SPILLS PREVENTION & RISK MANAGEMENT PLAN FOR SOURCE WATER PROTECTION AREA

MACEWEN PETROLEUM FUEL DISPENSING FACILITY 5546 ALBION ROAD SOUTH, OTTAWA (GLOUCESTER), ONTARIO



SPILLS PREVENTION & RISK MANAGEMENT PLAN

This Spills Prevention & Risk Management Plan, limited for the property located at 5546 Albion Road, in Ottawa, Ontario has been prepared for MacEwen Petroleum Inc. to ensure identified source protection area is protected, maintained and that in the event of an incident, the risk to the sensitive feature can be mitigated.

GENERAL SITE DETAILS & CONTACT INFORMATION

Business Name	MacEwen Petroleum Inc.
Business Owner	Allan MacEwen
Business Address	5546 Albion Road Ottawa, Ontario K4P 0A7
Business Head Office Phone Number	613-527-2100
Business Phone Number	613-822-0256
Business Representative	Roch Lortie
Business Representative Mobile Number	613-277-0264
Business Representative Email	r.lortie@macewen.ca
Property Owner Name	MacEwen Petroleum Inc.
Property Owner Address	18 Adelaide Street
	P.O. Box 100 Maxville, Ontario K0C 1T0
Vulnerable Area	Albion Sun Vista Communal Supply Well System
Applicable Source Protection Plan	Trow Associates Inc. & Jacques Whitford Environmental Limited Wellhead Protection Area Plan Albion Sun Vista Community & Peer Review – Albion Sun Vista Wellhead Protection Area Plan

RISK MANAGEMENT PLAN - RETAIL FUEL DISPENSING SERVICE STATION

HAZARD IDENTIFICATION

Hazard	Location & Discussion	Risk Management Measure	
Liquid petroleum hydrocarbons (gasoline, and diesel) storage, spills or releases	Stored in large quantities underground in storage tanks. Dispensed to clients through a service of underground service lines, and petroleum dispensing pumps.	These are to be equipped with monitoring and detection systems must be maintained according to applicable provincial requirements, as governed by the Technical Standards and Safety Authority.	
		Regular dips of the installation by the on-site staff will be used to compare electronic inventory counts to monitor if product is lost or released.	
		An groundwater monitoring program will be implemented with annual reporting to the corresponding authority overseeing the program.	
		Only trained site personnel are authorized to conduct on-site refueling of equipment when necessary. This includes machinery during construction efforts, as well as the re-fueling of petroleum storage vessels associated with the site operations.	
Supply Well Damage	Along the east-central extent of the Site. Damage to the existing supply well can result in immediate impacts to the aquifer.	During construction and redevelopment of the Site, the supply well must be protected from potential damage by all parties involved.	
	Such impairment can travel through the supply aquifer, resulting in possible detrimental conditions of neighbouring	At no time shall snow be piled or stored within 15 m of the supply well.	
	supply wells.	Construction fencing must be maintained around the perimeter of the supply well.	
		At no time, shall the well casing or area within 15 m of the structure be altered, damaged or excavated, with the following exception:	

Hazard	Location & Discussion	Risk Management Measure
		i. A licenced individual, under O. Reg. 903, is retained to extend the casing accordingly so that it is at least 40 cm above final grade;
		ii. A licenced individual, under O. Reg. 903, is retained to disinfect the supply well post repair or alterations to the structure;
		iii. The installation of protective bollards to prevent damage to the well during typical Site operations;
		iv. The removal of asphalt surfacing, and curbing, and re-instatement, within 15 m of the well;
		v. Should a spill occur or accidental release occur within 15 m of the supply well, the Site specific Spill Management Plan must be followed, including notification of the respective parties and subsequent monitoring of the aquifer.
Chemical storage, spill or release (including Oils and Lubricants, Methanol and Ethylene glycol, Engine coolant,	Stored in small quantities within the convenience store on the Site. They are maintained in sealed and labelled manufacturer packaging.	Storage of this materials should be in a safe location, away from vehicle traffic, and should be in small quantities.
Chlorofluorocarbons	All efforts must be maintained to ensure these are not released into the natural environment.	Spill containment and absorbent material must be available on the site in the event of an accident release, so it can be cleaned promptly.
		All personnel and contractors on site are obligated to adhere to the training, operational procedures, and work instructions established by MacEwen Petroleum Inc.
		Only trained site personnel are authorized to conduct on-site refueling of equipment when necessary. This includes

Hazard	Location & Discussion	Risk Management Measure	
		machinery during construction efforts, as well as the re-fueling of petroleum storage vessels associated with the site operations.	
		The fueling area of machinery during construction must be as far from the existing supply well as possible, and no less than 30 meters the supply well. The following must also be considered:	
		Refueling of machinery during on-site construction must be completed at the northern portion of the Site where a notable confining clay layer has been identified;	
		 Spill containment or absorbent supplies must be readily available during re- fuelling; and 	
		Re-fuelling of machinery during construction must be at least 30 m from any surface watercourses, water bodies, other wells, or other sensitive locations.	
Sewage release as a result of a potential malfunctioning sewage disposal system or incident	The Site is serviced by a private sewage disposal system located at the northern portion of the property. The associated tank and components contain rather significant quantities of raw sewage.	The septic is to be located at the northern extent of the site, in the area generally noted to have a confining layer of clay, which acts as a barrier between the surface and the deeper supply aquifer. This clay later should be maintained to support the	

In-Ground Petroleum Storage Installation Details

Fuel Storage Installation Details:	Underground Double Walled Fibreglass Construction.	
	Four (4) installations located at the southeastern portion of the site.	
Capacity in Liters/	25000 liters / 2025 / Diesel	
Age or Date of Installation/		
Contents:		
Capacity in Liters/	25000 liters / 2025 / Super	
Age or Date of Installation/		
Contents:		
Capacity in Liters/	65000 liters / 2025 / Regular	
Age or Date of Installation/		
Contents:		
Capacity in Liters/	65000 liters / 2025 / Regular	
Age or Date of Installation/		
Contents:		
Interstitial Monitoring and Leak	YES □	
Detection Systems in Place :		
	NO □	

Additional Details Regarding the handling and storage of the fuel on the site.					
Fuel dispensing and storage equipment is maintained by trained and licensed personnel or contractors.					
The filling of the underground storage tanks is only completed by competent and trained individuals.					
The installations are installed by licensed MacEwen Petroleum Inc. employees, following the corresponding guidelines for installation in Ontario, and inspected by the Technical Standards and Safety Authority.					
The tanks are dipped regularly to verify internal inventory systems.					
The tanks are equipped with leak detection technology.					

SPILL RESPONSE PLAN

1.	Secure the area	•	Confirm if the area of the spill is safe for responders, and that it does not pose a risk for health or safety concerns or danger;	
		•	Isolate the area with available barricade markers like pylons or caution tape until the incident is resolved.	
2.	Check for hazards	•	Review the area for potential hazards, like reactive chemicals, or the source of the spill.	
3.	If considered serious hazards	•	Leave the area and instruct others (staff, costumers) to follow;	
		•	Call 911.	
4.	If not considered a serious hazard	•	Eliminate the source of the spill, if possible (i.e. lift overturned container, emergency stop the pump, etc.).	
5.	Migration Prevention	•	Using available spill response materials, such as absorbent, prevent the spill from moving into monitoring wells, supply wells, septic disposal system, storm drains and manholes.	
		•	Follow the material safety data sheet instruction for materials used as spill response.	
6.	Clean the Spill	•	Depending on the extent of the spill, this can be done by on- Site staff;	
		•	Larger incidents will require support by environmental response services providers.	
7.	Remove impacted material from the site	•	Dispose of materials, including absorbent materials used, into secure containers for off-site disposal accordingly.	
8.	Notify supervisor or n	nanag	er of the incident	
9.	Notify the site owner	of the	incident	
10	10. Report the spill to the Spills Action Centre			
11	. Complete the attache	d Spill	Report Form	
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*NOTE, CLEAR SPILL RESPONSE PROCEDUES ARE OUTLINED IN THE STAFF TRAINING PACKAGE. INCLUDING THE SPILL REPONSE FORM AND REPRESENTATIVE CONTACT DETAILS.

SITE APPOINTED SPILL RESPONSE COORDINATOR

Site Occupant / Tenant Name:	MacEwen Petroleum Inc.
Site Occupant / Tenant Contact Information:	18 Adelaide Street, P.O. Box 100
	Maxville, Ontario K0C 1T0
	Phone : 613-527-2100
Site Occupant / Tenant Representative	Roch Lortie
(After Hour Emergency Contact):	Mobile : 613-277-0264
	Email : r.lortie@macewen.ca

DOCUMENT REVISION AND HISTORY REVISION

Revision	Reason for Revision	Date