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Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility Project

Publication Date: September 26, 2019

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No comments received

Public

No comments received

MEMORANDUM

DATE: August 19, 2019

TO: Bridget Tutty

FROM: Neil Morehouse A/Director of Protected Areas and Ecosystems

SUBJECT: EnviroSystems Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility

The Protected Areas and Ecosystems Branch have reviewed the Environmental Assessment Application for the EnviroSystems Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility

Wetland Comments:

As the proposed facility will be constructed within the boundaries of an existing developed light-industrial operation, no direct impact to wetland habitat is anticipated. Effluent emissions, resulting from malfunction or incidents, to downstream water resources can be mitigated through proper operational procedures, material containment and routine monitoring as required. No further comments at this time.

Protected Areas and Ecosystem Comments:

As the proposed facility will be constructed within the boundaries of an existing developed light-industrial operation, no direct impact to protected areas is anticipated.

From: [Vervaet, Sharon](#)
To: [Tutty, Bridget R](#)
Cc: [Seaboyer, Matt P](#)
Subject: RE: Environmental Assessment Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility:
Comments Reminder
Date: August 29, 2019 9:28:22 AM

Hi Bridget,

The Air Quality Unit has no comments on this Environmental Assessment. If you have any questions, please let me know.

Sharon

From: [Cross, Anna](#)
To: [Tutty, Bridget R](#)
Cc: [Weseloh McKeane, Sean](#)
Subject: EA EnviroSystems Waste Dangerous and Non-dangerous Goods
Date: August 30, 2019 3:51:49 PM

Hi Bridget,

CCH has no concerns at this time.

However, the Curator of Botany noted that there was little information regarding the storm drain infrastructure and spill-control measures. He thought that it might be appropriate to document where the outflow pipes go and assess whether this could impact aquatic plants or fish habitat. Basic chemical spill response measures are in place, so he is willing to defer to DFO or Dept. of Energy hydrology experts.

Thanks,
Anna

Special Places Assistant
Communities, Culture and Heritage

Fisheries and Aquaculture

Date: 2019-09-03

To: Bridget Tutty, Environmental Assessment Officer

From: Executive Director, Policy and Corporate Services
Nova Scotia Department of Fisheries and Aquaculture

Subject: Environmental Assessment Waste Dangerous and Non-Dangerous Goods
Temporary Storage Facility

Thank you for the opportunity to review the Environmental Assessment Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility Project documents.

The Nova Scotia Department of Fisheries and Aquaculture has issued one land-based aquaculture licence in the local area of the proposed site and has one other under review. Potential impacts to aquaculture operations should be considered in the mitigation strategies proposed by the applicant.

Agriculture

Date: 2019-09-03

To: Bridget Tutty, Environmental Assessment Officer

From: Executive Director, Policy and Corporate Services
Nova Scotia Department of Agriculture

Subject: Environmental Assessment Waste Dangerous and Non-Dangerous Goods
Temporary Storage Facility

Thank you for the opportunity to review the Environmental Assessment Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility Project documents.

Given that there are no agricultural properties were identified within 5 km of the proposed development, the Department of Agriculture has no immediate concerns with the project proposal.

Environment

Date: 3 September 2019

To: Bridget Tutty, Environmental Assessment Officer

From: Brent Baxter, P.Eng., Senior Engineering Specialist, Industrial Management

Subject: Comments on Environmental Assessment for Proposed EnviroSystems Waste Dangerous Goods Temporary Storage Facility at 11 Brown Avenue, Dartmouth, NS

I have reviewed the report submitted for environmental assessment for the proposed EnviroSystems' Waste Dangerous Goods temporary storage facility to be located at 11 Brown Avenue in the Burnside Industrial Park in Dartmouth, NS.

In Table 2.1 of this report, the proponent identifies materials that they propose to collect and break them down into "waste dangerous goods" and "waste non-dangerous goods", presumably based on their interpretation of the federal Transportation of Dangerous Goods Regulations. It should be noted that since they are applying for a provincial environmental assessment and, if successful, a provincial industrial approval for the proposed facility, they should be advised to consider Nova Scotia Environment's regulations. They have incorrectly listed used oil, waste hydrocarbon fuels, waste glycols and other materials as "waste non-dangerous goods" but these are clearly designated as "waste dangerous goods" under the Dangerous Goods Management Regulations as well as the Used Oil Regulations. Other wastes that they propose to collect would have to be tested to see if they have properties that would make them waste dangerous goods.

The proponent proposes to store containers, drums and pails of a variety of these materials in a large semi-permanent structure covered with a fabric tent. It is unclear if this fabric is compatible with the materials being stored under it or if it could react or deteriorate if exposed to these materials or the vapours that may be produced during storage. Additional information on compatibility would be useful to predict any issues. Section 8 of the Dangerous Goods Management Regulations also requires that a storage facility be designed, constructed and maintained to protect stored materials from the elements of weather. It is not clear if this fabric shelter can provide this security, especially with regards to temperature controls or what would happen if collected gases were released within the proposed structure.

The proponent notes that there will be segregation between waste types within the storage building but then notes that any spilled or leaked material will drain to a sump where response can occur. If this is in fact a common sump, there is a significant risk of incompatible materials being in contact at this point and perhaps producing a reaction or other circumstances that would endanger the safety of the materials being stored. This should be clarified and, if not properly designed, improved.

The proponent further mentions that material spilled on the larger site enter a Stormceptor before being discharged from the site. This is simply a brand of oil-water separator and is only designed to separate oil and water mixtures which have a significant viscosity differences which would permit easy

separation and containment. Since the proponent proposes to collect and store a broad range of materials including such as glycols, waste waters that are fully miscible in water, an oil-water separator would present no barrier to their release. Similarly, the various gases being collected would simply be released.

Having reviewed the registration document, it is my opinion that the proponent has not included sufficient detail or perhaps an insufficient design to recommend approving the proposed facility at this time. Further information or clarification of these points could improve the assessment process.

From: [Hearn, Scott](#)
To: [Tutty, Bridget R](#)
Subject: RE: Environmental Assessment Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility
Date: September 4, 2019 10:28:58 AM

Hi Bridget,

I have no comments to make on this.

Thanks,

Scott

From: [Colomb, Sylvie](#)
To: [Tutty, Bridget R](#)
Subject: RE: Environmental Assessment Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility: Comments Reminder
Date: September 4, 2019 4:35:52 PM

Hi Bridget,

TIR staff have reviewed this document. The proponent is proposing a storage facility on an existing facility, which has been in operation for roughly 25 years. While we don't have any comments on it that are of concern, we have a few observations that are listed below.

1. The proponent has indicated that they do not anticipate any significant additional truck traffic as a result of this additional storage facility, as additional transport loads are offset by increased transport efficiency. The handling capacity is stated at between 5000 and 7000 drums per year. Are there any current and projected truck volume figures?
2. The report mentions transportation of many different types of dangerous goods. Transportation of any dangerous goods must comply with any relevant regulations.
3. Based on Figure 2 on page 4 of the report, the proposed expansion is on a small portion of the southeast corner of the existing facility and does not appear to impact the existing access.
4. Reference to turning radius with regards to spills is mentioned for the expansion. Although no new accesses are stated to be planned or required, this would also refer to turning radii for any new trucks required on the existing access as a result of the proposed expansion.

Thank you for the opportunity to comment on this.

Regards,
Sylvie

Environment

Date: Sept. 5, 2019

To: Bridget Tutty, Environmental Assessment Officer

From: Chuck McKenna, Manager Resource Management Unit

Subject: EnviroSystems Waste Dangerous and Non-Dangerous Goods Temporary Storage Facilities.

Staff with NSE's resource management Unit have reviewed the environmental assessment report submitted by EnviroSystems for the construction and operation of a waste dangerous and non-dangerous goods temporary storage facility.

It is important to note that many substances listed in in column 2 of Table 2.1 are potentially considered a dangerous or waste dangerous goods in accordance with the Nova Scotia Environment Act and regulations. This includes (but is not limited to) waste glycols, used oils and waste hydrocarbon fuels. Correct classification and handling of this material is required.

The information provided addresses the engineered controls and response procedures that will be put in place for liquid wastes. However, detailed information for the handling of compressed gasses, solids and asbestos waste was not provided. Therefore, design details and operating procedures are required for the handling and spill prevention of all substance types (liquid, gas, solid). This information should include any ventilation and filtration systems to contain potentially toxic or harmful vapours.

The emergency response plan for the facility must be updated in accordance with the Nova Scotia Environment Contingency Planning Guidelines to include a hazards approach with additional information on potential releases to air. The plan must detail the potential worst-case incident and ensure the resources are available to respond.

To: Bridget Tutty
Environmental Assessment, NSE

From: Environmental Health, NSE

Date: September 6, 2019

Subject: Envirosystems Waste Dangerous and Non-Dangerous Goods
Temporary Waste Storage Facility

Environmental Health had undertaken a review of the Environmental Assessment Registry Document for the proposed project. The focus of the review was to assess the potential for the project to impact human health from environmental exposure.

The following comments were generated from the review:

Liquid Spill Containment

Section 3.1.5, page 10 of the EARD discusses proposed containment control in the event of the liquid spill inside the storage facility, and at the loading/unloading area.

The report states that both Level 1 and Level 2 spill containment controls proposed for the storage facility will equal a “minimum 10% of the total aggregate storage volume”, and that the proposed storage capacity will exceed minimum storage requirements by 2-3.5 times and 11 times for Level 1 and Levels 2 containment, respectively.

Additionally, the report states that the proposed storage capacity at the loading/unloading area will exceed minimum requirements by 1.5-3 times.

It is unclear how the proponent established minimum storage requirements, as no reference is provided. Claims of this nature should be supported by reference(s) to allow for a critical review of any standard or guideline adopted by the proponent.

Releases To The Environment

This EA focuses on potential environmental impacts associated with a spill or release of liquid materials. No assessment was made of environmental impacts associated with the release and dispersal of solid materials, or vapours/gases, including H₂S. As well, no environmental effects assessment was undertaken to address impacts related to fire and explosion, or the mixing of incompatible materials.

Rationale for excluding such potential events from environmental assessment should be provided.

Environment

Date: September 04, 2019

To: Bridget Tutty, Environmental Assessment Officer

From: Climate Change Unit

Subject: Envirosystems Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility EA

Climate Change Adaptation

The potential effects of climate change on the project and mitigation measures were not incorporated in this registration document. We request the proponent consider potential impacts on the project from climate change and have a plan in place to mitigate any potential risks. The proponent should consider reviewing the Nova Scotia Environment's *Guide to Considering Climate Change in Environmental Assessment in Nova Scotia* for guidance. The guide is available at <https://novascotia.ca/nse/ea/docs/EA.Climate.Change.Guide.pdf>

GHG mitigation

The proponent has not provided any estimation for greenhouse gas emissions to be released during the construction and operation of the facility. However, it is expected that the additional impact of the project on Nova Scotia greenhouse gas emissions will be very low.



Suite 200
1801 Hollis Street
Halifax, NS B3J 3N4

Bureau 200
1801 rue Hollis
Halifax, NE B3J 3N4

Date: September 6, 2019

To: Bridget Tutty, Nova Scotia Environment

From: Andrea Service, Impact Assessment Agency of Canada

Subject: Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility,
Envirosystems Incorporated, Brown Avenue, Dartmouth

The federal environmental assessment process is set out in the [Impact Assessment Act](#) (IAA). The [Physical Activities Regulations](#) (the Regulations) under IAA set out a list of physical activities considered to be "designated projects." For designated projects listed in the Regulations, the proponent must provide the Agency with an Initial Description of a Designated Project that includes information prescribed by applicable regulations ([Information and Management of Time Limits Regulations](#)).

Based on the information submitted to the Province of Nova Scotia on the proposed Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility, it does not appear to be described in the Regulations. Under such circumstances the proponent would not be required to submit an Initial Description of a Designated Project to the Agency. However, the proponent is advised to review the Regulations and contact the Agency if, in their view, the Regulations may apply to the proposed project.

The proponent is advised that under section 9(1) of the IAA, the Minister may, on request or on his or her own initiative, by order, designate a physical activity that is not prescribed by regulations made under paragraph 109(b) if, in his or her opinion, either the carrying out of that physical activity may cause adverse effects within federal jurisdiction or adverse direct or incidental effects, or public concerns related to those effects warrant the designation. Should the Agency receive a request for a project to be designated, the Agency would contact the proponent with further information.

The proposed project may be subject to sections 82-91 of IAA. Section 82 requires that, for any project occurring on federal lands, the federal authority responsible for administering those lands or for exercising any power to enable the project to proceed must make a determination regarding the significance of environmental effects of the project. The Agency is not involved in this process; it is the responsibility of the federal authority to make and document this determination.



The proponent is encouraged to contact the Agency at (902) 426-0564 if it has additional information that may be relevant to the Agency or if it has any questions or concerns related to the above matters.

Regards,

Andrea Service
Environmental Assessment Officer
Impact Assessment Agency of Canada
Andrea.Service@canada.ca
902-426-8157





Lands and Forestry

MEMORANDUM

TO: Bridget Tutty, NS Department of Environment
FROM: Department of Lands and Forestry
DATE: September 6, 2019
RE: Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility

The Department of Lands and Forestry provides the following comments on the above project:

Crown Lands:

This project is not on Crown lands and would not require any approvals/authorities from Land Administration.

Wildlife, Wildlife Habitat and Surveys:

The Department is concerned that an accidental release of contaminants into the environment could impact wildlife and wildlife habitat. The Department recommends that the following mitigation measure be considered as a condition of approval for the project:

- A monitoring schedule be developed for the storage area, and any outflow and stormwater connections, to ensure that accidental spills are identified, captured, remediated, and reported immediately.

Considerations:

A number of species of conservation concern (either SARA listed, NS ESA listed, or S1-S3 ACCDC provincially ranked species) are found within a 5km radius of the project footprint; only one species at risk (Eastern White Cedar, NS ESA Vulnerable) is found within 1km of the project radius. Containment protocols and response plan as described appears to be adequate to prevent accidental leaks or spills from reaching any watercourses or potential habitat that may exist outside of the industrial site.

No wildlife surveys or monitoring is recommended. Provided this project is developed according to the specifications outlined in the Environmental Assessment Registration document, there are no additional wildlife or wildlife habitat requirements necessary at this time.

Date: September 6, 2019

To: Acting Manager, Water Management Unit, Sustainability and Applied Science Division

From: Senior Hydrogeologist, Sustainability and Applied Science Division

Subject: Environmental Assessment Review of Envirosystems Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility

Reviews for EA's from the Sustainability and Applied Science Division Hydrogeologist focus on the potential for the proposed undertaking/project to adversely affect groundwater resources, including general groundwater quality, local water wells/water supply and groundwater discharge to surface water.

The purpose of the proposed undertaking is to realize the operational benefits identified by Envirosystems, while providing a safe and environmentally-sound facility for the temporary storage of waste dangerous and non-dangerous goods. Envirosystems plans to construct and operate a new waste dangerous and non-dangerous goods temporary storage facility at their existing site at 11 Brown Avenue, Dartmouth, NS, which is fully permitted and operational as a Used Oil Collection and Storage operation. The Project site is approximately 4 kilometres (km) northwest from the community of Dartmouth and approximately 5.6 km northwest from the City of Halifax.

Comments:

1. The proposed site area is situated about 7 km southwest of the Lake Major Protected Water Area (PWA). As the PWA is in a different watershed, there are likely no impacts to it due to the proposed Project.
2. Any natural surface water drainage from the Project area likely flows west/southwest of the site, and ultimately into Wright's Cove, Bedford Basin. Storm water outflow locations were identified by the proponent (on a map) along the southwest property boundary.
3. The proposed site area is approximately 3 km west of the municipal drinking watershed for water systems around the Shubenacadie River/lakes. The area is in a separate secondary watershed.
4. This area of Dartmouth (Burnside) is service by Halifax Water and groundwater is unlikely to be used. There are no Registered Public Drinking Water Supply located

(in NSE records) in the vicinity of the site (within 5 km).

5. Using the Department of Energy and Mines online Groundwater Atlas, the reviewer found 4 water supply wells located within 600 metres of the proposed site area. However, some of these well locations are likely not accurate (i.e. community name does not match coordinates location).

It has been noted previously that the Well Logs Database Records and any mapping based on these records need to be considered in terms of locational errors/accuracy of the original data. In addition, the Well Logs Database does not contain a complete listing of every water supply well in the province and some areas may contain water supply wells not reported. Field truthing and field surveys for water supply well locations is necessary. This is particularly important given the discrepancies in the registration document concerning the number of water supply wells potentially affected.

6. The proponent notes that “The closest residential development is approximately 1 km to the southeast in Highfield Park, Dartmouth” (page 2).
7. EnviroSystems plans to construct and operate a new waste dangerous and non-dangerous goods temporary storage facility consisting of a fabric covered shelter on a concrete pad. The shelter footprint will be approximately 52 ft (15.85 m) x 50 ft (15.24 m) with a storage capacity for approximately 450 45-gallon (205-litre) drums. They also note that 20 L pails, and occasionally 1000 L intermediate bulk container totes may be used. The annual handling capacity is estimated to be between 5000 and 7000 drums per year. The wastes are to be stored only, with no opening, sampling or processing on site.

Waste chemicals stored may include:

Oxidizing Liquids and Solids	Lab Pack Propane
Flammable Debris	Lab Pack Water Reactive
Lab Pack Acids and Bases	Acids
Lab Pack Organic	Lean Liquids
Lab Pack Oxidizer	Calibration Gas Cylinder
Lab Pack Pesticides	Freon Cylinder
Mercury	Caustic Liquids and Solids
Cyanide	Fire Extinguishers
Lab Pack Aerosols	Fluorinated Hydrocarbons
Lab Pack Isocyanates	Perchloroethylene
Heavy Metal Sludge	Lab Pack Acetylene
Parts Wash Solvent	Asbestos

Discussion

As noted above, groundwater is likely not used in the area as there is the availability of municipal water supply. The greatest concern to groundwater would be due to spills or leaks of stored chemicals that escape the proposed secondary containment

features. Thus, the design, construction and operational management of the storage facility is the primary factor for protection of groundwater against chemical impacts.

Other than potential groundwater usage as drinking water (which does not seem to be an issue in this area due to the availability of municipal water supply), impacted groundwater may also potentially affect indoor air quality of adjacent buildings by the volatilization of chemicals into air (particularly chlorinated hydrocarbons and pesticides). The potential for chemical impacts groundwater to discharge to downgradient surface water bodies is present although the degree of potential impacts has not been identified.

Recommendations

The following recommendations are suggested for proposed EnviroSystems Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility:

Planning/Design Issues

Planning/design should include awareness in the contingency plans that environmental surface water and groundwater conditions may additionally need to be monitored and evaluated should there be significant spills/leaks from the facility, or in areas adjacent to the facility, that are not fully captured by the secondary containment features.

Operational Issues/Other Permitting Processes

None identified

Other Observations

This site is located in an Industrial area with nearby businesses including materials recycling facility, auto services, truck rentals and industrial marine facilities.

Immediately to the southwest of the site is a significant topographic elevation difference, due to the railway cut for the Canadian National Railways line.

Date: September 4, 2019

To: Manager, Water Management Unit

From: Senior Surface Water Quality Specialist, Water Management Unit

Subject: EnviroSystems Incorporated Environmental Assessment Registration Document – Review Comments & Recommendations

Scope of Review

As Senior Surface Water Quality Specialist with the Nova Scotia Environment (NSE) Sustainability and Applied Science Division, the following EnviroSystems Incorporated Environmental Assessment (EA) review focuses on the following subjects:

- Surface water quality & its management
- General surface and groundwater resources, and fish and fish habitat & their management

The following review considers whether the environmental concerns associated with the above subjects and the proposed mitigation measures have been adequately addressed in the Environmental Assessment. The recommendations provided below are meant to supplement the actions outlined in the EA submission documents.

While general comments on fish and fish habitat, wetlands, surface water quantity, and groundwater quality and quantity may be included below, applicable technical specialists should be consulted for specific review and comment.

Reviewed Documents

The following document was the basis for this EA review:

GHD. 2019. *Environmental Assessment Registration Document*. EnviroSystems Incorporated.

Comments

General

- EnviroSystems Inc. is proposing to construct and operate a waste dangerous and non-dangerous goods temporary storage facility within its existing property that currently operates as a used oil collection and storage operation at 11 Brown Avenue, Halifax, Nova Scotia in the Burnside Industrial Park.

Surface Water Resources

- The existing site surface water runoff drains via gravity in a stormwater

management system via a series of catch basins and underground pipes that discharges via two pipes on the south side of the property boundary. No details are provided on where the outfalls discharge to (e.g., municipal storm sewer or sewer collection system, drainage ditch, off-site as overland flow).

Surface Water Quality

- The proposed facility will be constructed with primary (Level 1) and secondary (Level 2) engineered containment features to manage potential spills within the storage facility and its loading apron.
 - The proposed storage facility primary spill containment design is designed to have sufficient volume to store 10% of maximum dangerous and non-dangerous goods storage volume and an additional 1000 L (equivalent to one tote).
 - The proposed loading apron is designed to drain via a valve control pipe to an existing catch basin within the stormwater management system. The primary containment is proposed to store up to 10% of the total aggregate volume received via the largest transport vehicle.
 - During loading and unloading activities on the apron the valve is planned to be placed in the closed position to prevent potential spills from discharging to the stormwater management system. There is no discussion on whether the valve will be maintained in the open or closed position when the apron is not in use for loading/unloading.
 - A Stormceptor is proposed to be installed within the existing stormwater drainage pipe system just prior to the outfall location to reduce potential hydrocarbon or dangerous good loads to the receiving environment from stormwater or spills.

Fish and Fish Habitat

- The outfall discharge location is not described within the submission and what is the receiving water system (e.g., municipal sewer, drainage ditch).

Surface Water Quantity

- There is no discussion of the existing land use where the proposed storage facility is to be located (e.g., gravel lot, paved area, meadow vegetation). Based on review of aerial photo mapping via on-line resources (e.g., Google Maps) it is observed to be a gravel parking lot.
- No discussion is provided related to local topography at the site with respect to surface water drainage in the vicinity of the proposed facility location and how it will be managed during the operations phase, including potential localized flooding.

Recommendations

The following recommendations could be potentially developed as conditions in support of an Industrial Approval for the Project.

Operational Issues/Other Permitting Processes

Surface Water Quality

- A surface water quality monitoring program should be developed to monitor discharge from the stormwater collection system and the secondary containment system sump. The contaminants of concern to be monitored should be based on the expected waste types and classifications to be received by the facility. This plan should be submitted to NSE staff for review and approval prior to the start of construction of the proposed facility.
- The outfall receiving environment should be confirmed to be a Halifax Region Water Commission storm sewer collection system. A written agreement with the Halifax Region Water Commission allowing the discharge of the stormwater from the upgraded stormwater system into the municipal sewer system should be received prior to the start of the construction of the proposed facility.
- A stormwater system maintenance plan that includes the Stormceptor, should be developed and submitted to NSE staff for review and approval prior to the start of construction of the proposed facility.

Surface Water Quantity

- The stormwater collection system upgrades, including the Stormceptor, should be designed by a qualified professional. Pre- and post-development surface water runoff rates should be considered in the design with the objective of a zero increase in peak discharge from the project development area. The stormwater collection system upgrades should be developed in consultation with and reviewed by NSE staff.

Environment

Date: September 6, 2019

To: Bridget Tutty, Environmental Assessment Officer

From: Jonathan Gaudet, Regional Engineer ICE

Subject: Envirosystems Dangerous Goods Storage and Handling EA (Dartmouth)

1. *In Section 5.3 Valued Component – Surface Water Resources, the following needs to be clarified:*

“A Stormceptor will be located immediately upstream of the outfall will prevent stormwater and potential spill contaminants from being discharged into the environment”

How does the stormceptor prevent stormwater from being discharged into the environment in the event of a spill? Is there a way to isolate flow at this point in the event of a spill or release? What types of contaminants can be collected by this technology prior to discharge?

What is the purpose of the stormceptor? If the isolation valve for the apron were to fail or was left opened? It appears to have been located to protect the overall facility stormwater catch basin system from spills or releases and not just spills on the Dangerous Goods unloading area apron.

If Dangerous goods are expected to on occasion arrive at the stormceptor, then the catch basins and underground piping system should be leak tested and the materials should be confirmed to be suitable for corrosives and other dangerous goods being stored on site.

The second outfall pipe was not labelled or discussed in the EA, is it confirmed that the second outfall pipe is not connected to the catch basin network and does not require connection to the stormceptor?

2. *Asbestos is to be handled in accordance with Asbestos Waste Management Regulations, exempt from Dangerous Goods regulations.*

MEMORANDUM

To: Paul Currie, Manager, Industrial Management Unit

From: Hydrologist, Industrial Management Unit, Sustainability and Applied Science Division

Date: September 6, 2019

Subject: Envirosystems Waste Dangerous and Non-Dangerous Goods Temporary Facility EA Review Comments

Scope of review:

The scope of this Environmental Assessment review from the NSE Sustainability and Applied Science Division Hydrologist is to assess the potential environmental impacts and proposed mitigations of the proposed undertaking on surface water quantity and management. While comments may also include considerations for impacts on general surface water quality, groundwater, freshwater fish habitat, and wetlands, appropriate technical specialists for these areas should be consulted for specific review and comment.

Documents reviewed:

The documents outlined below formed the basis for this EA review, and is referred to as the 'the submission' through the rest of this memorandum:

- Environmental Assessment Registration Document – Envirosystems' Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility at 11 Brown Avenue. Report Prepared by GHD. Dated August 1, 2019, and accessed from <https://novascotia.ca/nse/ea/Waste-Dangerous-and-Non-Dangerous-Goods-Temporary-Storage-Facility/>

Comments and recommendations re: the submission:

Site Water Management:

- Proposed location of the works is within an existing industrial site, which is currently under NSE approval for used oil collection and storage.

- It is reported that there are no anticipated potential interactions or effects between the Project and groundwater resources, but further details or a rationale to support this statement are not clearly outlined in the submission
- The management of on-site runoff is outlined, but it is not clear in the submission what is downstream of the site – i.e., what collection system or watercourse exists downstream of the outfall that is reported in the submission.
- The submission outlines details surrounding the plans for engineered containment features to mitigate risks surrounding release of substances stored on site.
- No information is provided surrounding the current conditions of the area to be developed, such as current land use. The activity is reported to occupy approximately 325 m² on the existing site.
- Post-construction contours and any assessment of considerations for flooding of the proposed area are not provided as part of the submission.

Conclusions & Recommendations:

Please see below for a summary of issues and recommendations:

Operational Issues/Other Permitting Processes

- A surface water monitoring plan, including details surrounding the regular monitoring of the observation sump outlined in the submission, must be developed and submitted to SAS & ICE divisions of NSE for review and acceptance.
- The Approval Holder shall submit a site stormwater management plan to the Department for review and acceptance. This plan shall include final design details completed by a qualified professional, including details to support the mitigation of potential flooding of the storage facility and isolation of flows from higher risk areas, and considerations for matching pre and post development discharge conditions with consideration for the potential impacts of climate change. This plan shall also include considerations for the management of any water collected when the valve is closed, as well as plans to operate and maintain any stormwater treatment facilities (e.g., Stormceptors) in line with manufacturer's specifications and recommendations.
- Final containment design to be completed by a qualified professional and considerate of the specific materials to be stored on site, as well as any applicable regulations and/or industry standards.



Department of Municipal Affairs and Housing

Maritime Centre, Floor 14 North
1505 Barrington Street
PO Box 216
Halifax, NS B3J 2M4

Date: September 6, 2019
To: Bridget Tutty, Environmental Assessment Officer, Nova Scotia Environment
From: Graham Fisher, A/Provincial Director of Planning
Subject: **WASTE DANGEROUS AND NON-DANGEROUS GOODS TEMPORARY STORAGE FACILITY**

As requested, staff at the Department of Municipal Affairs have reviewed the Environmental Assessment Registration Documents for the proposed Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility at 11 Brown Avenue in Dartmouth, Nova Scotia.

From the perspective of our departmental mandate, we have no comments to submit to the EA review.

Thank you for the opportunity to review the Registration Documents for the above-noted project. Should you require additional information, please feel free to contact either Alan Howell, Senior Planner (902-483-3746 / Alan.Howell@novascotia.ca) or me (902-424-7918/ Gordon.Smith@novascotia.ca).

Regards,

A handwritten signature in blue ink, appearing to read "Graham Fisher".

Graham Fisher
A/Provincial Director of Planning

c: Alan Howell, Senior Planner, DMAH



Environmental Health Program
Regulatory Operations and Enforcement Branch
1505 Barrington Street, Suite 1625
Halifax, NS B3J 3Y6

September 6th, 2019

Bridget Tutty
Nova Scotia Environment
1903 Barrington Street
Halifax, NS
B3J 2P8

Subject: Health Canada's Response –Envirosystems' Waste Dangerous and Non-Dangerous Goods Temporary Storage Facility, 11 Brown Avenue, Dartmouth, NS

Dear Ms. Tutty:

Thank-you for your e-mail dated August 1st, 2019, requesting Health Canada's review of the above-mentioned Environmental Assessment (EA) Registration document¹ with respect to issues of relevance to human health.

Upon review of the above stated registration document Health Canada offers the following comments:

Emergency Response and Contingency Plan:

The proponent did not include the municipal water and wastewater utility, Halifax Water as a contact in their emergency planning. As there is the potential for contaminants to enter the storm water system then Halifax Water should be contacted so they can take appropriate action.

Additionally, the proponent failed to include any Environmental Management section details on the handling of compressed gasses, solids and asbestos waste. Engineering Controls, Emergency Response and Contingency Plan - details and operating procedures should be included for the handling and spill prevention of these substances, include any ventilation and filtration systems to contain potentially harmful vapours.

This will allow Health Canada to better evaluate the potential for adverse health effects associated with project activities and the adequacy of any proposed mitigation measures.

If you have any comments/questions, please contact the undersigned at your convenience.

Sincerely,

Sara Rumbolt, BSc., BTech., CPHI(C)
Environmental Assessment Specialist, Health Canada
e-mail: sara.rumbolt@canada.ca

cc: Rick O'Leary, Manager, Environmental Health Program, Health Canada, Atlantic Region

Sent by e-mail to Bridget.Tutty@novascotia.ca