# PHASE I ENVIRONMENTAL SITE ASSESSMENT

No Name Gas 2911 Barton St. S, Hamilton, Ontario

Prepared for: ACME Oil & Gas

Prepared by: Plan B Environmental 301 James St S Hamilton, Ontario

Report Date: 2022-12-20 Project Number: PN12345 2022-12-20 Ref. No. PN12345 ACME Oil & Gas 350, 55th Street Houston, Texas 78654

Attention: ACME Oil & Gas

# Re: Phase I Environmental Site Assessment Report No Name Gas, 2911 Barton St. S, Hamilton, Ontario

Plan B Environmental is pleased to submit our report describing the findings of the Phase I Environmental Site Assessment (ESA) of No Name Gas. This assessment was prepared in general accordance with the Canadian Standards Association (CSA) standard Phase I Environmental Site Assessment (CSA Designation: Z768-01).

The purpose of the Phase I ESA was to identify actual and potential site contamination. This identification involves the evaluation and reporting of existing information collected through records review, site visits, and interviews.

If you have any questions or require further clarification of the report findings, please contact the undersigned at your convenience. Thank you for the opportunity to be of service to ACME Oil & Gas.

Yours very truly, Plan B Environmental

John Smith, P.Eng. Sr. Environmental Engineer David Doe, P.Eng. Engineering Manager

# TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
1.1	1 Findings and Evaluation	1
1.2	2 Conclusions	1
2.0	INTRODUCTION	
2.1	1 Purpose	3
2.2		
3.0	SCOPE OF WORK	
3.1	6 1	
3.2		
3.3		
3.4 <b>4.0</b>	4 User Reliance	
-		
4.1 4.2		
4.2		
4.4		
4.5		
4.6		
4	4.6.1 Aerial Photographs	7
4	4.6.2 Property Use Records	7
4	4.6.3 Title Search and Assessment Rolls	7
4	4.6.4 Prior Phase I ESA Reports	7
4	4.6.5 Company Records	7
4	4.6.6 Regulatory Information	8
4.7	7 Additional Records	8
5.0	SITE VISIT	
5.1	1 General	9
5	5.1.1 Property Use	9
5	5.1.2 Adjoining and Surrounding Property Use	9
5	5.1.3 Hazardous Materials	9
5	5.1.4 Unidentified Substances	9
5	5.1.5 Storage Tanks	9
5	5.1.6 Storage Containers	
5	5.1.7 Odours	
5	5.1.8 Potable Water Supply	
5	5.1.9 Special Attention Items	
5.2		
5	5.2.1 Geologic, Hydrogeologic, and Topographic Conditions	
5	5.2.2 General Description of Structures	
5	5.2.3 Roads, Parking Facilities, and Rights of Way	
5	5.2.4 Wells	
5	5.2.5 Sewage Disposal	

ļ	5.2.6	Pits and Lagoons1	1
ļ	5.2.7	Stained Materials1	1
1	5.2.8	Stressed Vegetation1	1
!	5.2.9	Fill	1
!	5.2.10	Wastewater	1
!	5.2.11	Watercourses, Ditches, or Standing Water1	1
5.3	In	terior Observations1	1
1	5.3.1	Heating and Cooling Systems1	1
!	5.3.2	Stains1	2
!	5.3.3	Drains and Sumps1	2
!	5.3.4	Mechanical Equipment	2
6.0	INTE	RVIEWS	2
6.1	In	terviews with Client, Site Manager and Occupants1	2
6.2		terviews with Government Officials	
7.0	FIND	DINGS AND EVALUATION 1	2
7.0 8.0		DINGS AND EVALUATION1 CLUSIONS	
8.0	CON	CLUSIONS1	3
	CON Ac	CLUSIONS	<b>3</b>
<b>8.0</b> 8.1	CON Ac Ac	CLUSIONS1	<b>3</b> .3
8.0 8.1 8.2	CON Ac Ac Lii	CLUSIONS 1   Iditional Investigation 1   Iditional Services 1	<b>3</b> 4 4
8.0 8.1 8.2 8.3	CON Ac Lin SIGN	CLUSIONS 1   Iditional Investigation 1   Iditional Services 1   miting Conditions/Deviations 1	<b>3</b> 4 4 <b>4</b>
8.0 8.1 8.2 8.3 9.0 10.0	CON Ac Lir SIGN Refe	CLUSIONS 1   Iditional Investigation 1   Iditional Services 1   miting Conditions/Deviations 1   IATURES AND QUALIFICATIONS 1	<b>3</b> 4 4 <b>4</b> 5
8.0 8.1 8.2 8.3 9.0 10.0 APPE	CON Ac Lin SIGN Refe NDICE	CLUSIONS 1   Iditional Investigation 1   Iditional Services 1   miting Conditions/Deviations 1   IATURES AND QUALIFICATIONS 1   Irrences 1   S 1	3 3 4 4 4 5 6
8.0 8.1 8.2 8.3 9.0 10.0 APPE Ap	CON Ac Lin SIGN Refe NDICE pendix	CLUSIONS 1   Iditional Investigation 1   Iditional Services 1   miting Conditions/Deviations 1   IATURES AND QUALIFICATIONS 1   rences 1   S 1   1: Site Plans and Figures 1	<b>3</b> 4 4 <b>4</b> 5 6 7
8.0 8.1 8.2 8.3 9.0 10.0 APPE App App	CON Ac Lin SIGN Refe NDICE Dendix Dendix	CLUSIONS 1   Iditional Investigation 1   Iditional Services 1   miting Conditions/Deviations 1   IATURES AND QUALIFICATIONS 1   Irrences 1   S 1   1: Site Plans and Figures 1   2: Aerial (Satellite) Photographs 2	<b>3</b> 4 4 <b>5</b> 7 1
8.0 8.1 8.2 8.3 9.0 10.0 APPE App App	CON Ac Lin SIGN Refe NDICE Dendix Dendix Dendix	CLUSIONS 1   Iditional Investigation 1   Iditional Services 1   miting Conditions/Deviations 1   IATURES AND QUALIFICATIONS 1   rences 1   S 1   1: Site Plans and Figures 1	<b>3</b> 4 4 <b>4</b> <b>5</b> 6 7 1 4
8.0 8.1 8.2 8.3 9.0 10.0 APPE Ap Ap	CON Ac Lin SIGN Refe NDICE Dendix Dendix Dendix Dendix Dendix	CLUSIONS 1   Iditional Investigation 1   Iditional Services 1   miting Conditions/Deviations 1   IATURES AND QUALIFICATIONS 1   Invences 1   S 1   1: Site Plans and Figures 1   2: Aerial (Satellite) Photographs 2   3: Site Photographs 2	<b>3</b> 3 4 4 <b>5</b> 6 7 1 4 7
8.0 8.1 8.2 8.3 9.0 10.0 APPE App App App App	CON Ac Lin SIGN Refe NDICE Dendix Dendix Dendix Dendix Dendix Dendix	CLUSIONS 1   Iditional Investigation 1   Iditional Services 1   Initing Conditions/Deviations 1   IATURES AND QUALIFICATIONS 1   Interences 1   S 1   1: Site Plans and Figures 1   2: Aerial (Satellite) Photographs 2   3: Site Photographs 2   4: Historical Research Documentation 2	<b>3</b> 3 4 4 <b>4 5 6</b> 7 1 4 7 9
8.0 8.1 8.2 8.3 9.0 10.0 APPE Ap Ap Ap Ap	CON Ac Lin SIGN Refe NDICE Dendix Dendix Dendix Dendix Dendix Dendix Dendix Dendix	CLUSIONS 1   Iditional Investigation 1   Iditional Services 1   miting Conditions/Deviations 1   IATURES AND QUALIFICATIONS 1   Irences 1   S 1   1: Site Plans and Figures 1   2: Aerial (Satellite) Photographs 2   3: Site Photographs 2   4: Historical Research Documentation 2   5: Regulatory Records Documentation 2	<b>3</b> 3 4 4 <b>4 5 6</b> 7 1 4 7 9 1

# **1.0 EXECUTIVE SUMMARY**

ACME Oil & Gas engaged Plan B Environmental to conduct a Phase I Environmental Site Assessment (ESA) of the property No Name Gas located at 2911 Barton St. S, Hamilton, Ontario subsequently referred to in this report as "the subject property". This assessment was prepared in general accordance with the Canadian Standards Association (CSA) standard for Phase I Environmental Site Assessments (CSA Designation: Z768-01).

The purpose of the Phase I ESA was to identify actual and potential site contamination. This identification involves the evaluation and reporting of existing information collected through records review, site visits, and interviews.

The subject consists of a gasoline dispensing station and convenience store. It is approximately 1.1 acres in size and rectangular in shape. The legal description of the subject property is Section 17, Lot 643, Parcel 23.

## **1.1** Findings and Evaluation

No areas of actual contamination were identified on the subject property as of the date of this report.

The following areas of potential contamination were identified on the subject property and are shown in the figure in Appendix 1:

The evidence for this potential contamination is:

• Documented and reported petroleum leak during piping upgrade.

It is unclear whether the cleanup after the petroleum leak removed all contaminated soil.

It is our opinion that this potential contamination represents a significant environmental concern. The petroleum leak could have impacted surrounding soil and potentially the groundwater.

### **1.2** Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of CSA Z768-01 of 2911 Barton St. S, Hamilton, Ontario the property. Any exceptions to, or deviations from, this standard are described in Section 9.3 of this report.

This assessment has identified evidence of potential contamination in connection to the subject property. This evidence is listed and described in section 7.

In our professional opinion it is recommended that the following additional investigation be conducted to reduce the level of uncertainty regarding actual or potential contamination on the subject property:

ACME Oil & Gas Phase I Environmental Site Assessment No Name Gas

2022-12-20 PN12345 Page 2

• A Phase II ESA is recommended to determine if there is any impacted soil and groundwater in the area of the reported petroleum leak.

# 2.0 INTRODUCTION

ACME Oil & Gas engaged Plan B Environmental to conduct a Phase I Environmental Site Assessment (ESA) of the property No Name Gas located at 2911 Barton St. S, Hamilton, Ontario subsequently referred to in this report as "the subject property". This assessment was prepared in general accordance with the Canadian Standards Association (CSA) standard for Phase I Environmental Site Assessments (CSA Designation: Z768-01).

### 2.1 Purpose

The purpose of the Phase I ESA was to identify actual and potential site contamination. This identification involves the evaluation and reporting of existing information collected through records review, site visits, and interviews.

### 2.2 Location and Legal Description

The subject property is located at 2911 Barton St. S, Hamilton, Ontario and consists of a gasoline dispensing station and convenience store. It is approximately 1.1 acres in size and rectangular in shape. The legal description of the subject property is Section 17, Lot 643, Parcel 23. The area is zoned as C1.

### **3.0 SCOPE OF WORK**

The scope of work for this assessment was in general accordance with the CSA standard for Phase I Environmental Site Assessments (CSA Designation: Z768-01). These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying actual or potential site contamination.

In accordance with the standard, the scope of work for this ESA included the following elements:

- (a) Review of available records relating to the current and past use of the property. These included the mandatory records specified in section 4.4 and optional records specified in section 4.5. The search distance for these records is described in section 4.1.
- (b) Conducting a site visit to observe current uses or evidence of past uses of the property. And to the extent possible current and past uses of the adjoining and surrounding properties.
- (c) Interviews with the property owners and/or other individuals knowledgeable about the property.
- (d) Evaluation of the information obtained from this investigation and presentation of the findings in this report.

# **3.1** Significant Assumptions

While this report provides an overview of potential environmental concerns, both past and present, the environmental assessment is limited by the availability of information at the time of the assessment. It is possible that unreported disposal of waste or illegal activities impairing the environmental status of the property may have occurred which could not be identified. The conclusions and recommendations regarding environmental conditions that are presented in this report are based on a scope of work authorized by the Client. Note, however, that virtually no scope of work, no matter how exhaustive, can identify all contaminants or all conditions above and below ground.

## **3.2** Limitations and Exceptions

The report has been prepared in accordance with generally accepted environmental methodologies referred to in CSA Z768-01 and contains all the limitations inherent in these methodologies. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report.

The conclusions of this report are based in part, on the information provided by others. The possibility remains that unexpected environmental conditions may be encountered at the site in locations not specifically investigated. Should such an event occur, Plan B Environmental must be notified in order that we may determine if modifications to our conclusions are necessary.

The services performed and outlined in this report were based, in part, upon visual observations of the site and attendant structures. Our opinion cannot be extended to portions of the site that were unavailable for direct observation, reasonably beyond the control of Plan B Environmental.

The objective of this report was to assess environmental conditions at the site, within the context of our contract and existing environmental regulations within the applicable jurisdiction. Evaluating compliance of past or future owners with applicable local, provincial, and federal government laws and regulations was not included in our contract for services.

Our observations relating to the condition of environmental media at the site are described in this report. It should be noted that compounds or materials other than those described could be present in the site environment.

No environmental site assessment can wholly eliminate uncertainty regarding the actual or potential site contamination in connection with a property. Performance of this assessment is intended to reduce, but not eliminate uncertainty regarding the actual or potential site contamination in connection with the property recognizing reasonable limits of time and cost.

This assessment does not include any testing or sampling of materials (for example, soil, water, air, building materials).

# **3.3** Special Terms and Conditions

No special terms and conditions were agreed on between the client and the environmental professional.

No other services beyond the requirements of Z768-01 standard are required. No other parties will rely on the Phase I ESA report.

### 3.4 User Reliance

This report may be distributed and relied upon by ACME Oil & Gas, its successors, and assigns. Reliance on the information and conclusions in this report by any other person or entity is not authorized without the written consent of Plan B Environmental.

### 4.0 **RECORDS REVIEW**

The purpose of the records review was to obtain and review records on current and past activities on the site that could be interpreted as contributing to potential or existing contamination.

### 4.1 Search Distance

Considering factors such as current and historical land use in the area of the property a minimum search distance of 250 m was used for the records review.

The following factors were considered in determining the search distance: current and historical land use on the subject property and on neighboring properties; known or suspected contamination on the subject property and on neighboring properties; and where appropriate, proposed future use of the property, rezoning applications, or official plans for development.

### 4.2 First Developed Use

Based on the information obtained from the records review, the property was historically used for agriculture until being developed as a gasoline dispensing station in 1946.

### 4.3 Current and Past Uses of the Property

Historical use formation describing the subject property was obtained from a variety of sources as discussed below. This information is summarized in the table below.

Period/Date	Land Use	Source(s) of Information
1926	Farm	City Directories
1934	Farm and Vegetable stand	City Directories
1946	Gasoline dispensing station	Aerial photos
1970	Gasoline dispensing station	Aerial photos
1980	Gasoline dispensing station and convenience store	Aerial photos

# 4.4 Current and Past Uses of Adjoining Properties

The historical uses of adjoining properties to the subject property are summarized below. These uses were determined using the standard historical sources noted above.

#### North Historical Land Use

Period/Date	Land Use	Source(s) of Information
1926	Farm	City Directories
1978	Offices	Aerial photos

#### South Historical Land Use

Period/Date	Land Use	Source(s) of Information
1926	Farm	City Directories
1967	Gasoline dispensing station	Aerial photos

#### **East Historical Land Use**

Period/Date	Land Use	Source(s) of Information
1926	Farm	City Directories
1978	Offices	Aerial photos

#### West Historical Land Use

Period/Date	Land Use	Source(s) of Information
1926	Farm	City Directories
1956	Convenience store	Aerial photos
1978	Restaurant	Aerial photos

Period/Date	Land Use	Source(s) of Information
1926	Farm	City Directories
1956	Convenience store	Aerial photos
1978	Restaurant	Aerial photos

# 4.5 Current and Past Uses of Surrounding Properties

The following historical uses of surrounding properties were identified:

The surrounding property was used as farmland until the 1960s and 1970s and was then developed for commercial uses.

### 4.6 Mandatory Records

#### 4.6.1 Aerial Photographs

The aerial photographs are included in Appendix 2. Recent images for Google Maps were obtained for 2022, 2018, and 2005. In addition, aerial photos were reviewed from 1946 to 1980. The aerial photographs show the property occupied by a gasoline dispensing station and convenience store. The area in the vicinity of the property is primarily commercial with numerous parking lots. On the southwest side of the property is another gasoline dispensing station that may represent a potential source of contamination.

#### 4.6.2 Property Use Records

No insurance records were available for review.

City directories for the property were reviewed for the years 1926 to 2018. The property was initially used as a farm and vegetable stand until 1946 and then was used as a gasoline dispensing station in these directories.

A request under the Freedom of Information and Protection of Privacy Act (FOIPPA) was made to the Ontario Ministry of Environment and Climate Change in regards to potential environmental concerns. A response letter has not been received at the time of writing this report. Any pertinent information related to the requested documents will be forwarded upon receipt.

### 4.6.3 Title Search and Assessment Rolls

Title search and tax assessment information is included in Appendix 4. Below is a summary of the review of the title search and assessment rolls.

Owner	Years of Ownership
No Name Gas	1946 to 2023

Owner	Years of Ownership
No Name Gas	1946 to 2023

Owner	Years of Ownership
No Name Gas	1946 to 2023

#### 4.6.4 Prior Phase I ESA Reports

No prior Phase I ESA reports were available for review.

#### 4.6.5 Company Records

No company records were reviewed. Geological and Geotechnical Reports

No geological or geotechnical reports were available for review.

#### 4.6.6 Regulatory Information

A search request was made to the TSSA in regards to potential environmental concerns. A response letter has not been received at the time of writing this report. Any pertinent information related to the requested documents will be forwarded upon receipt.

### 4.7 Additional Records

Soil in property Hamilton area is predominately derived from glacial drift (glaciolacustrine sediments in the lower city; glacial tills in the upper city) and from limestone and shale erosion.

No topographic maps were available for review.

An ERIS report was reviewed for the property. The ERIS report is based on a number of databases including, but not limited to, the National PCB Inventory, National Pollutant Release Inventory, Occurrence Reporting Information System, Retail Fuel Storage Tanks, Private Fuel Storage Tanks, Waste Disposal Sites Inventory and Certificates of Approval. The ERIS report is included in Appendix A. It documents two (2) records for the Property and an additional thirty-five (35) records for the Phase One Study Area.

The following is a summary of the two (2) records identified for the Property:

- One (1) ERIS Historical Search record; and,
- Two (2) Retail Fuel Storage Tank records.

### 5.0 SITE VISIT

The subject property was inspected on 2023-01-17. The assessor was accompanied by Dan Brown, Operations Supervisor during the inspection. The weather during the inspection was sunny with a light wind from the east. During the site visit an exterior and interior walk-through of the buildings, if present, was performed. The exterior of adjoining properties was visually observed for actual or potential contamination. A site plan of the property is provided in Appendix 1 and photographs of the property and surrounding area are provided in Appendix 3.

There were no limitations imposed by physical obstructions or limiting conditions.

## 5.1 General

#### 5.1.1 Property Use

The following current uses of the property that could be evidence of actual or potential site contamination were observed:

Previously reported leak during piping upgrade.

No evidence of past uses of the property that could be evidence of actual or potential site contamination were observed.

#### 5.1.2 Adjoining and Surrounding Property Use

The following current uses of the adjoining and surrounding properties that could be evidence of actual or potential site contamination were observed:

Gasoline dispensing station on adjoining property to south.

No evidence of past uses of adjoining or surrounding properties that could be evidence of actual or potential site contamination were observed.

#### 5.1.3 Hazardous Materials

No hazardous materials were observed to be stored or used on the property.

#### 5.1.4 Unidentified Substances

No unidentified substances were observed on the property.

#### 5.1.5 Storage Tanks

Determining the presence of Aboveground Storage Tanks (ASTs) and Underground Storage Tanks (USTs) is considered essential in assessing potential contamination sources. Visual inspection and the review of tank registration records are used to determine the possible existence of past and present storage tanks on the subject property. It must be noted however, that the absence of certain site conditions or lack of records may restrict or prevent the determination of the number and contents of storage tanks on the subject property.

No aboveground storage tanks were observed on the subject property.

Underground storage tanks that may contain hazardous chemicals or fuel were observed on the subject property.

The following underground storage tanks were observed:

Contents	Age (years)	Size	Location
Diesel	8	8000 gallons	South side of property
Gas	8	12000 gallons	South side of property

Vent, fill pipes, or access ways were observed on the subject property. These pipes may indicate the presence of un-recorded underground storage tanks.

There were 2 vent and 2 fill pipes on the east side of property.

#### 5.1.6 Storage Containers

No storage containers such as drums, totes, or pails were observed on the property.

#### 5.1.7 Odours

No strong, pungent, or noxious odors were observed.

#### 5.1.8 Potable Water Supply

Potable water on the property is supplied by the municipal water supply.

#### 5.1.9 Special Attention Items

PCBs, ACMs, UFFI, lead, ozone-depleting materials and other special attention items were not observed on the property.

#### 5.2 Exterior Observations

#### 5.2.1 Geologic, Hydrogeologic, and Topographic Conditions

The topography of the property is relatively flat with a moderate slope to the north. The topography of the surrounding area is slightly rolling with a gentle slope to the north.

#### 5.2.2 General Description of Structures

The following buildings and structures are located on the subject property:

Age (years)	Stories	Usage	Location
21	1	Convenience store	East side of property

#### 5.2.3 Roads, Parking Facilities, and Rights of Way

Roads border the property on the west and south sides.

The following parking facilities were observed:

- 12 parking spots beside the convenience store
- 5.2.4 Wells

No wells were observed on the property.

5.2.5 Sewage Disposal

Sanitary sewage is discharged into municipal sanitary sewer system.

#### 5.2.6 Pits and Lagoons

No pits, ponds, or lagoons were observed on the property.

No pits, ponds, or lagoons were observed on adjoining properties.

#### 5.2.7 Stained Materials

No areas of stained materials (e.g., soil and asphalt) were observed on the property.

#### 5.2.8 Stressed Vegetation

No areas of stressed vegetation were observed on the property.

#### 5.2.9 Fill

No areas, mounds, or depressions that may be filled or graded by non-natural causes or filled with fill of unknown origin were observed on the property.

#### 5.2.10 Wastewater

No wastewater or other liquids being discharged from or to the subject property were observed.

#### 5.2.11 Watercourses, Ditches, or Standing Water

No surface water features (e.g., storm water, runoff, ditches, streams, rivers, ponds, and lakes) were observed on the property.

### 5.3 Interior Observations

#### 5.3.1 Heating and Cooling Systems

The buildings on the property are heated by electric & natural gas (piped).

No cooling systems were observed on the property.

#### 5.3.2 Stains

No stains were observed on the floors, walls, or ceilings in the structures on the property.

#### 5.3.3 Drains and Sumps

No floor drains or sumps showing evidence of contamination were observed in the structures on the property.

#### 5.3.4 Mechanical Equipment

No hidden hydraulic lift equipment such as elevators or in-ground vehicle hoists were observed on the property.

### 6.0 INTERVIEWS

The purpose of the interviews is to corroborate or augment the information gathered in the records review and the site visit. Copies of the interview documentation can be found in Appendix 6.

### 6.1 Interviews with Client, Site Manager and Occupants

Date	Name	Status	Organization
2023-01-05	Mike Johnson	Client	ACME Oil & Gas
2023-01-10	Dave Olivier	Site Manager	No Name Gas

### 6.2 Interviews with Government Officials

Date	Name	Title	Organization
2023-01-11	Lisa Elliot	County Clerk	District 11 Administration
2023-01-13	Michael Moore	Sr. Environmental Officer	MOEE

# 7.0 FINDINGS AND EVALUATION

No areas of actual contamination were identified on the subject property as of the date of this report.

The following areas of potential contamination were identified on the subject property and are shown in the figure in Appendix 1:

APEC	Location of APEC	PCA	Location of PCA	COPCs	Media Impacted
Two USTs	South side of	Gasoline and	On-site	Petroleum	Soil and Groundwater
	property	Associated Products		Hydrocarbons	
		Storage in Fixed			
		Tanks			
USTs	South adjoining	Gasoline and	Off-site	Petroleum	Soil and Groundwater
	property	Associated Products		Hydrocarbons	
		Storage in Fixed			
		Tanks			

### Areas of Potential Environmental Concern

The evidence for this potential contamination is:

• Documented and reported petroleum leak during piping upgrade.

It is unclear whether the cleanup after the petroleum leak removed all contaminated soil.

It is our opinion that this potential contamination represents a significant environmental concern. The petroleum leak could have impacted surrounding soil and potentially the groundwater.

# 8.0 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of CSA Z768-01 of 2911 Barton St. S, Hamilton, Ontario, the subject property. Any exceptions to, or deviations from, this standard are described in Section 9.3 of this report.

This assessment has identified evidence of potential contamination in connection to the subject property. This evidence is listed and described in section 7.

# 8.1 Additional Investigation

In our professional opinion it is recommended that the following additional investigation be conducted to reduce the level of uncertainty regarding actual or potential contamination on the subject property:

• A Phase II ESA is recommended to determine if there is any impacted soil and groundwater in the area of the reported petroleum leak.

The rationale for proposing this additional investigation is:

It is unclear whether all impacted soil was removed after the petroleum leak.

### 8.2 Additional Services

No additional services beyond the scope of the CSA Z768-01 standard were conducted as part of this assessment.

### 8.3 Limiting Conditions/Deviations

There are no limiting conditions, deletions or deviations and this Phase I ESA complies with the CSA Z768-01 standard.

### 9.0 SIGNATURES AND QUALIFICATIONS

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We are familiar with applicable federal, provincial, territorial, and local legislation and published guidelines used to evaluate the actual or potential presence of contamination on the subject property.

The qualifications of the environmental professional(s) and personnel conducting the site reconnaissance and interviews (if conducted by someone other than an environmental professional) are provided in Appendix 8.

Prepared by:

**Reviewed by:** 

John Smith, P.Eng. Sr. Environmental Engineer David Doe, P.Eng. Engineering Manager

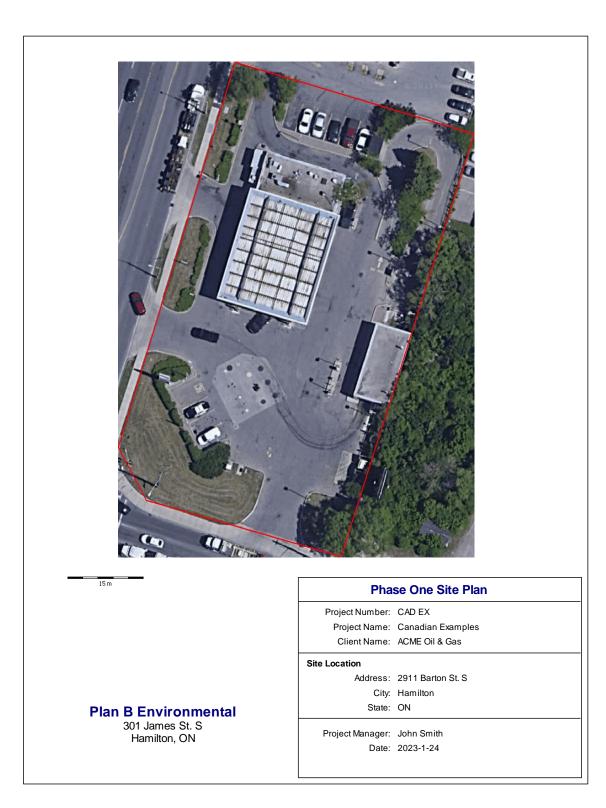
# **10.0** References

The following documents or other publications may have been used in the preparation of this report.

- Canadian Standards Association: *Standard for Phase I Environmental Site Assessments (CSA Z768-01).*
- Canadian Council of Ministers of the Environment: 2008 National Classification System for Contaminated Sites.
- Consulting Engineers of Ontario: *Generally Accepted Standards for Environmental Investigations*, Toronto, Ontario, 1993.

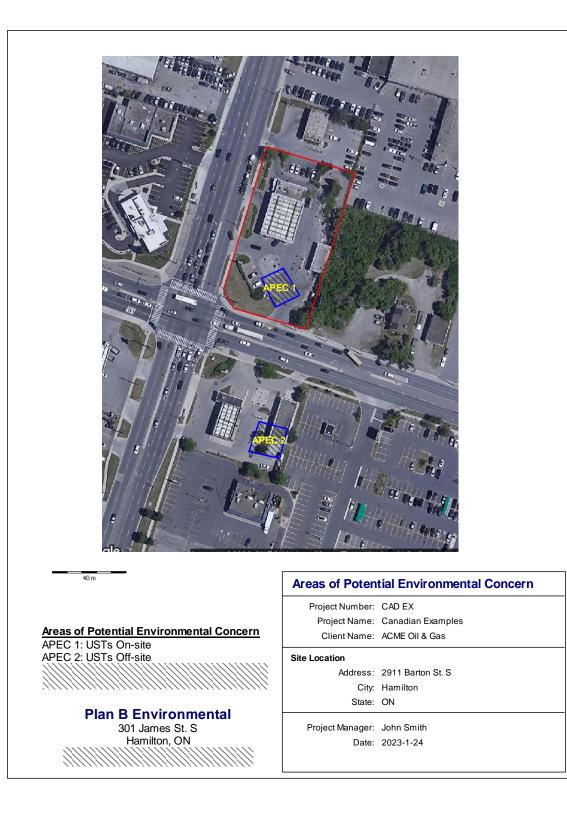
**APPENDICES** 

Appendix 1: Site Plans and Figures

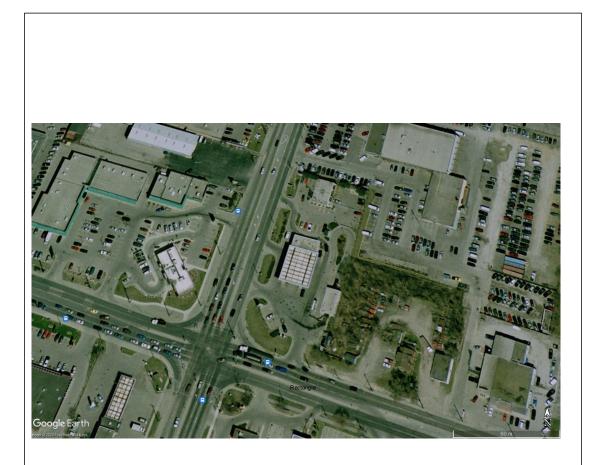




100 m	Phase One Study Area		
	Project Number:	CAD EX	
	Project Name:	Canadian Examples	
	Client Name:	ACME Oil & Gas	
	Site Location		
	Address:	2911 Barton St. S	
	City:	Hamilton	
Plan B Environmental	State:	ON	
301 James St. Hamilton, ON	Project Manager:		
	Date:	2023-1-23	

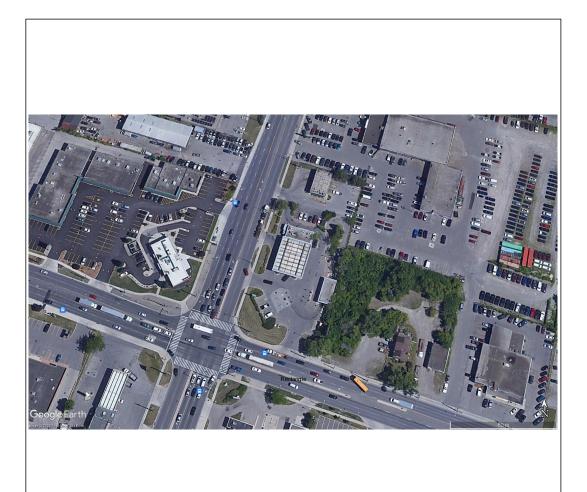


Appendix 2: Aerial (Satellite) Photographs



### Plan B Environmental 301 James St. S Hamilton, ON

2005 Historical Satellite Image			
Project Number:	CAD EX		
Project Name:	Canadian Examples		
Client Name:	ACME Oil & Gas		
Site Location			
Address:	2911 Barton St S		
City:	Hamilton		
State:	ON		
Project Manager:	John Smith		
Date:	2023-1-24		
Dale.	2023-1-24		



# **Plan B Environmental** 301 James St. S Hamilton, ON

#### 2018 Satellite Image

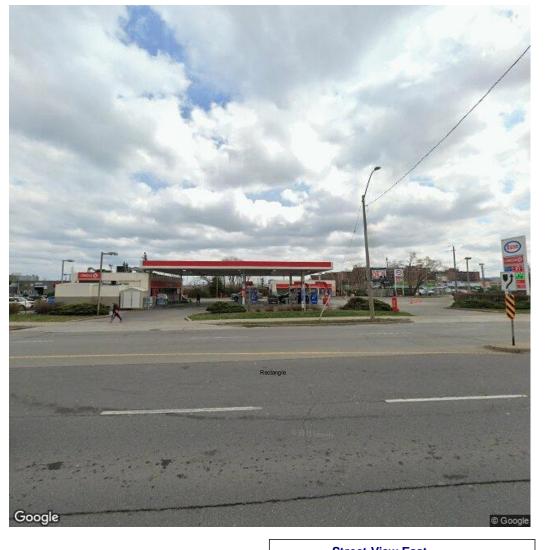
Project Number: CAD EX Project Name: Canadian Examples Client Name: ACME Oil & Gas

### Site Location

Address: 2911 Barton St. S City: Hamilton State: ON

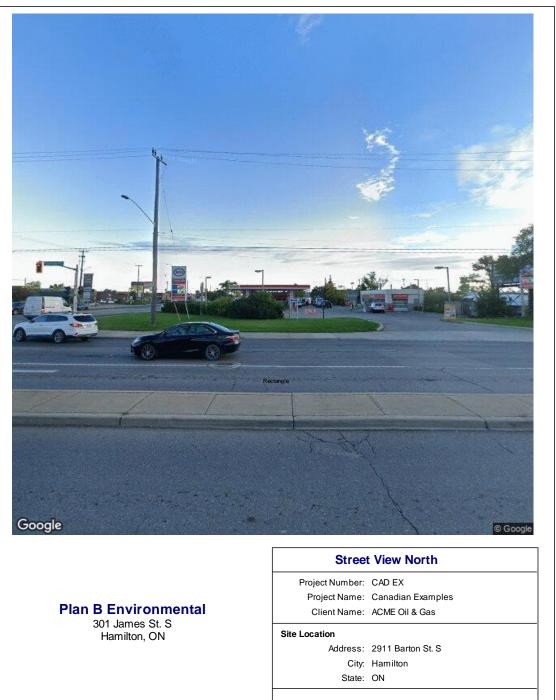
Project Manager: John Smith Date: 2023-1-24

**Appendix 3: Site Photographs** 



Plan B Environmental 301 James St. S Hamilton, ON

Street View East			
Project Number:	CAD EX		
Project Name:	Canadian Examples		
Client Name:	ACME Oil & Gas		
Site Location			
Address:	2911 Barton St. S		
City:	Hamilton		
State:	ON		
Project Manager:	John Smith		
Date:	2023-1-24		



Project Manager: John Smith Date: 2023-1-24 **Appendix 4: Historical Research Documentation** 

ACME Oil & Gas Phase I Environmental Site Assessment No Name Gas 2022-12-20 PN12345 Page 28 **Appendix 5: Regulatory Records Documentation** 

ACME Oil & Gas Phase I Environmental Site Assessment No Name Gas 2022-12-20 PN12345 Page 30 **Appendix 6: Interview Documentation** 

# **Client Questionnaire**

Date of Interview: 2023-01-05 Name: Mike Johnson Title: Environmental Manager Organization: ACME Oil & Gas

### **General Questions**

#### 1. What is the purpose and intended use of the Phase I ESA?

The client stated the purpose of the Phase I ESA was for a liability assessment for a proposed acquisition or potential divesture of a site.

2. Other than yourself, what other parties will rely on the Phase I report?

No other parties will rely on the Phase I ESA report.

3. Are there any special terms and conditions that must be agreed upon by the environmental professional?

No special terms and conditions were agreed on between the client and the environmental professional.

### 4. Are any services beyond the requirements of standard CSA Z768-01 Phase I ESA required?

No other services beyond the requirements of Z768-01 standard are required.

5. What is the current use of the property?

Gas station and store

- 6. What type of property transaction is it (sale, purchase, exchange, etc.)? Exchange
- 7. Who is the owner of the property?

The client is not the current owner.

- a. Client is Owner
  - i. Who is the site contact for the property?
  - ii. How can the site contact be reached?
- b. Client is Not Owner
  - i. Who is the current owner of the property?

The current owner is No Name Gas.

ii. How can the current owner be reached?

The current owner can be reached by 204-222-1234.

### 8. Do you know the past uses of the property?

The client does not know the past uses of the property.

9. Do you know of any pending threatened, or past litigation relevant to environmental contamination in, on, or from the property?

The client does not know of any litigation relevant to environmental contamination in, on, or from the property.

**10.** Do you know of any notices or other correspondence from any government agency regarding any possible violation of environmental laws?

The client does not know of any notices or other correspondence regarding possible violation of environmental laws.

#### 11. Do you know of spills or other chemical releases that have taken place at the property?

The client does not know of any spills or other chemical releases that have taken place at the property.

### 12. Do you know of any environmental cleanups that have taken place at the property?

The client does not know of any environmental cleanups that have taken place at the property.

**13.** Based on your knowledge and experience related to the property are there any indicators that point to the presence or likely presence of contamination at the property?

The client knows of no indicators that point to the presence or likely presence of contamination at the property.

### **Helpful Documents Related Questions**

Do you know of any of the following documents for the property exist and whether copies can be provided for review within reasonable time and cost constraints?

### 1. Title searches?

The client does not know if there are any title searches on the property that can be provided for review within reasonable time and cost constraints.

### 2. Agreement of purchase and sale?

The client does not know if there are agreements for purchase and sale on the property that can be provided for review within reasonable time and cost constraints.

### 3. Environmental site assessment reports?

The client does not know if there are environmental site assessment reports on the property that can be provided for review within reasonable time and cost constraints.

### 4. Environmental audit reports?

The client does not know if there are environmental compliance audit reports on the property that can be provided for review within reasonable time and cost constraints.

### 5. Environmental site investigation reports?

The client does not know if there are environmental site investigation reports on the property that can be provided for review within reasonable time and cost constraints.

### 6. Environmental permits?

The client does not know if there are environmental permits on the property that can be provided for review within reasonable time and cost constraints.

### 7. Registrations for underground and above-ground storage tanks?

The client does not know if there are registrations for underground and above-ground storage tanks on the property that can be provided for review within reasonable time and cost constraints.

### 8. Safety data sheets?

The client does not know if there are material safety data sheets on the property that can be provided for review within reasonable time and cost constraints.

9. Safety plans; preparedness and prevention plans; spill prevention, countermeasures and control plans; facility response plans?

The client does not know if there are safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; facility response plans, etc. for the property that can be provided for review within reasonable time and cost constraints.

### 10. Hazardous waste generator notices or reports?

The client does not know if there are hazardous waste generator notices or reports on the property that can be provided for review within reasonable time and cost constraints.

### 11. Geological or geotechnical reports?

The client does not know if there are geological geotechnical studies on the property that can be provided for review within reasonable time and cost constraints.

### 12. Other pertinent documents?

The client does not know of any other pertinent documents on the property that can be provided for review within reasonable time and cost constraints.

# **Owner Questionnaire**

(Only use if client is not current owner)

Date of Interview: 2023-01-09 Name: John Harvey Title: General Manager Organization: No Name Gas

### **General Questions**

- 1. How long have you owned the property?
- 12 years
- 2. What is the current use of the property?
- Gas station and convenience store
- **3.** Who is the site contact for the property? Dave Olivier
- **4.** How can the site contact be reached? 225-320-1900
- 5. Do you know the past uses of the property?

The current owner knows of the following past uses of the property:

6. Do you know of any pending threatened, or past litigation relevant to environmental contamination in, on, or from the property?

The current owner does not know of any litigation relevant to hazardous substances or petroleum products in, on, or from the property.

7. Do you know of any notices or other correspondence from any government agency regarding any possible violation of environmental laws?

The current owner does not know of any notices or other correspondence regarding possible violation of environmental laws.

8. Do you know of spills or other chemical releases that have taken place at the property? The current owner knows of the following spills or other chemical releases that have taken place at the property:

**9.** Do you know of any environmental cleanups that have taken place at the property? The current owner knows of the following environmental cleanups that have taken place at the property:

2022-12-20 PN12345 Page 36

# **10.** Based on your knowledge and experience related to the property are there any indicators that point to the presence or likely presence of contamination at the property?

The current owner knows of no indicators that point to the presence or likely presence of contamination at the property.

### **Helpful Documents Related Questions**

Do you know of any of the following documents for the property exist and whether copies can be provided for review within reasonable time and cost constraints?

### 1. Environmental site assessment reports?

The current owner does not know if there are environmental site assessment reports on the property that can be provided for review within reasonable time and cost constraints.

### 2. Environmental compliance audit reports?

The current owner does not know if there are environmental compliance audit reports on the property that can be provided for review within reasonable time and cost constraints.

### 3. Environmental site investigation reports?

The current owner does not know if there are environmental site investigation reports on the property that can be provided for review within reasonable time and cost constraints.

### 4. Environmental permits?

The current owner does not know if there are environmental permits on the property that can be provided for review within reasonable time and cost constraints.

### 5. Registrations for underground and above-ground storage tanks?

The current owner does not know if there are registrations for underground and above-ground storage tanks on the property that can be provided for review within reasonable time and cost constraints.

### 6. Safety data sheets?

The current owner does not know if there are material safety data sheets on the property that can be provided for review within reasonable time and cost constraints.

# 7. Safety plans; preparedness and prevention plans; spill prevention, countermeasures and control plans; facility response plans?

The current owner does not know if there are safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; facility response plans, etc. for the property that can be provided for review within reasonable time and cost constraints.

### 8. Hazardous waste generator notices or reports?

The current owner does not know if there are hazardous waste generator notices or reports on the property that can be provided for review within reasonable time and cost constraints.

### 9. Geological or Geotechnical studies?

The current owner does not know if there are geological or geotechnical studies on the property that can be provided for review within reasonable time and cost constraints.

### 10. Other pertinent documents?

The current owner does not know of any other pertinent documents on the property that can be

provided for review within reasonable time and cost constraints.

# Site Manager Questionnaire

(Only use if client is not the site manager)

Date of Interview: 2023-01-10 Name: Dave Olivier Title: Property Manager Organization: No Name Gas

### Questions

1. How long have you been the site manager of the property?

2 years

2. What was type of business do you have at the property?

Gas station

### 3. Do you know the past uses of the property?

The site manager knows of the following past uses of the property:

Gas station

### 4. Who are the occupants of the property?

The property is currently occupied by:

No Name Gas

# **5.** Do you know of specific chemicals that are present or once were present at the property? The site manager does not know of any specific chemicals that are present or once were present at the property.

# 6. Do you know of spills or other chemical releases that have taken place at the property? The site manager knows of the following spills or other chemical releases that have taken place at the property:

### 7. Do you know of any environmental cleanups that have taken place at the property?

The site manager does not know of any environmental cleanups that have taken place at the property.

8. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

The site manager does not have any other knowledge or experience with the property that may be pertinent to the environmental professional.

9. Do you know of any pending, threatened, or past litigation relevant to environmental contamination in, on, or from the property?

The site manager does not know of any pending threatened, or past litigation relevant to environmental contamination in, on, or from the property.

**10.** Do you know of any notices or other correspondence from any government agency regarding any possible violation of environmental laws?

The site manager does not know of any notices or other correspondence from any government agency regarding any possible violation of environmental laws.

12. Based on your knowledge and experience related to the property are there any indicators that point to the presence or likely presence of contamination at the property?

The site manager knows of no indicators that point to the presence or likely presence of contamination at the property.

### **Helpful Documents Related Questions**

Do you know of any of the following documents for the property exist and whether copies can be provided for review within reasonable time and cost constraints?

### 1. Environmental site assessment reports?

The site manager does not know if there are environmental site assessment reports on the property that can be provided for review within reasonable time and cost constraints.

### 2. Environmental compliance audit reports?

The site manager does not know if there are environmental compliance audit reports on the property that can be provided for review within reasonable time and cost constraints.

### 3. Environmental site investigation reports?

The site manager does not know if there are environmental site investigation reports on the property that can be provided for review within reasonable time and cost constraints.

### 4. Environmental permits?

The site manager does not know if there are environmental permits on the property that can be provided for review within reasonable time and cost constraints.

### 5. Registrations for underground and above-ground storage tanks?

The site manager does not know if there are registrations for underground and above-ground storage tanks on the property that can be provided for review within reasonable time and cost constraints.

### 6. Safety data sheets?

The site manager does not know if there are material safety data sheets on the property that can be provided for review within reasonable time and cost constraints.

# 7. Safety plans; preparedness and prevention plans; spill prevention, countermeasures and control plans; facility response plans?

The site manager does not know if there are safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; facility response plans, etc. for the property that can be provided for review within reasonable time and cost constraints.

### 8. Hazardous waste generator notices or reports?

The site manager does not know if there are hazardous waste generator notices or reports on the property that can be provided for review within reasonable time and cost constraints.

2022-12-20 PN12345 Page 40

### 9. Geological or geotechnical studies?

The site manager does not know if there are geological or geotechnical studies on the property that can be provided for review within reasonable time and cost constraints.

#### 10. Other pertinent documents?

The site manager does not know of any other pertinent documents on the property that can be provided for review within reasonable time and cost constraints.

# **Occupant 1 Questionnaire**

Date of Interview: Name: Title: Organization:

- 1. During what time period were you occupant of the property?
- 2. What was type of business did you have at the property?
- 3. Do you know the past uses of the property?
- 4. Do you know of specific chemicals that are present or once were present at the property?
- 5. Do you know of spills or other chemical releases that have taken place at the property?
- 6. Do you know of any environmental cleanups that have taken place at the property?
- 7. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

# **Occupant 2 Questionnaire**

Date of Interview: Name: Title: Organization:

- 1. During what time period were you an owner/occupant of the property?
- 2. What was type of business did you have at the property?
- 3. Do you know the past uses of the property?
- 4. Do you know of specific chemicals that are present or once were present at the property?
- 5. Do you know of spills or other chemical releases that have taken place at the property?
- 6. Do you know of any environmental cleanups that have taken place at the property?
- 7. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

# **Occupant 3 Questionnaire**

Date of Interview: Name: Title: Organization:

- 1. During what time period were you an owner/occupant of the property?
- 2. What was type of business did you have at the property?
- 3. Do you know the past uses of the property?
- 4. Do you know of specific chemicals that are present or once were present at the property?
- 5. Do you know of spills or other chemical releases that have taken place at the property?
- 6. Do you know of any environmental cleanups that have taken place at the property?
- 7. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

### **Occupant 4 Questionnaire**

Date of Interview: Name: Title: Organization:

- 1. During what time period were you an owner/occupant of the property?
- 2. What was type of business did you have at the property?
- 3. Do you know the past uses of the property?
- 4. Do you know of specific chemicals that are present or once were present at the property?
- 5. Do you know of spills or other chemical releases that have taken place at the property?
- 6. Do you know of any environmental cleanups that have taken place at the property?
- 7. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

# **Occupant 5 Questionnaire**

Date of Interview: Name: Title: Organization:

- 1. During what time period were you an owner/occupant of the property?
- 2. What was type of business did you have at the property?
- 3. Do you know the past uses of the property?
- 4. Do you know of specific chemicals that are present or once were present at the property?
- 5. Do you know of spills or other chemical releases that have taken place at the property?
- 6. Do you know of any environmental cleanups that have taken place at the property?
- 7. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

# **Government Official 1 Questionnaire**

Date of Interview: 2023-01-11 Name: Lisa Elliot Title: County Clerk Organization: District 11 Administration

### Questions

### 1. Do you know the past uses of the property?

The official knows of the following past uses of the property:

Gas station

2. Do you know of specific chemicals that are present or once were present at the property? The official does not know of any specific chemicals that are present or once were present at the property.

**3.** Do you know of spills or other chemical releases that have taken place at the property? The official does not know of any spills or other chemical releases that have taken place at the property.

4. Do you know of any environmental cleanups that have taken place at the property?

The official does not know of any environmental cleanups that have taken place at the property.

5. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, territorial, provincial, or local law?

The official is not aware of any environmental cleanup liens against the property that are filed or recorded under federal, territorial, provincial, or local law.

6. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

The official does not have any other knowledge or experience with the property that may be pertinent to the environmental professional.

### **Government Official 2 Questionnaire**

Date of Interview: 2023-01-13 Name: Michael Moore Title: Sr. Environmental Officer Organization: MOEE

### Questions

### 1. Do you know the past uses of the property?

The official knows of the following past uses of the property:

### Gas station

# **2.** Do you know of specific chemicals that are present or once were present at the property? The official does not know of any specific chemicals that are present or once were present at the property.

# **3.** Do you know of spills or other chemical releases that have taken place at the property? The official knows of the following spills or other chemical releases that have taken place at the property:

A gasoline leak was reported in 1995 during an upgrade to the piping system.

# **4.** Do you know of any environmental cleanups that have taken place at the property? The official does not know of any environmental cleanups that have taken place at the property.

5. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, territorial, provincial, or local law?

The official is not aware of any environmental cleanup liens against the property that are filed or recorded under federal, territorial, provincial, or local law.

6. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

The official does not have any other knowledge or experience with the property that may be pertinent to the environmental professional.

# **Government Official 3 Questionnaire**

Date of Interview: Name: Title: Organization:

- 1. Do you know the past uses of the property?
- 2. Do you know of specific chemicals that are present or once were present at the property?
- 3. Do you know of spills or other chemical releases that have taken place at the property?
- 4. Do you know of any environmental cleanups that have taken place at the property?
- 5. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, territorial, provincial, or local law?
- 6. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

### **Government Official 4 Questionnaire**

Date of Interview: Name: Title: Organization:

- 1. Do you know the past uses of the property?
- 2. Do you know of specific chemicals that are present or once were present at the property?
- 3. Do you know of spills or other chemical releases that have taken place at the property?
- 4. Do you know of any environmental cleanups that have taken place at the property?
- 5. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, territorial, provincial, or local law?
- 6. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

### **Other 1 Questionnaire**

Date of Interview: Name: Status: Title: Organization:

- 1. During what time period were you familiar with the property?
- 2. Do you know the past uses of the property?
- 3. Do you know of specific chemicals that are present or once were present at the property?
- 4. Do you know of spills or other chemical releases that have taken place at the property?
- 5. Do you know of any environmental cleanups that have taken place at the property?
- 6. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

# **Other 2 Questionnaire**

Date of Interview:
Name:
Status:
Title:
Organization:

- 1. During what time period were you familiar with the property?
- 2. Do you know the past uses of the property?
- 3. Do you know of specific chemicals that are present or once were present at the property?
- 4. Do you know of spills or other chemical releases that have taken place at the property?
- 5. Do you know of any environmental cleanups that have taken place at the property?
- 6. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

# **Other 3 Questionnaire**

Date of Interview:
Name:
Status:
Title:
Organization:

- 1. During what time period were you familiar with the property?
- 2. Do you know the past uses of the property?
- 3. Do you know of specific chemicals that are present or once were present at the property?
- 4. Do you know of spills or other chemical releases that have taken place at the property?
- 5. Do you know of any environmental cleanups that have taken place at the property?
- 6. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

# **Other 4 Questionnaire**

Date of Interview:
Name:
Status:
Title:
Organization:

- 1. During what time period were you familiar with the property?
- 2. Do you know the past uses of the property?
- 3. Do you know of specific chemicals that are present or once were present at the property?
- 4. Do you know of spills or other chemical releases that have taken place at the property?
- 5. Do you know of any environmental cleanups that have taken place at the property?
- 6. Do you have any other knowledge or experience with the property that may be pertinent to the environmental professional?

**Appendix 7: Other Supporting Documentation** 

ACME Oil & Gas Phase I Environmental Site Assessment No Name Gas 2022-12-20 PN12345 Page 55 **Appendix 8: Qualifications** 

ACME Oil & Gas Phase I Environmental Site Assessment No Name Gas 2022-12-20 PN12345 Page 57