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# Importation and Disposal of Treated Flowback Water

Environmental Impact Assessment  
Registration



May 30, 2014



New Brunswick Department of Environment and Local Government  
P.O. Box 6000  
Fredericton, NB  
E3B 3H1

Attention: Mr. Shawn Hamilton

***Importation and Discharge of Treated Flowback Water Environmental Impact Assessment Registration, Atlantic Industrial Services, Dieppe, NB***

Dear Mr. Hamilton:

We are pleased to present three hard copies and three digital copies of the Registration Document for the above-noted project. This document will be submitted on behalf of Atlantic Industrial Services (AIS) to the New Brunswick Department of Environment and Local Government for review as per the New Brunswick Environmental Impact Assessment Regulation (Reg. 87-83), under the Clean Environment Act.

If you have any questions, please contact the undersigned.

Yours truly,

**DILLON CONSULTING LIMITED**

A handwritten signature in blue ink, appearing to read "Gay Drescher".

Gay Drescher, MES MCIP RPP.

Project Manager

Our file: 14-9315

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## 1.0 The Proponent

### 1.1 Name of the Proponent

Atlantic Industrial Services (a division of Envriosystems Inc.)

### 1.2 Chief Executive Officer

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### 1.3 Principle Contact Person

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### 1.4 Property Ownership

Atlantic Industrial Services (AIS) is leasing a property currently owned by 3227805 Nova Scotia Limited and is operating the facility under a Certificate of Approval to Operate (I-8636) issued by the New Brunswick Department of Environment and Local Government (NBDELG). The facility provides for the handling and disposal of industrial wastes.

## 2.0

## The Undertaking

## 2.1

### Name of the Undertaking

Importation and Disposal of Treated Flowback Water

## 2.2

### Project Overview

AIS, a division of EnviroSystems Ltd., serves industrial customers in Atlantic Canada by providing for waste management, in particular contaminated materials. The head office for AIS is in Dartmouth, Nova Scotia and its largest facility is located in Debert, Nova Scotia. In addition to the contaminated waste pickup and disposal service, AIS also collects flowback and process water from the oil and gas industry exploring and operating in Atlantic Canada. The Debert facility has become a central location for treatment of flow back water from unconventional oil and gas drilling operations in the Maritimes. This facility has a holding capacity of approximately 30 million litres.

Until recently AIS was able to discharge flowback water through existing municipal discharge systems in Nova Scotia. In late 2013, the Municipality of Colchester County in Nova Scotia voted against allowing this service to continue and as a result, the facility in Debert now has a considerable backlog of treated water.

AIS has assumed the Certificate of Approval to Operate (I-8636) for an Industrial Waste Treatment facility in Dieppe, New Brunswick, formerly known as Acadia Waste Products. AIS is in the process of applying for a modification to the Certificate of Approval to Operate to allow for the discharge of treated flowback waters to the Dieppe municipal system. This change request has led the New Brunswick Department of Environment and Local Government (DELG) to issue an opinion that the flowback water from Nova Scotia is waste importation requiring review pursuant to the provincial EIA regulation (87-83) of the Clean Environment Act.

This project is considered an Undertaking under Schedule 'A' of the Environmental Impact Assessment Regulation 87-83 of the New Brunswick Clean Environment Act:

- 'm1': "*all disposal, destruction, recycling, reprocessing or storage of waste that originates outside New Brunswick and all facilities or systems for the disposal, destruction, recycling, reprocessing or storage of such waste*";

In accordance with the 'Rules of Industry' (NBDEM, 2013), disposal of a waste (e.g. flowback or produced water) at an existing (e.g. municipal or industrial) waste water treatment facility in New Brunswick will not be permitted unless it has been established that the facility is capable of providing effective treatment.

The waste water facility operator, in consultation with the proponent and the regulator, must:

- fully characterize the concentrations of contaminants in the waste fluid; and
- design and install any necessary treatment processes to ensure that the waste water treatment system will have sufficient capacity and will be capable of addressing the contaminants found in the waste fluid, without impacting the long term viability or life span of the waste water treatment system and without causing other negative impacts including but not limited to adverse impacts on the quality of the receiving water.

As this project involves the importation of treated water, no treatment will take place on site. The treated water meets the Dieppe municipal sewer discharge criteria and is scheduled to be discharged to the City of Dieppe Sanitary Sewer System. Regular monitoring of the water will take place where specified in the permits and approvals issued for operation of the facility.

### 2.2.1 Treatment Technology

As a service provider to large industrial customers including the oil and gas industry, AIS has a number of treatment systems which it uses to treat waste product. A listing of treatment options is provided in Table 2-1.

For the treatment of flowback water, AIS uses a number of proprietary methods. While the water could be treated to a standard which would permit discharge to the marine environment, few direct discharge options are readily available. One of the limiting factors to releasing the water through a municipal system is the chloride concentrations remaining after treatment. To treat flowback water to a higher standard, AIS uses reverse osmosis enabling chlorides to be removed. The quality of the treated water meets the requirement of the Dieppe municipal sewer discharge criteria.

Treatment Technologies	Additional Process
Solids Filtration	
Dissolved Air Flootation (DAF)	
Thermal Dehydration and Distillation	
Thermal Treatment	For streams with oil content - oil is separated for further processing and recycling
Chemical Treatment	Chemical precipitation, pH adjustment, or chemical oxidation
Biological Treatment	Two active lagoons and four holding lagoons
Electrocoagulation Units	
Membrane Treatment	Ultra filtration - Zenon
Membrane Treatment	Reverse osmosis
Mechanical Treatment (for solids removal)	Filter press and centrifuges
Media Filtration	Filtration, absorption, activated carbon, polishing, various resins & medias
Advanced Ultra Sonic and Ozone Oxygen Treatment	

TABLE 2-1: AIS TREATMENT TECHNOLOGIES

At its Debert facility, AIS has approval from Nova Scotia Environment (Pilot Project Approval, No: 2014-088503) to treat flowback water to a standard which would allow for discharge to municipal systems. As indicated in the approval, 5 million litres may be treated at any one time. Initial results indicate that the reverse osmosis permeate method is the most effective treatment method (Table 2-2).

Substance	Reverse Osmosis Feed	Reverse Osmosis Concentrate	Reverse Osmosis Permeate	Dieppe By-law
Biochemical Oxygen Demand	ND	5.3	ND	400 mg/l
Cadmium	0.000032	0.000129	ND	
Chlorides	4400	16000	44	1500 mg/l
Chromium	ND	0.0012	ND	
Copper	0.0035	0.0088	ND	
Cyanide	ND	0.0011	ND	
Lead	0.00062	0.00174	ND	
Nickel	ND	0.005	ND	
Oil & Grease - animal or vegetable in origin	ND	ND	ND	150 mg/l
Oil & Grease - mineral or synthetic in origin	ND	ND	ND	15 mg/l
pH	7.24	7.45	6.39	6 / 9.5
Phenolic Compounds (4AAP)	ND	0.16	ND	0.05 mg/l
Sulphates Expressed as SO <sub>4</sub>	16	78	ND	1500 mg/l
Sulphide (as H <sub>2</sub> S)	ND	ND	ND	3.5 mg/l
Suspended Solids	5	16	ND	400 mg/l
Zinc	0.0522	0.145	ND	7.5 mg/l
NORM Radionuclide (Bq/l)				
Uranium-238 series (all progeny)	0.002	<0.01	<0.001	
Uranium-238 (U-238, Th-234, Pa-234m, U-234)				
Thorium-230	<0.1	<0.1	<0.1	
Radium-226 (in equilibrium with its progeny)	1.4	0.5	<0.05	
Lead-210 (in equilibrium with Bi-201 & Po-210)	<0.1	<0.1	<0.1	
Thorium-232 series (all progeny)				
Thorium-232	<0.1	0.1	<0.1	
Radium-228 (in equilibrium with Ac-228)	<0.7	0.7	<0.7	
Thorium-228	<0.1	<0.1	<0.1	
Potassium-40	4	<3	<4	

TABLE 2-2: RESULTS OF REVERSE OSMOSIS TREATMENT METHODS (2013)

### 2.3 Purpose/Rationale/Need for the Undertaking

While development of the oil and gas industry, particularly through non-conventional drilling, has stagnated due to moratoria placed by provincial governments, a considerable backlog of process water from well stimulation exists. The majority of this water is contained in Nova Scotia, as the facility in Debert has become the largest repository in the Maritimes. Flowback water generated in New Brunswick was previously sent to the Debert facility for treatment and disposal and these waters have been since disposed.

Waters generated from exploration in Nova Scotia have been directed to Debert; the facility has reached its capacity for flow back water and is now at a stage where disposal is critical to avoid overtopping of the storage ponds. The decision by the Municipality of Colchester County to disallow continued discharge of treated water through the

municipal sewer system has led AIS to investigate a number of options. In addition to the waters at Debert, there are approximately 20 million litres of untreated flowback waters in Nova Scotia awaiting treatment by AIS.

At present, AIS is working with a cement kiln in Nova Scotia on trials to use the treated water in cement processing. Approximately 2 million litres of the backlog will be used in the initial trial. While this may become a viable option, the volume of water used at any one time is limited, requiring continued storage at the Debert facility.

The recent expansion by AIS to the City of Dieppe through the lease of the existing Acadia Waste Products facility has allowed for consideration of discharging treated water through the municipal sanitary sewer system. Should approval be granted, this facility will be able to discharge up to 30 million litres of treated water over a two year period through continuous and controlled release.

The purpose of the proposed expansion into Dieppe is to address the identified needs of local oil and gas exploration companies to:

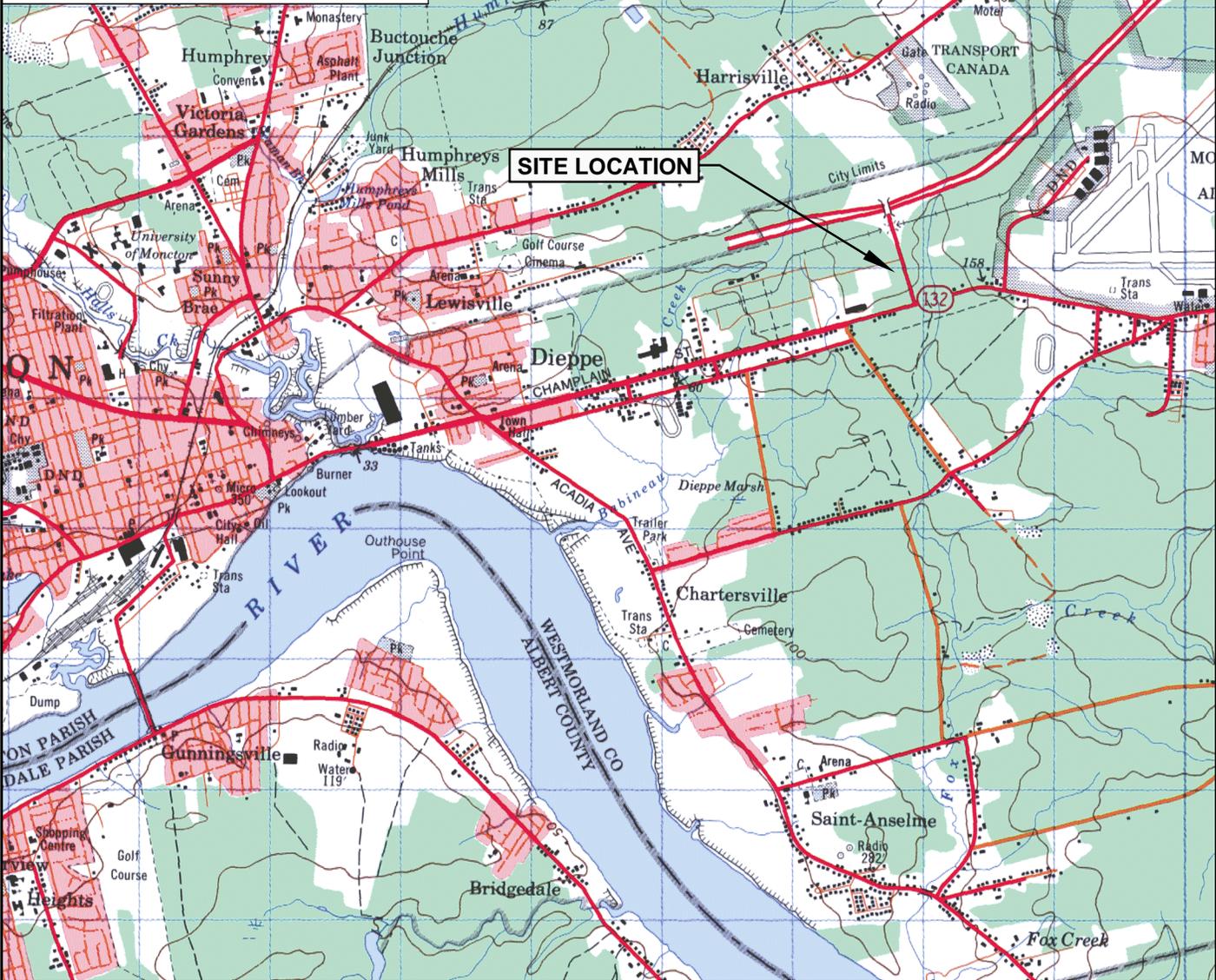
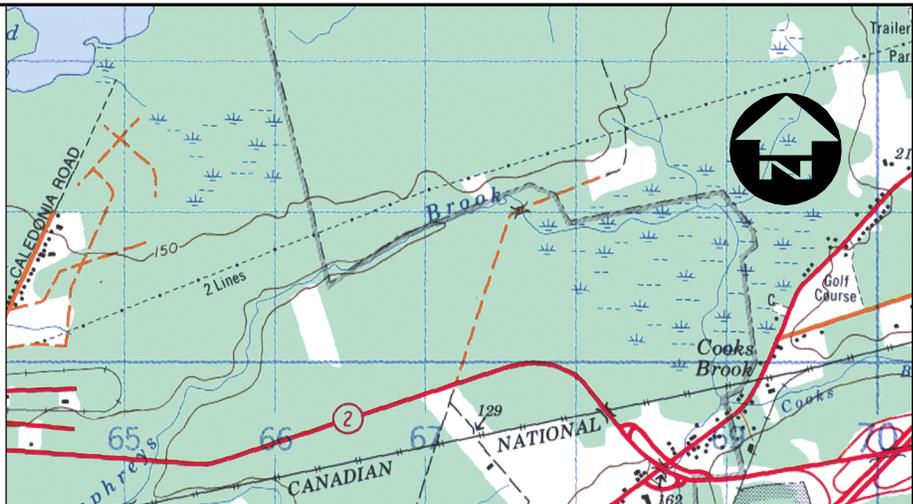
- Reduce waste management costs;
- Reduce environmental liability; and
- Reduced impact on the environment resulting from long distance waste transport.

## 2.4

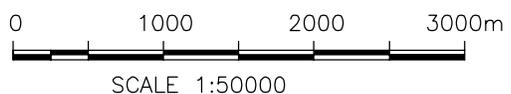
### Project Location

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The property is located in the Dieppe Industrial Park, City of Dieppe, County of Westmorland, New Brunswick, at 57 Sylvio Street and identified by Parcel Identifiers (PID) 70220710 and 70579990 as shown on Figure 2.1. The property occupies approximately 9704m<sup>2</sup>.



MAP SOURCE - NTS MAPSHEET 21i/02



PROJECT	DIEPPE INDUSTRIAL PARK ENVIRONMENTAL ASSESSMENT	PROJECT NO.	14-9315
TITLE	SITE LOCATION MAP	FIGURE NO.	2.1
DATE	APRIL 2014		

FileName: g:\cad\149315\05-environmental\03-reports\149315-05-03-fig 2.1.dwg



SOURCE - GOOGLE IMAGERY 2012

SCALE 1:1500



PROJECT	DIEPPE INDUSTRIAL PARK ENVIRONMENTAL ASSESSMENT	PROJECT NO. 14-9315
	TITLE AERIAL OF DIEPPE FACILITY	FIGURE NO. 2.2

DATE APRIL 2014

File Name: z:\halifax\halifax\_cad\cad\149315\05-environmental\03-reports\149315-05-03-fig.2.2.dwg

## 2.5 Physical Components of the Project

For the purpose of this EIA, the project is defined as the importation between AIS facilities from the Debert, Nova Scotia facility to the Dieppe, New Brunswick facility and ultimately disposal of the treated flowback water into the City of Dieppe Sanitary Sewer System.

The main project components for this project include:

- Transportation; and,
- Discharge of treated water

The project components are summarized below.

### Transportation of Waste

Transportation of treated water from the Debert facility to Dieppe will be conducted using tanker trucks with the capacity to hold 36,000 litres of treated water. Based on the total volume of water (30 million litres), AIS anticipates three (3) truck loads per day, five (5) days per week, over approximately a two (2) year period. Prior to shipment, the water will be tested in accordance with the Nova Scotia Approval to Operate.

The trucking route consists of a total distance of approximately 150 km as shown on Figure 2.3 and will consist of:

- Leave Debert, NS facility and travel along Trans-Canada Highway (NS) to Route 2 (NB) - Approximately 140 km
- Travel along Route 132 (Champlain St) to Aviation Ave, Boulevard Adelard Savoie, and Sylvio Street in Dieppe, NB – Approximately 10 km



FIGURE 2-3: WASTE WATER TRUCKING ROUTE

AIS is licensed to operate trucking vehicles in New Brunswick under the New Brunswick Regulation 2001-67, Vehicle Dimensions and Mass Regulation, Motor Vehicle Act.

### Discharge of Waste

Once at the facility in Dieppe, the water will be transferred to temporary storage vessels, each having a capacity of 80,000 litres by way of secure coupling between truck and vessel. These vessels will be installed prior to initiating shipment and each will be protected with secondary containment to eliminate the uncontrolled release of water should there be equipment failure. Testing of the water will occur again at the Dieppe facility in accordance with regulatory requirements. The water will be released from these vessels to the sanitary system at a rate equivalent to 18m<sup>3</sup>/day to avoid flooding the system and to minimize disruption, in accordance with the City of Dieppe requirements.

The City of Dieppe Sewer By-law (By-Law No. 78-5 By-Law Of The Municipality Of Dieppe Respecting The Water And Sewage Systems) requires that any wastewater must meet certain standards:

'Under Section 35(7) Except as hereinafter provided, no person shall discharge, cause to be discharged, or continue to discharge any of the following into any drain or sewer connection connecting with the sanitary wastewater system of the Municipality:

(7) waters or wastes containing cyanides, chromium, cadmium, copper, or sulphides; or containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment or constitute a hazard to humans or animals;'

The specific limits are provided in Table 2-3.

Substance	Moncton By-law	Dieppe By-law
Biochemical Oxygen Demand	400 mg/l	400 mg/l
Cadmium	5.5 mg/l	
Chlorides	1500 mg/l	1500 mg/l
Chromium	6.5 mg/l	
Copper	5.5 mg/l	
Cyanide	1 mg/l	
Lead	6.5 mg/l	
Nickel	6.5 mg/l	
Oil & Grease - animal or vegetable in origin	150 mg/l	150 mg/l
Oil & Grease - mineral or synthetic in origin	15 mg/l	15 mg/l
pH	6 / 10.5	6 / 9.5
Phenolic Compounds (4AAP)	0.5 mg/l	0.05 mg/l
Sulphates Expressed as SO <sub>4</sub>	1500 mg/l	1500 mg/l
Sulphide (as H <sub>2</sub> S)	3.5 mg/l	3.5 mg/l
Suspended Solids	475(>1) / 100 (<1)	400 mg/l
Zinc	6.5 mg/l	7.5 mg/l
NORM Radionuclide (Bq/l)		
Uranium-238 series (all progeny)		
Uranium-238 (U-238, Th-234, Pa-234m, U-234)		
Thorium-230		
Radium-226 (in equilibrium with its progeny)		
Lead-210 (in equilibrium with Bi-201 & Po-210)		
Thorium-232 series (all progeny)		
Thorium-232		
Radium-228 (in equilibrium with Ac-228)		
Thorium-228		
Potassium-40		

TABLE 2-3: DISCHARGE LIMITS FOR DIEPPE AND MONCTON

## 2.6 Project Schedule

Given the critical nature of the Debert facility, should approval be granted through the EIA review, installation of the storage vessels at the site will be initiated immediately. As indicated above, at 30 million litres of water, assuming no other users are identified, the whole project will take at maximum 2 years to complete the release through the municipal system.

## 3.0

## Description of Existing Environment

The existing facility in Dieppe has been in operation at its present location for approximately 13 years. Located in the Dieppe Industrial Park, the facility is flanked by other industrial facilities, including Ditech Testing, a propane and bulk tank refurbishment company, a transport/trucking company owned by ATS Inc., the Greater Moncton International Airport and shipping and receiving warehouse for Irving Tissue Ltd. A site layout plan of the facility is provided in Figure 3.1, shown as 13-2.

## 3.1

### Atmospheric Environment

## 3.1.1

#### Ambient Air Quality

##### Ozone (O<sub>3</sub>)

Monitoring results for O<sub>3</sub> for the Moncton and Fundy National Park stations indicate there were no reported exceedences of the Canada Wide Standard (CCME, 2000) between 2007 and 2010. Reviewing the O<sub>3</sub> records since 1990, a linear trend indicated no change in the province wide O<sub>3</sub> average of 26 ppb (NBDELG, 2012).

##### Nitrogen Dioxide (NO<sub>2</sub>)

Monitoring results for NO<sub>2</sub> showed that levels did not exceed the 1 hour objective of 400 ppb or the 24-hour objective of 400 ppb in 2010 (CCME, 1989). No exceedences of NO<sub>2</sub> standards have been recorded at the Moncton station since monitoring commenced in 1998 (NBDELG, 2012).

##### Carbon Monoxide (CO)

Monitoring results in 2010 for CO in Moncton showed that levels did not exceed the hourly objective of 15 ppm or the 8-hour objective of 6 ppm (CCME, 1996). No exceedences of CO objectives have been recorded at the Moncton station since monitoring commenced in 1998 (NBDELG, 2009, 2012).

##### Index of Quality of the Air (IQUA)

The Index of Quality of the Air system has been used for over 25 years to make air quality monitoring results easier for the public to understand. Results for each pollutant measurement are expressed on a scale from 1-100+, and classed as "good" (index 0 to 25), fair (26 to 50), "poor" (51 – 100) or "very poor" (over 100). Each of the categories is based on the National Air Quality Objectives. The average IQUA in Moncton for 2007-2010 was rated as "good" for 99.3% of the time over the three year period and "fair" for the remaining 0.7% of the time (NBDELG, 2009; NBDELG, 2010 and NBDELG, 2011).

##### Air Quality Health Index (AQHI)

The Air Quality Health Index (AQHI) is a scale designed to compare the air quality in a specific region to associated health risks. The purpose of the AQHI is to provide the public information in order for them to protect their health from the negative effects of air pollution. The index is based on three key health-related air pollutants: O<sub>3</sub>, NO<sub>2</sub> and Particulate Matter (PM<sub>2.5</sub>/PM<sub>10</sub>) (Environment Canada, 2013a). It uses a scale from 1 to 10 to measure the air quality in relation to human health. The higher the number, the greater the health risk associated with the air quality. When an amount of air pollution is very high, the number will be reported as 10+. There are four categories of risk, low (1-3), moderate (4-6), high (7-10) and very high (>10).



The 2010 year was the first year in which the AQHI was reported for the Moncton Station. The AQHI for Moncton for 2012 was rated as low 98.8% of the year and moderate for 1.2% for the remaining time (NBDELG, 2012).

### 3.1.2 Greenhouse Gas (GHG) Emissions

The Province of New Brunswick has no standards or guidelines for regulating the emissions of GHGs. In 2011 (most recent published data), the national reported emissions of GHGs for Canada were 702 Mega-tonnes (MT) of carbon dioxide equivalent (CO<sub>2</sub>e) (Environment Canada, 2013c) which is similar to the 2010 and 2009 emissions levels (Environment Canada, 2012a and 2011 a, b, c). In New Brunswick, the annual emissions from 2009 to 2011 were approximately 18.4MT of CO<sub>2</sub>e per year representing 2.6% of the national emissions (Environment Canada, 2013c).

GHG reporting is mandated by Environment Canada from sources that release 0.05MT or more of CO<sub>2</sub>e per year. In New Brunswick, 13 facilities reported emissions to Environment Canada for a total of 7.8MT of CO<sub>2</sub>e (Environment Canada, 2013c). The closest of these facilities to the project is located in Saint John, New Brunswick, approximately 150km from the proposed project.

### 3.1.3 Ambient Noise Quality

The Province of New Brunswick has not established regulatory limits for sound pressure levels from industrial and construction activities. As indicated in the Responsible Environmental Management of Oil and Natural Gas Activities in New Brunswick, Rules for Industry (NBDEM, 2013) (the 'Rules') the maximum permissible levels of noise from oil and gas operations (including well drilling, servicing, compressors and production) are 50dBA Leq during the day (7 am to 7 pm) and 40dBA Leq during the night (7 pm to 7 am) at the nearest residence. Given the largely industrial setting of the Dieppe facility, existing sound pressure levels in the vicinity of the project are expected to be typical of sound pressure levels in an industrial/commercial area.

## 3.2 Biophysical Environment

The property is serviced by the City of Dieppe water supply and the Moncton sewage systems. The subject site is not located in a wellfield protection area under the New Brunswick Wellfield Protection Program or a designated watershed under the New Brunswick Watershed Protection Program.

There are no watercourses located within 30 m of the property boundary. The nearest freshwater body is a small drainage channel, which is located approximately 200 m northwest of the property. This channel drains south to an unnamed tributary to Fox Creek.

Based on the GeoNB Map layer, there are no regulated or provincially significant wetlands located within the vicinity of the property.

## 3.3 Socioeconomic Environment

The property is located in an existing industrial park, and is zoned accordingly. The facility will be operated on this property.

The City of Dieppe is (population size, industrial base – i.e. has heavy industry or light industry), part of the Greater Moncton economic area.

## 4.0 Summary of Environmental Impacts

### 4.1 Assessment of Environmental Impacts

#### 4.1.1 Waste

The proposed project involves the importation of what has been deemed to be a waste pursuant to the provincial EIA Regulation (m.1). Although treated out of province, because the end product cannot be disposed of in the host province (Nova Scotia), the water is deemed a waste requiring disposal in New Brunswick. The treatment of the water results in a product which meets the Dieppe municipal sewer discharge criteria, and if released to the environment would pose no human health risk or environmental risk.

#### 4.1.2 Transportation

The water will be transported by 30,000l tanker trucks from Debert Nova Scotia to Dieppe New Brunswick. The total travel distance is 140km, 50km of which will be in New Brunswick. It is estimated that a maximum of three trips a day will be made in a five day work week. To accommodate the volume of water in Nova Scotia, it is estimated that the process will take a maximum of two years.

The potential for greenhouse gas emissions exists with the transportation activity, although the incremental impact of adding three vehicle movements per day for five days over two years is considered to be negligible.

#### 4.1.3 Disposal

AIS operates an existing industrial waste management facility in the Dieppe Industrial Park. This facility has been operating since approximately 2001 and has a current Certificate of Approval to Operate (I-8363). Once on site, the water will be stored in storage vessels located on the subject property. These vessels will be protected by a secondary containment system to mitigate against potential unscheduled releases of water.

The importation of the water to the site will not result in any additional land use effects. There will be no additional noise associated with the transfer to the storage vessels and then the release of the water to the sanitary system. There will be no air quality impacts as the waste product is clean water.

The City of Dieppe has indicated that the water could be discharged through its system. The water meets the City of Dieppe Sewer By-law discharge criteria and the City of Moncton Sewerage Commission discharge criteria. There are no identifiable impacts resulting from the release of the water to the sanitary sewer system.

### 4.2 Accidents, Malfunctions and Unplanned Events

AIS has contingency plans as part of its standard operating procedures to address potential accidents malfunctions and unplanned events. In this project, these events relate specifically to the transportation portion of the project and an unplanned release of the water. AIS currently has a facility-specific Health and Safety Program for their operations. This document will be revised and updated to reflect the activities for the transportation and discharge of the waste water at the Dieppe facility.

To minimize the transportation risks, AIS operates its own haul vehicles that are licensed and operated in accordance with all regulatory standards. Transportation routes are selected to maximize public safety.

5.0

## Public Consultation

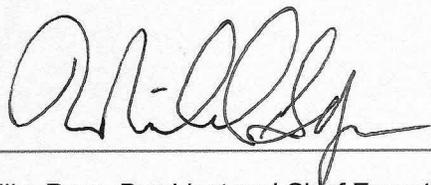
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In accordance with the New Brunswick EIA Regulation, public consultation is required for each project. To address this requirement, AIS will make a public presentation to the City of Dieppe Council. This notification will be provided to NBDELG within 60 days of registration of the project.

6.0

# Signature

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Mike Ryan, President and Chief Executive Officer  
EnviroSystems

May 21, 2014

Date

## References

Canadian Council of Ministers of Environment (CCME). 2000. Canada-Wide Standards for Particulate Matter (PM) and Ozone. Quebec. 10pp.

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# Appendix A

## *Project Related Documents*



**Environment  
Environnement**

**PILOT PROJECT  
APPROVAL**

**Province of Nova Scotia  
*Environment Act, S.N.S. 1994-95, c.1***

**APPROVAL HOLDER:** Atlantic Industrial Services  
**APPROVAL NO:** 2014-088503  
**EFFECTIVE DATE:** January 20, 2014  
**EXPIRY DATE:** December 31, 2014

**Pursuant to Part V of the *Environment Act, S.N.S. 1994-95, c.1* as amended from time to time, approval is granted to the Approval Holder subject to the Terms and Conditions attached to and forming part of this Approval, for the following activity:**

Temporary operation of an Industrial Wastewater Treatment System, located at 660 McElmon Road, Debert, Nova Scotia, to treat flowback fluids originating from the Elmworth/Triangle Exploration Project.

Administrator  Date Signed

Jan 20, 2014

The Minister has delegated his powers and responsibilities under the *Act* with respect to this Approval to the Administrator, as defined by this Approval. Therefore any information or notifications required to be provided to the Minister under this Approval can be provided to the Administrator unless otherwise advised in writing.



## APPROVAL TO OPERATE

**I-8636**

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Pursuant to paragraph 8(1) of the *Water Quality Regulation - Clean Environment Act*, this Approval to Operate is hereby issued to:

**Envirosystems Incorporated**  
for the operation of the  
**Dieppe Oily Water Treatment Plant**

Description of Source: **Oily Water Treatment, Methanol Impacted Water Treatment, Tank Decommissioning, Truck Washing.**

Source Classification: **Fees for Industrial Approvals Regulation - Clean Water Act** **Class 3**

Parcel Identifier: **70220710**

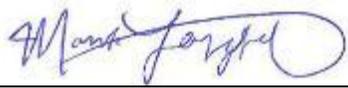
Mailing Address: **57 Sylvio St.  
Dieppe, NB E1A 7X1**

Conditions of Approval: **See attached Schedule (s)"A" and "B" of this Approval**

Supersedes Approval: **I-8441**

Valid From: **February 27, 2014**

Valid To: **November 06, 2014**

Recommended by:   
Environment Division

Issued by:   
for the Minister of Environment and Local Government

February 27, 2014  
Date