.

If you have any questions concerning this report, please contact us to discuss them.

Sincerely,

NOVA Chemicals (Canada) Ltd.



Per: Fred S. Maxim
Senior Corporate Counsel

Encl.

Copy: Ian Mondrow, Gowling WLG



NOVA Chemicals (Canada) Ltd. Senior Executive Certificate

**Pursuant to Conditions of Approval 5(b)(i) of Decision and Order
EB-2015-0212 (the Order)**

To: The Ontario Energy Board

I, Arnel Santos, of the City of Calgary, in the Province of Alberta, acting in my position as a senior executive of NOVA Chemicals (Canada) Ltd. (NCCL), to the best of my knowledge do hereby certify as follows:

1. My position with NCCL is Senior Vice President, Operations, and as such, I have personal knowledge of, or have conducted due inquiry of individuals who have personal knowledge of, the facts and matters herein stated.
2. NCCL has implemented all the recommendations of the Environmental Report filed in the proceeding and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.

Name: 

Title: Senior Vice President, Operations

Date: May 27, 2019

**Kimball Pipeline Replacement
Project – Final Environmental
Monitoring Report**

**OEB Decision and
Order EB-2015-0212**



Prepared for:
NOVA Chemicals (Canada) Ltd.
PO Box 3060
Sarnia, ON N7T 8C7

Prepared by:
Stantec Consulting Ltd.
1-70 Southgate Drive
Guelph ON N1G 4P5

File No. 160961274
May 27, 2019

Sign-off Sheet

This document entitled Kimball Pipeline Replacement Project – Final Environmental Monitoring Report was prepared by Stantec Consulting Ltd. for the account of NOVA Chemicals (Canada) Ltd. ("the Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by 
(signature)

Michael Candido, B.Sc.
CISEC Environmental Inspector

Reviewed by 
(signature)

Rob Rowland, P.Geo
Senior Project Manager

Table of Contents

ABBREVIATIONS	II
OEB FILING REQUIREMENTS	II
1.0 POST CONSTRUCTION ENVIRONMENTAL MONITORING REPORT	1.1
1.1 DISCUSSION	1.1
2.0 COMPANY CONTACTS	2.1

LIST OF APPENDICES

Appendix A Table 1.1 and Table 1.2

LIST OF TABLES – APPENDIX A

Table 1.1: Post-Construction Environmental Observations (Late Spring 2018)
Table 1.2: Post-Construction Environmental Observations (Spring 2019)

Abbreviations

HDD	Horizontal Directional Drill
OEB	Ontario Energy Board
RoW	Right of Way
SCRCA	St. Clair Region Conservation Authority

OEB Filing Requirements

OEB Decision and Order: EB-2015-0212

Year of Reporting: Spring 2019

Pipeline Specifications:

- Diameter: NPS 12 (324 mm)
- Length: 4.0 km
- Product: Ethane

1.0 POST CONSTRUCTION ENVIRONMENTAL MONITORING REPORT

The purpose of this report is to highlight the key environmental post-construction monitoring components for the construction of the NOVA Chemicals (Canada) Ltd. Kimball Pipeline Replacement Project (“the Project”) in accordance with the Ontario Energy Board’s (OEB) Decision and Order EB-2015-0212.

Conditions of OEB approval EB-2015-0212 for the Project state post construction monitoring and reporting be completed. The OEB requires a final monitoring report be filed no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1. This final monitoring report is provided to assist NOVA Chemicals in complying with specific OEB Conditions of Approval. The OEB Conditions of Approval addressed in this report include assessing the effectiveness of the mitigation and rehabilitation measures implemented during and following completion of construction activities in the summer of 2017. The current condition of rehabilitated land will be described. In addition, the effectiveness of any actions taken to prevent or mitigate any identified impacts of construction will be discussed.

Restoration and clean-up activities along the pipeline Right-of-Way (RoW) were completed during the last week of August 2017. This final report considers the observations and recommendations found in the Kimball Pipeline Replacement Project – Spring 2018 Year After Construction Interim Environmental Monitoring Report (March 26, 2019) prepared by Stantec. The site visit was conducted on May 14, 2019.

The following biophysical elements were encountered during the construction phase:

- Physical environment
- Soil conservation and productivity
- Vegetation
- Water quality and quantity
- Fish and fish habitat
- Wildlife and wildlife habitat
- Species at Risk
- Wetlands

As outlined in Table 1.1, each biophysical element may have one or more specific elements (i.e.: soil conservation and productivity). The table provides information for each specific element as to how it was preserved, mitigated, reclaimed etc. Table 1.1 also outlines outstanding issues, potential adverse environmental effects and a proposed schedule to address potential effects identified during the spring 2018 site visit. Table 1.2 outlines the features that were observed in spring 2019 based on observations and recommendations from the spring 2018 site visit.

1.1 DISCUSSION

Several mitigation and reclamation measures were employed throughout the Project as they related to the environmental commitments. Mitigation and reclamation measures were implemented for clearing and topsoil stripping, to protect Species at Risk (SAR), wildlife, soils and wetlands. Based on the observations

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Post Construction Environmental Monitoring Report
May 27, 2019

and recommendations found in the Kimball Pipeline Replacement Project – Spring 2018 Year After Construction Interim Environmental Monitoring Report (March 26, 2019) the following elements were assessed during the spring 2019 site visit:

Soil and Soil Productivity

Topsoil was stripped over the trench line for the entire length of the pipeline and stripped across the entire workspace where the pipeline intersected an agricultural field. Topsoil was stored at the edge of the easement and separate from subsoil. Topsoil stripping was successful in preventing topsoil/subsoil mixing and soil loss.

Through the forested area of the RoW, subsoil was replaced over the trench and levelled prior to topsoil replacement to prevent mixing of the soil horizons. Topsoil was then replaced, and the entire RoW was disced. Subsidence approximately 60 m in length and approximately 15-25 cm in depth was observed over the pipeline trench west of Tecumseh Road between the road and the agricultural field.

Final clean up within the agricultural field consisted of decompaction with a soil ripper implement attached to a D6 dozer, disking and levelling of subsoil. Topsoil was then replaced, levelled and disced. All cleanup activities were completed to the farm operator's satisfaction. Natural contours were re-established to maintain natural surface drainage. No vehicle traffic was permitted over replaced topsoil.

Natural surface drainage was maintained on the agricultural field. Corn was planted on the RoW during the 2018 growing season. No evidence of soil compaction was observed. Subsidence approximately 20 m in length and approximately 10-20 cm in depth was observed over the pipeline trench in the agricultural field.

Re-seeding

The entire length of the RoW was re-seeded with annual rye grass during cleanup using a broadcast seeder attached to an all-terrain vehicle (ATV). Seed was applied the 3rd and 4th week of August 2017. Good growth was observed along the entire length of the RoW. No additional seeding is recommended. Good vegetation growth was observed at hydro seeded locations where the RoW intersected road crossings. No additional hydro seeding is recommended.

Native species growth was good along the entire RoW.

Wetlands

Most of the wooded area adjacent to the RoW is classified as unidentified treed wetland. Snake exclusion fence that was installed along the entire length of the RoW prior to the start of construction activities also functioned as a barrier to prevent and control sedimentation and erosion beyond the construction work space. Fencing was inspected and repaired daily as required.

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Post Construction Environmental Monitoring Report
May 27, 2019

All organic matter/muck soils excavated during trenching were stored separately from subsoil and spread evenly over the excavated areas during reclamation. Mud mats were installed in excessively wet areas to prevent mixing of soil layers. Surface drainage patterns were returned to pre-construction state to maintain wetland function and flow patterns, while also matching existing topography and contours.

Wetland drainage and water flow have returned to pre-construction conditions. Good reestablishment and regeneration of native plant species in wetland areas were observed.

Company Contacts
May 27, 2019

2.0 COMPANY CONTACTS

NOVA Chemicals (Canada) Ltd.

Brad Wright
Construction Coordinator
Phone: (519) 481-2427
email: Brad.Wright@novachem.com

Mac Hollingsworth
Project Lead
Phone: (519) 346-3336
email: Mac.Hollingsworth@novachem.com

Stantec Consulting Ltd.

Michael Candido, CAN-CISEC
Environmental Inspector
Phone: (519) 780-8139
email: michael.candido@stantec.com

Appendix A

Table 1.1 and Table 1.2

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Appendix A - Tables
May 27, 2019

Table 1.1: Post-Construction Environmental Observations (Late Spring 2018)

Biophysical Element	Specific Element/ Location	Information / Comments	Outstanding Issue / Incident	Potential Adverse Environmental Effects	Proposed Action & Schedule
Physical Environment	Topography	Not an issue due to level topography; there was sloping topography at ditches and water courses; ditches and water courses will be discussed in "Water Quality" section. No outstanding issues, however, the farm field should be monitored during the spring, after rain fall, to ensure effective surface runoff.	No outstanding issues.	Improper surface grading.	N/A
Soil Conservation and Productivity	Topsoil conservation	On the agricultural area, the topsoil was removed from the entire width of the easement and stockpiled at the edge of the easement as per the agreement reached with the farm operator. Topsoil and subsoil were piled separately. In non-farm fields topsoil was removed from the trench line area only and stockpiled at the edge of the easement, separate from the subsoil.	Minor subsidence over pipeline trench.	Crop loss.	Observed and reassess in late spring/early summer 2019.
	Soil de-compaction	Compaction was relieved by using a soil ripper attached to a D6 dozer. Subsoil across the farm field was ripped to a depth of 40 centimeters and leveled prior to topsoil replacement to prevent mixing of soil horizons. Subsoil was disced and leveled over the trench across the remaining length of the RoW prior to topsoil replacement. Topsoil was disced across the entire RoW. No vehicle traffic was permitted on topsoil once replaced. No evidence of soil compaction observed.	No outstanding issues.	Crop loss.	N/A

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Appendix A - Tables
May 27, 2019

Table 1.1: Post-Construction Environmental Observations (Late Spring 2018)

Biophysical Element	Specific Element/ Location	Information / Comments	Outstanding Issue / Incident	Potential Adverse Environmental Effects	Proposed Action & Schedule
	Erosion	N/A: due to the level topography and clayey texture of the soils in this area, wind and water erosion issues were not anticipated.	N/A	N/A	N/A
	Artificial Agricultural Drainage	No artificial agricultural drains were encountered during trenching.	N/A	N/A	N/A
Vegetation	Removal	Where necessary, vegetation was removed for trenching and to access the RoW. Felled trees were replaced on a 2 for 1 basis and planted in locations approved by the St. Clair Region Conservation Authority (SCRCA) in St Clair Township. Good native vegetation growth observed.	No outstanding issues.	Reclaiming native vegetation, potential for invasive plant species and weeds.	Observed and reassess in late spring/early summer 2019.
	Re-seeding/Re-planting	The entire workspace was re-seeded using an annual rye grass applied at a rate of 20 kg/ha. Hydro seeding was completed where the RoW intersected road crossings (Tecumseh Road and Ladysmith Road). Felled trees were replaced on a 2 for 1 basis and planted within St. Clair Township at locations approved by the SCRCA. 24 trees were planted on property of one easement owner and 124 at NOVA Chemical's St Clair Site. Very good growth observed on re-seeded areas. No additional seeding required. Good growth observed on hydroseeded areas. No additional hydro seeding required.	No outstanding issues.	Temporary vegetation loss and exposed soil susceptible to invasive plant species and weeds.	N/A

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Appendix A - Tables
May 27, 2019

Table 1.1: Post-Construction Environmental Observations (Late Spring 2018)

Biophysical Element	Specific Element/ Location	Information / Comments	Outstanding Issue / Incident	Potential Adverse Environmental Effects	Proposed Action & Schedule
Water Quality and Quantity	Watercourses	Two watercourse crossings were completed by Horizontal Directional Drill (HDD) – Allingham Drain and Jarvis Drain that are regulated by the SCRCA. All crossings followed mitigation recommendations described in the EPP and SCRCA permit conditions. A minor inadvertent return of drilling mud occurred during the HDD of Allingham and Jarvis Drains. Crew deployed drilling mud control procedures immediately. The drilling rig was shut down and remediation materials including straw bales, sand bags, stakes and filter cloth were employed. A vacuum truck was used to remove drilling fluid from the isolated area. Straw bales and silt fencing were placed into the creek to prevent siltation downstream. Bales and fencing were removed when the water quality (suspended solids) returned to background levels.	No outstanding issues.	Temporary and minor siltation of the watercourse and minor sedimentation downstream.	N/A
Fish and Fish Habitat	Watercourses	An inadvertent return of drilling mud occurred during the HDD of Allingham and Jarvis Drains (see Water Quality and Quantity).	No outstanding issues.	Temporary and minor siltation of the watercourse and minor sedimentation downstream. Temporary reduction of water quality.	N/A
Wetlands	Complexes	Unidentified treed wetlands adjacent to the RoW. Snake exclusion fence also functioned to prevent off easement siltation of wetlands.	No outstanding issues.	Harm and/or disturbance to wildlife. Alteration of drainage patterns.	Observed and reassess in late spring/early summer 2019.

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Appendix A - Tables
May 27, 2019

Table 1.1: Post-Construction Environmental Observations (Late Spring 2018)

Biophysical Element	Specific Element/ Location	Information / Comments	Outstanding Issue / Incident	Potential Adverse Environmental Effects	Proposed Action & Schedule
		Organic soil layer was stripped and stored separately from subsoil. Mud mats installed in excessively wet areas. Pre-construction surface drainage patterns re-established during reclamation activities. No outstanding issues. Natural revegetation of native plant species in wetland areas was observed.			
Wildlife and wildlife habitat	Chickadee	One nest was found at the edge of the RoW. The location was communicated to crew members. Where possible, work was delayed until the nest became inactive. The Environmental Inspector was on site during work around the nest to assist crew with locating and avoiding the nest.	No outstanding issues.	Harm and/or disturbance to wildlife.	N/A
	American Robin	Nests were identified in trees at the edge of the RoW. Locations were communicated to the crew. General nest locations were flagged to provide a safe setback from ongoing work.	No outstanding issues.	Harm and/or disturbance to wildlife.	N/A
	Eastern Gartersnake	Several Eastern Gartersnakes were observed in the workspace. Snake exclusion fencing was installed prior to construction to prevent snakes from entering the workspace. All sightings were reported to the Environmental Inspector. Where necessary, work was stopped in that location and the snake was relocated outside of the exclusion fence.	No outstanding issues	Harm and/or disturbance to wildlife.	N/A
Species at Risk	Butler's Gartersnake	One suspected Butler's Gartersnake was observed in the workspace during the project. Snake exclusion fencing was installed prior to construction to prevent snakes from entering	No outstanding issues.	Harm and/or disturbance to wildlife.	N/A

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Appendix A - Tables

May 27, 2019

Table 1.1: Post-Construction Environmental Observations (Late Spring 2018)

Biophysical Element	Specific Element/ Location	Information / Comments	Outstanding Issue / Incident	Potential Adverse Environmental Effects	Proposed Action & Schedule
		the workspace. No construction activities were occurring near the observation. The snake was allowed to travel out of the workspace.			
Air Quality		Main impact to air quality was exhaust from construction equipment, machinery and pickup trucks. Impact was minimal.	N/A	Minimal contribution of greenhouse gases to the atmosphere.	N/A
Heritage Resources		N/A: a complete archeological assessment was performed prior to construction and no sites were identified.	N/A	N/A	N/A

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Appendix A - Tables
May 27, 2019

Table 1.2: Post-Construction Environmental Observations (Spring 2019)

Biophysical Element	Specific Element/ Location	Information / Comments	Outstanding Issue / Incident	Potential Adverse Environmental Effects	Proposed Action & Schedule
Physical Environment	Topography	Not an issue due to level topography; there was sloping topography at ditches and water courses; ditches and water courses will be discussed in "Water Quality" section. No outstanding issues, however, the farm field should be monitored during the spring, after rain fall, to ensure effective surface runoff.	No outstanding issues.	Improper surface grading.	N/A
Soil Conservation and Productivity	Topsoil conservation	On the agricultural area, the topsoil was removed from the entire width of the easement and stockpiled at the edge of the easement as per the agreement reached with the farm operator. Topsoil and subsoil were piled separately. In non-farm fields topsoil was removed from the trench line area only and stockpiled at the edge of the easement, separate from the subsoil.	Minor subsidence over pipeline trench.	Crop loss.	N/A
	Soil de-compaction	Compaction was relieved by using a soil ripper attached to a D6 dozer. Subsoil across the farm field was ripped to a depth of 40 centimeters and leveled prior to topsoil replacement to prevent mixing of soil horizons. Subsoil was disced and leveled over the trench across the remaining length of the RoW prior to topsoil replacement. Topsoil was disced across the entire RoW. No vehicle traffic was permitted on topsoil once replaced. No evidence of soil compaction observed.	No outstanding issues.	Crop loss.	N/A

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Appendix A - Tables
May 27, 2019

Table 1.2: Post-Construction Environmental Observations (Spring 2019)

Biophysical Element	Specific Element/ Location	Information / Comments	Outstanding Issue / Incident	Potential Adverse Environmental Effects	Proposed Action & Schedule
	Erosion	N/A: due to the level topography and clayey texture of the soils in this area, wind and water erosion issues were not anticipated.	N/A	N/A	N/A
	Artificial Agricultural Drainage	No artificial agricultural drains were encountered during trenching.	N/A	N/A	N/A
Vegetation	Removal	Where necessary, vegetation was removed for trenching and to access the RoW. Felled trees were replaced on a 2 for 1 basis and planted in locations approved by the SCRCA in St Clair Township. Good native vegetation growth observed.	No outstanding issues.	Reclaiming native vegetation, potential for invasive plant species and weeds.	N/A
	Re-seeding/Re-planting	The entire workspace was re-seeded using an annual rye grass applied at a rate of 20 kg/ha. Hydro seeding was completed where the RoW intersected road crossings (Tecumseh Road and Ladysmith Road). Felled trees were replaced on a 2 for 1 basis and planted within St. Clair Township at locations approved by the SCRCA. 24 trees were planted on property of one easement owner and 124 at NOVA Chemical's St Clair Site. Very good growth observed on re-seeded areas. No additional seeding required. Good growth observed on hydroseeded areas. No additional hydro seeding required.	No outstanding issues.	Temporary vegetation loss and exposed soil susceptible to invasive plant species and weeds.	N/A
Water Quality and Quantity	Watercourses	Two watercourse crossings were completed by Horizontal Directional Drill (HDD) – Allingham Drain and Jarvis Drain that are	No outstanding issues.	Temporary and minor siltation of the watercourse and	N/A

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Appendix A - Tables
May 27, 2019

Table 1.2: Post-Construction Environmental Observations (Spring 2019)

Biophysical Element	Specific Element/ Location	Information / Comments	Outstanding Issue / Incident	Potential Adverse Environmental Effects	Proposed Action & Schedule
		regulated by the SCRCA. All crossings followed mitigation recommendations described in the EPP and SCRCA permit conditions. A minor inadvertent return of drilling mud occurred during the HDD of Allingham and Jarvis Drains. Crew deployed drilling mud control procedures immediately. The drilling rig was shut down and remediation materials including straw bales, sand bags, stakes and filter cloth were employed. A vacuum truck was used to remove drilling fluid from the isolated area. Straw bales and silt fencing were placed into the creek to prevent siltation downstream. Bales and fencing were removed when the water quality (suspended solids) returned to background levels.		minor sedimentation downstream.	
Fish and Fish Habitat	Watercourses	An inadvertent return of drilling mud occurred during the HDD of Allingham and Jarvis Drains (see Water Quality and Quantity).	No outstanding issues.	Temporary and minor siltation of the watercourse and minor sedimentation downstream. Temporary reduction of water quality.	N/A
Wetlands	Complexes	Unidentified treed wetlands adjacent to the RoW. Snake exclusion fence also functioned to prevent off easement siltation of wetlands. Organic soil layer was stripped and stored separately from subsoil. Mud mats installed in excessively wet areas. Pre-construction surface drainage patterns re-established during reclamation activities.	No outstanding issues.	Harm and/or disturbance to wildlife. Alteration of drainage patterns.	N/A

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Appendix A - Tables
May 27, 2019

Table 1.2: Post-Construction Environmental Observations (Spring 2019)

Biophysical Element	Specific Element/ Location	Information / Comments	Outstanding Issue / Incident	Potential Adverse Environmental Effects	Proposed Action & Schedule
		No outstanding issues. Natural revegetation of native plant species in wetland areas was observed.			
Wildlife and wildlife habitat	Chickadee	One nest was found at the edge of the RoW. The location was communicated to crew members. Where possible, work was delayed until the nest became inactive. The Environmental Inspector was on site during work around the nest to assist crew with locating and avoiding the nest.	No outstanding issues.	Harm and/or disturbance to wildlife.	N/A
	American Robin	Nests were identified in trees at the edge of the RoW. Locations were communicated to the crew. General nest locations were flagged to provide a safe setback from ongoing work.	No outstanding issues.	Harm and/or disturbance to wildlife.	N/A
	Eastern Gartersnake	Several Eastern Gartersnakes were observed in the workspace. Snake exclusion fencing was installed prior to construction to prevent snakes from entering the workspace. All sightings were reported to the Environmental Inspector. Where necessary, work was stopped at that location and the snake was relocated outside of the exclusion fence.	No outstanding issues	Harm and/or disturbance to wildlife.	N/A
Species at Risk	Butler's Gartersnake	One suspected Butler's Gartersnake was observed in the workspace during the project. Snake exclusion fencing was installed prior to construction to prevent snakes from entering the workspace. No construction activities were occurring near the observation. The snake was allowed to travel out of the workspace.	No outstanding issues.	Harm and/or disturbance to wildlife.	N/A

KIMBALL PIPELINE REPLACEMENT PROJECT – FINAL ENVIRONMENTAL MONITORING REPORT

Appendix A - Tables

May 27, 2019

Table 1.2: Post-Construction Environmental Observations (Spring 2019)

Biophysical Element	Specific Element/ Location	Information / Comments	Outstanding Issue / Incident	Potential Adverse Environmental Effects	Proposed Action & Schedule
Air Quality		Main impact to air quality was exhaust from construction equipment, machinery and pickup trucks. Impact was minimal.	N/A	Minimal contribution of greenhouse gases to the atmosphere.	N/A
Heritage Resources		N/A: a complete archeological assessment was performed prior to construction and no sites were identified.	N/A	N/A	N/A

Date	Time	Concerned Party	Description of Complaint	Action Taken	Rationale for Action Taken
2-May-17	4:30 PM	Third-party Pipeline Operator	Third-party Pipeline Operator raised concerns regarding NOVA Chemicals' proposed pipeline removal and installation plan due to the proximity to its existing pipeline and the potential impact on the integrity of that pipeline. Third party requested that its pipeline technician be present during all removal, construction and installation work to ensure the integrity of its pipeline.	NOVA Chemicals Project team met with the third party Pipeline Operator's Damage Prevention department and identified best practices to be followed related to the Project. Third party was satisfied with the proposed construction and installation methods and the methods were agreed to by both parties. Any issues identified during the construction period were discussed with pipeline technician and resolved.	Ensure there was no impact to the third party pipeline due to this Project and to work in conjunction with their pipeline technician. The proximity of the pipelines required both parties to have a good working relationship to ensure the integrity of both parties' assets. Utilizing best practices helped to ensure the safe removal of NOVA Chemicals' existing pipelines and the construction and installation of the new pipeline. Having third party pipeline technician on site throughout the construction period provided benefits to both parties.
6-Jul-17	11:49 AM	Neighbour	Neighbour indicated that trucks were speeding down an access road and causing dust. She indicated that she had also called the company which owns the access road and asked it to water the road to eliminate the dust issue.	NOVA Chemicals construction coordinator raised the concern with construction contractors about both the speeding and the dust. With permission from the owner of the access road, construction contractor watered the road and NOVA Chemicals/contractor agreed to monitor and address as required for the remainder of construction. NOVA Chemicals updated the neighbour that afternoon who stated that she noticed both that trucks were travelling slower and that she appreciated the road being watered.	Concerns from neighbours should be addressed as soon as possible and resolution explained to the neighbour. This issue was resolved by discussions with, and actions by, the contractor and the updates relayed to the neighbour that same afternoon.
21-Jul-17	5:15 PM	Unidentified neighbour	Unknown neighbour reported concern that trucks were driving too fast off Kimball to the compound.	NOVA Chemicals brought up the complaint and concern with contractors at the toolbox talk the next morning and highlighted the dangers of speeding and the importance of safe driving. Because it was unclear who was speeding, the complaint was also passed to the NOVA Chemicals Pipeline Coordinator, who contacted the other company who was working in the area at the time to raise its awareness.	Neighbour's concerns should be addressed regardless of who was speeding down the road. NOVA Chemicals was unable to determine who was speeding or whether it was our company/contractors or unrelated to the Project; however bringing it up in a toolbox talks raised awareness that speeding would not be tolerated, especially since this was the second complaint.
25-Jul-17	6:28 AM	Unidentified neighbour	The Ministry of Environment and Climate Change (MOECC) was contacted by an unknown party regarding concerns of noise and vibration around Kimball and Petrolia line areas. The MOECC contacted other company working in the area, which in turn relayed the message to NOVA Chemicals.	Our construction coordinator discussed the concern with our contractors, and determined that we were not working in the area at the time the noise and vibration were encountered.	In order to determine how to mitigate the noise and vibration issues, we needed to determine the cause. NOVA Chemicals determined that it was not caused by us; therefore our practices did not need to be altered. However, we appreciated being notified of the issue by the other company.