



**Clean Harbors Canada, Inc.
Ryley Facility Expansion Project**

Project Summary

In accordance with the Canadian Environmental Assessment Act, 2012

Prepared By:



Date

August 2014



Clean Harbors Canada, Inc. (Clean Harbors) owns and operates the existing hazardous waste management facility and transfer station located near Ryley, Alberta (the Ryley Facility) in SE 09-050-17 W4M (Figure 1). The Ryley Facility receives hazardous and non-hazardous material for landfill disposal and facilitates transfer of hazardous materials; it is one of only two operating hazardous waste landfills in Alberta. The Ryley Facility receives and transfers waste materials from research and development facilities, bitumen, oil and gas developers, chemical producers, institutional laboratories, federal and provincial government departments, and other industrial manufacturers. It has been in operation since 1992.

According to current annual rates of landfill capacity depletion, Clean Harbors anticipates that the existing Ryley Facility will achieve its anticipated total capacity of approximately 1.6 million cubic metres (m³) by 2021. To meet the projected market demand for landfill disposal of hazardous material for the continued growth of the oil and gas, chemical and heavy manufacturing sectors, Clean Harbors proposes to expand the landfill capacity of the Ryley Facility to occupy the area located immediately north of the lands on which it currently operates (the Project).

Clean Harbors proposes two alternative project designs according to shallow- and deep-constructed cell liner scenarios. The Project will occupy an approximate area of 44 hectares (ha) within NE 09-050-17 W4M located adjacent to the north of the municipal boundary for the Village of Ryley and the boundary for the Ryley Facility. The center of the proposed expansion is located at latitude 53° 18' 10.8" North, longitude -112° 25' 12" West.

Option 1 would consist of landfill cells constructed with the top of the cell liner at an approximate depth of 1.5 m below grade following salvage of topsoil materials. The planned design for Option 1 is consistent with the design of the presently operating cells at the Ryley Facility.

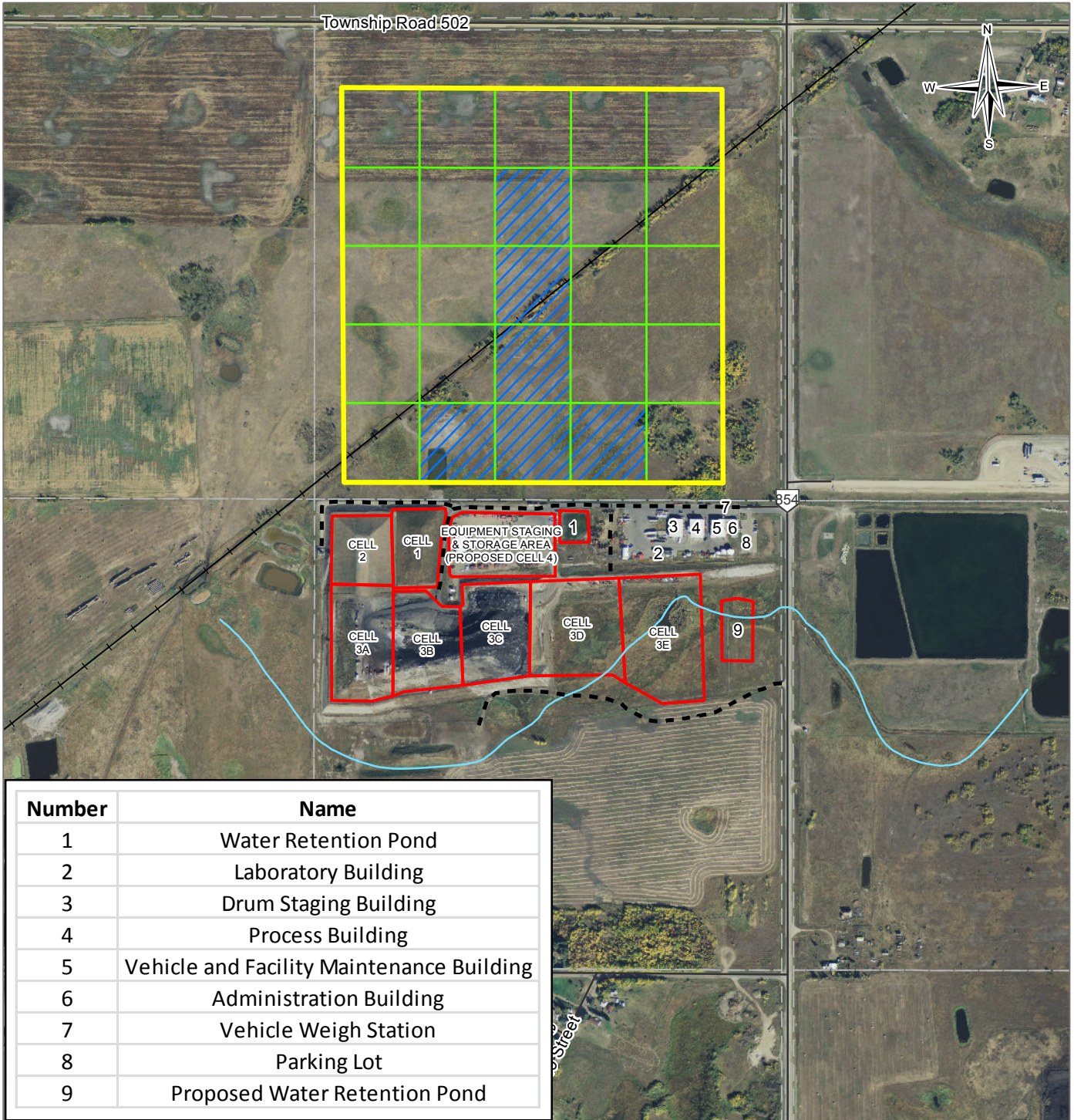
Option 2 would consist of landfill cells constructed with the top of the cell liner at an approximate depth of 5 m (varying from 3 m to 7 m depending on the depth of underlying clay materials) below grade following salvage of topsoil materials. The vehicle staging/offloading area would then be perched above the landfill cell, preventing vehicle traffic from contacting landfilled waste.

Under a full-build scenario, the Project footprint will consist of 25 to 30 landfill cells, temporary access roads, vehicle staging/offloading areas and surface water collection ponds. The location and size (i.e., area or volume) of these proposed infrastructure components may vary throughout the operation of the Project, depending on rates of airspace depletion and ongoing improvement of operational procedures and management. The proposed expansion will increase the overall landfill capacity by 5,000,000 m³ to 10,000,000 m³, or approximately 313% to 626% of the originally approved capacity of approximately 1,600,000 m³, resulting in an operational lifespan extension of greater than 40 years. The cumulative total operating capacity of the Ryley Facility, including the proposed expansion, will be 6,600,000 m³ to 11,600,000 m³.

Proponent Contact Information

The proponent for the Project is Clean Harbors Canada, Inc., a subsidiary of Clean Harbors, Inc.

Clean Harbors Canada, Inc.
4090 Telfer Road, RR#1
Corunna, Ontario, N0N 1G0
Website: <http://www.cleanharbors.com/locations/canada.html>



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LEGEND

- Road
- - - Access Roads (Approximate Centreline)
- - - Historical Railway Bed (Approximate Centreline)
- Bible Creek (Approximate Centreline)
- Existing Ryley Facility
- Proposed Expansion Boundary
- Future Landfill Subcells
- Interim Access and Vehicle Staging Area

NOTES

Base data source: ESRI & CanVec (50,000)
 Imagery: Valtus Imagery Services
 (July 29 - Oct. 6, 2012)

STATUS
 ISSUED FOR USE

RYLEY FACILITY EXPANSION PROJECT

Facility Location and Layout

PROJECTION UTM Zone 12	DATUM NAD83			
Scale: 1:10,000				
FILE NO. Figure1.mxd				
PROJECT NO. ENVSWM03011-01	DWN BB	CKD MS	APVD BH	REV 1
OFFICE Tl EBA-CAL	DATE August 7, 2014			



PREPARED BY:
 TETRA TECH EBA

Figure 1



The Chief Executive Officer for Clean Harbors, Inc. and its subsidiaries is:

Alan S. McKim
Chairman and Chief Executive Officer
Clean Harbors Inc.
Phone 781.792.5000

The principal contact person for the purposes of this Project Description is:

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Designated Activity

The proposed expansion will increase the overall landfill capacity by 5,000,000 m³ to 10,000,000 m³, or approximately 313% to 626% of the originally approved capacity of approximately 1,600,000 million m³. The cumulative total operating capacity of the Ryley Facility, including the proposed expansion, will be 6,600,000 m³ to 11,600,000 m³.

Pursuant to Paragraph 30 of the *Canadian Environmental Assessment Act, 2012 (CEAA, 2012) Regulations Designating Physical Activities*:

The construction, operation, decommissioning and abandonment of a facility used exclusively for the treatment, incineration, disposal or recycling of hazardous waste, or an expansion of such a facility that would result in an increase in its production capacity of more than 50%.

Consequently, the proposed expansion of the Ryley Facility is considered to be a Designated Project.

Emissions, Discharges and Wastes

Aqueous solutions derived from collected leachate will be assessed and, if contaminant concentrations are compliant with the conditions of the Approval under the Alberta *Environmental Protection and Enhancement Act (EPEA)*, are disposed of via deep well injection at an approved site located north of Edmonton near Morinville, Alberta. Surface water collected in onsite retention ponds is assessed for contaminant concentrations and, if compliant with the Alberta Environment (AENV) *Surface Water Quality Guidelines for Use in Alberta*, is disposed of by offsite pumping into Bible Creek, typically occurring once a year during dry conditions or periods of negligible flow rates. Contaminated waters not meeting thresholds for surface water quality will be addressed in the same fashion as collected leachate and will be disposed of via deep well injection.

Water volumes, as well as thermal and electrical energy requirements for operation of the Ryley Facility and the proposed expansion are considered to be relatively low; utility services are presently achieved through the connection to the facilities operated by the Village of Ryley and Beaver County. Increased water, sewage, and energy demand associated with expansion of the Ryley Facility (i.e., the Project) are anticipated to be negligible and will not require additional infrastructure.



Solid waste generated by construction and operation of the Project will be negligible in volume, characteristic of light industrial processes including both hazardous and non-hazardous materials and well within the available capacity of the Ryley Facility or the Beaver Regional Waste Management Services landfill.

The Ryley Facility (including the proposed expansion) does not require the use of incinerators that would result in an increase of total nitrogen and sulphur oxide (i.e., NO_x and SO_x) emissions. Trace emissions of volatile organic compounds (i.e., VOCs) may occur through use of a fume hood within the onsite laboratory facility. VOCs associated with storage and handling of hazardous materials associated with the existing transfer facility are removed through a ventilation scrubber. Greenhouse gas and air emissions are anticipated to be negligible to low in volume and will primarily be attributed to exhaust emissions from the operation of heavy equipment on site (i.e., approximately 10 vehicles) and transport vehicles shipping material to the Ryley Facility from source locations.

Clean Harbors implements dust and noise control measures to reduce the level of impact associated with the operation of the Ryley Facility to the greatest extent feasible. During windy periods with low precipitation, potential exists for the offsite deposition of dust and odour emissions from the landfill cells. Dust and odour emissions are controlled in accordance with Clean Harbors dust and odour control best management practices, including but not limited to regular monitoring of weather conditions and watering of landfill cells and access roads as required. Furthermore, Clean Harbors has implemented concurrent cell capping and closure plans for cells nearing capacity to reduce the duration of exposed landfilled waste, thereby reducing dust and odour emissions from the Ryley Facility.

Impacts of noise generated by the operation of heavy machinery at the Ryley Facility are reduced by restricting operations to standard business hours.

Project Schedule

Depending on approved Project design, the proposed lifespan of the Project is anticipated to exceed 40 years, according to the following phases of development:

- Site Preparation and Construction 6 months
- Operation 38 to 76 years
- Closure 6 months
- Reclamation 2 years

The Project will be developed with preliminary construction of ancillary elements related to the expansion of landfill capacity including storage areas for trucks, vehicle staging areas, access roads, disposal bins and stormwater retention ponds. Construction of these elements will only proceed with appropriate land-use approval from the Village of Ryley. Given the anticipated rate of landfilling, the landfill capacity will be developed in a succession of 25 to 30 subcells with each anticipated to undergo an operational life cycle of approximately 2 years. If approved, construction of the future proposed landfill subcells would likely commence in 2020 with the operational phase of the Project anticipated to commence in 2021. Following the closure and reclamation phases of the Project, Clean Harbors is committed to conducting ongoing environmental monitoring in accordance with the approved closure plan.

Land and Water Use

The Ryley Facility is located with the northern boundary of the Village of Ryley, in Beaver County, Alberta. The proposed expansion will be located immediately adjacent to the north of the Ryley Facility and will be located within the future boundaries of the Village of Ryley, with an anticipated annexation to occur in 2015. The Project



is located on lands zoned for “Landfill and Composting” in accordance with the Ryley Inter-municipal Development Plan. Other land uses surrounding the Project include livestock ranching, cultivation, rural residences and other landfill and recycling facilities.

The Project is located on freehold lands that shall be titled to Clean Harbors upon completion of a purchase agreement from the present landowner. There are no previously existing public or private caveats associated with Project location. There are no pre-existing subsurface mineral rights associated with the Project location.

There are no pre-existing authorizations for the diversion and/or use of water associated with the lands on which the Project is located.

Rural residences in Beaver County with closest proximity to the Project have the following legal locations and distance to the Project (Figure 2):

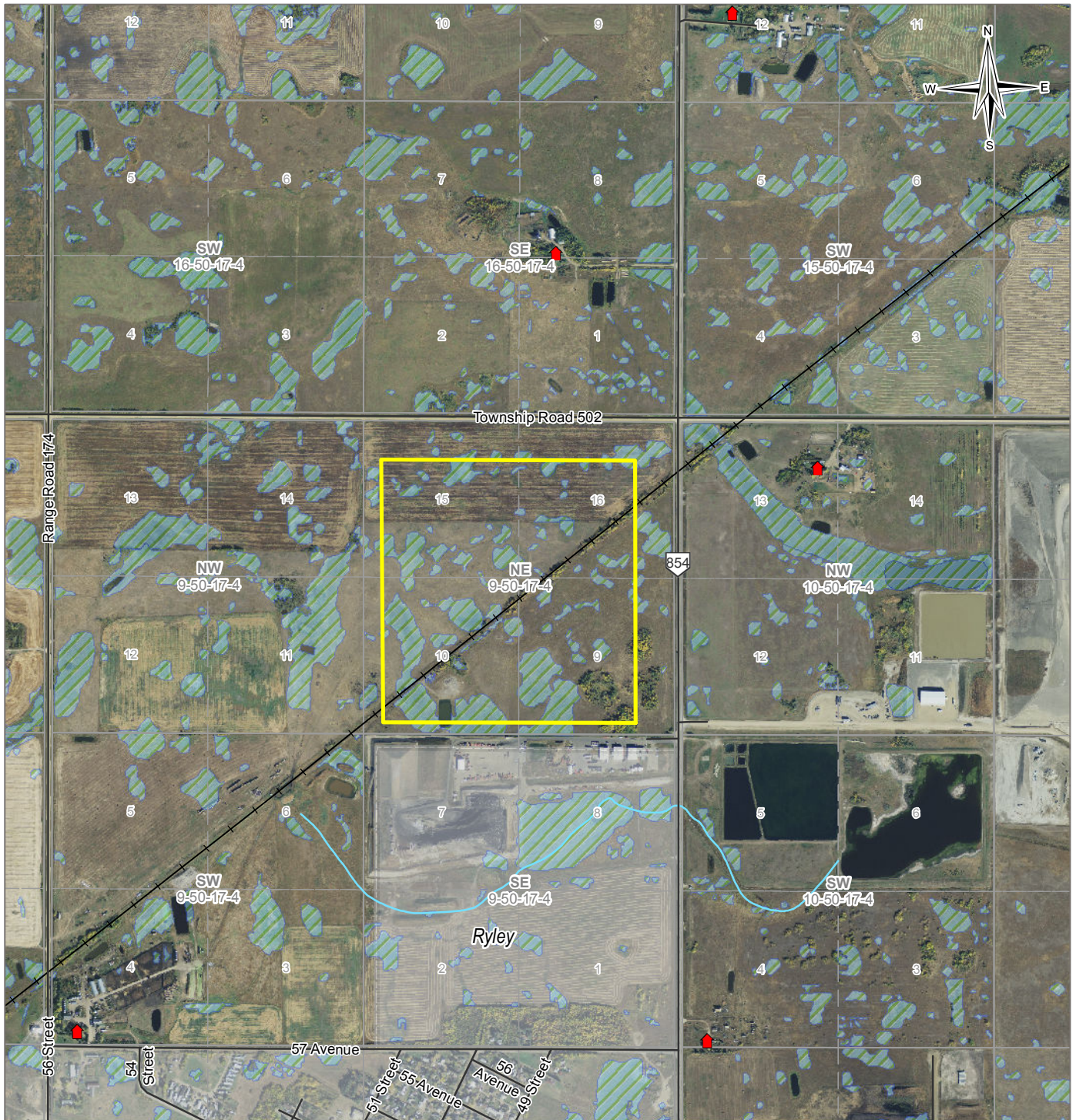
- 07-16-050-17 W4M: 0.9 km north;
- 13-10-050-17 W4M: 0.9 km east;
- 12-15-050-17 W4M: 1.6 km north northeast;
- 04-09-050-17 W4M: 1.6 km southwest; and
- 04-10-050-17 W4M: 1.3 km southeast.

The Project is located approximately 33.9 km southeast from Elk Island National Park.

Although the Project is located within the asserted traditional territory of Treaty 6 First Nations, the lands within NE 09-050-17 W4M have been under freehold title and have not been accessed for the purposes of traditional use and/or resource harvesting following settlement in the region. Consequently, the Project will not require access to, use or occupation of, or the exploration, development and production of lands and resources currently used for traditional purposes by Aboriginal peoples. Nearest aboriginal lands have the following proximities to the Project:

- Kikino Métis Settlement: 168.1 km north;
- Buffalo Lake Métis Settlement: 132.5 km north
- Saddle Lake Cree First Nation: 77.2 km northeast ;
- Louis Bull First Nation: 84.4 km southwest;
- Ermineskin First Nation: 77.9 km southwest;
- Samson First Nation: 77.2 km southwest;
- Enoch Cree First Nation: 85.5 km west northwest; and
- Montana First Nation: 89.4 km southwest.

The Project is not located in close proximity to any known traditional territories, settlement land or lands and resources currently used for traditional purposes by aboriginal peoples.



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LEGEND

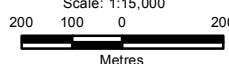
-  Rural Residence
-  Road
-  Historical Railway Bed (Approximate Centreline)
-  Bible Creek (Approximate Centreline)
-  Potential Wetland
-  Proposed Expansion Boundary
-  Town Boundary

NOTES
 Base data source: ESRI, CanVec (50,000) & ESRD
 Imagery: Valtus Imagery Services (July 29 - Oct. 6, 2012)

STATUS
 ISSUED FOR USE

RYLEY FACILITY EXPANSION PROJECT

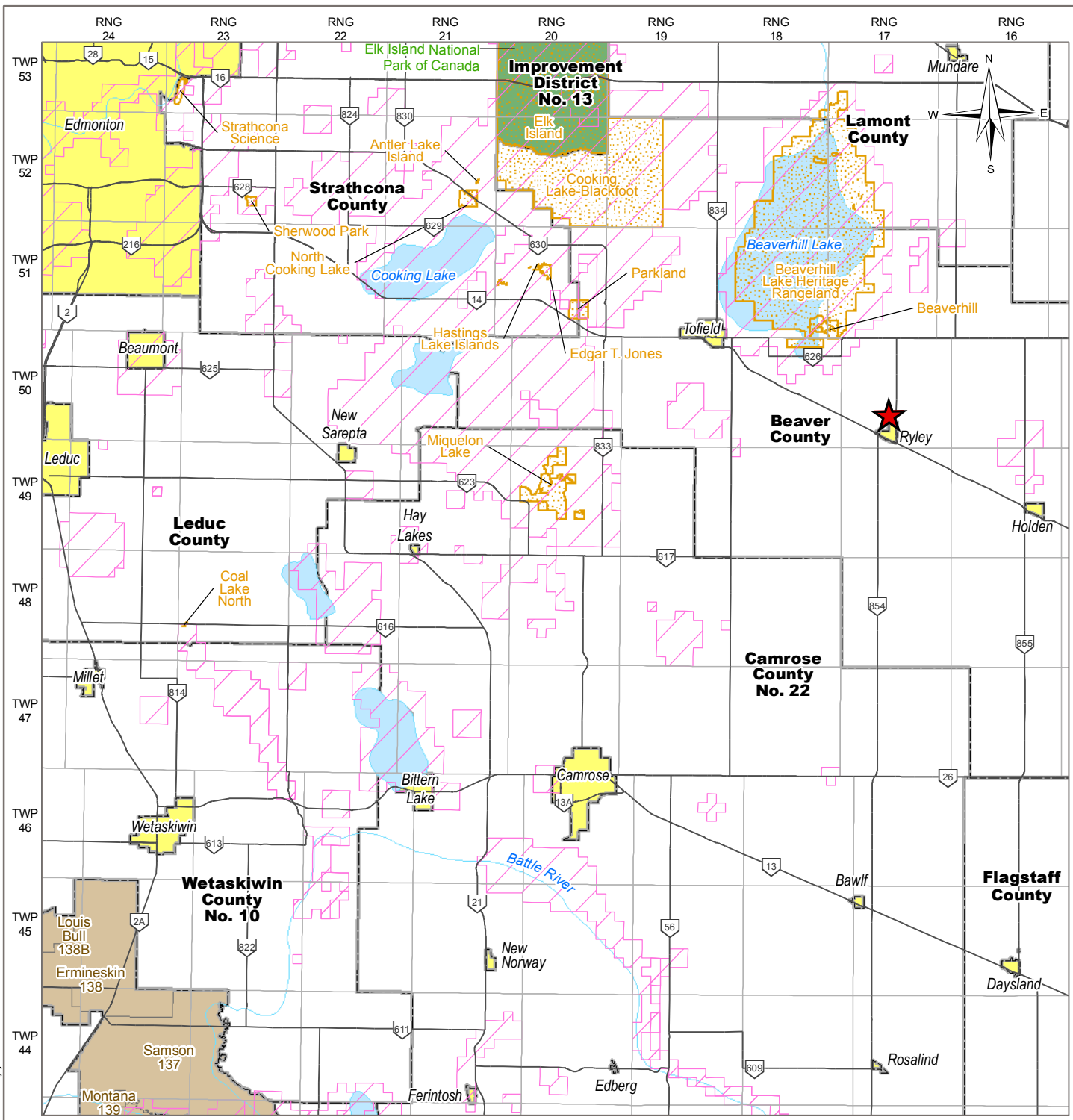
Local Environmental Context

PROJECTION UTM Zone 12		DATUM NAD83	
Scale: 1:15,000  Metres			
FILE NO. Figure2.mxd			
PROJECT NO. ENVSWM03011-01	DWN BB	CKD MS	APVD BH
OFFICE T1 EBA-CAL	DATE August 7, 2014		



PREPARED BY:


Figure 2



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LEGEND

- ★ Site Location
- Primary / Secondary Highway
- Environmentally Significant Area
- Protected Area
- National Parks
- Indian Reserve
- Urban Area
- Municipal Area
- ~ Watercourse
- Waterbody

NOTES
 Base data source: ESRI, CanVec (50,000), AltaLIS, ESRD & Government of Alberta (Tourism, Parks and Recreation)



STATUS
 ISSUED FOR USE

RYLEY FACILITY EXPANSION PROJECT

Regional Environmental Context

PROJECTION UTM Zone 12		DATUM NAD83	
Scale: 1:500,000			
FILE NO. Figure3.mxd			
PROJECT NO. ENVSWM03011-01	DWN BB	CKD MS	APVD BH
OFFICE Tl EBA-CAL	DATE August 7, 2014		

CleanHarbors

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Figure 3



Federal Involvement

There are no federal authorities that are, or may, provide financial support to the Project.

The Project is not located on federal lands.

No other federal legislative or regulatory requirements are anticipated to apply to the Project.

Baseline Environmental Conditions

The Project is located in the Central Parkland Natural Subregion of the Parkland Natural Region in Alberta; the Central Parkland Natural Subregion occupies the extensively cultivated area of Central East Alberta and contains Alberta's three most populated cities.

Air Quality, Odour and Noise

The Project is located in a rural area dominated by agricultural and industrial developments surrounding the Village of Ryley. Given the nature of annual ground disturbance and operational equipment associated with such activities, cultivation, cattle ranching and landfill developments have affected local air quality, odour and noise.

Using air quality data obtained from locations near Crossfield, Alberta (considered to be the nearest monitoring stations that were representative of a rural setting similar in context as that of the Project), it has been determined that baseline air quality, characterized by total nitrogen oxides and sulphur dioxide (i.e., NO_x and SO_x) levels, in the vicinity of the Ryley Facility was likely to be well within established regulatory guidelines.

The Ryley Facility (including the proposed expansion) does not require the use of incinerators that would result in an increase of NO_x and SO_x emissions. Trace emissions of volatile organic compounds (i.e., VOCs) may occur through use of a fume hood within the onsite laboratory facility. VOCs associated with storage and handling of hazardous materials associated with the existing transfer facility are removed through a ventilation scrubber. Greenhouse gas and air emissions are anticipated to be negligible to low in volume and will primarily be attributed to exhaust emissions from the operation of heavy equipment on site (i.e., approximately 10 vehicles) and transport vehicles shipping material to the Ryley Facility from source locations.

Clean Harbors implements dust, odour and noise control measures to reduce the level of impact associated with the operation of the Ryley Facility to the greatest extent feasible. During windy periods with low precipitation, potential exists for the offsite deposition of dust and odour from the landfill cells. Dust and odour emissions are controlled in accordance with Clean Harbors dust and odour control best management practices, including but not limited to regular monitoring of weather conditions and watering of landfill cells and access roads as required. Furthermore, Clean Harbors has implemented concurrent cell capping and closure plans for cells nearing capacity to reduce the duration of exposed landfilled waste, thereby reducing dust and odour emissions from the Ryley Facility.

Impacts of noise generated by the operation of heavy machinery at the Ryley Facility is reduced by restricting operations to standard business hours.

Groundwater

The Project is located in a region characterized by having deep, horizontal groundwater flow. Local groundwater is recharged at areas of higher elevation to the south and east, and is discharged to the north near Beaverhill



Lake. Depending on site-specific factors, depth to groundwater in the vicinity of the Project ranges from one to five metres below grade.

Groundwater quality within shallow bedrock encountered in the vicinity of the Project is typically brackish to slightly alkaline with relatively high content of bicarbonates. Groundwater associated with shallow bedrock formations was determined to be of poor quality and unsuitable for human consumption and agricultural activities (i.e., irrigation). Deep bedrock (i.e., >10 m below grade) was determined to have substantially lower content of total dissolved solids and therefore was considered to have better water quality than groundwater found in shallow formations (i.e., <10 m below grade).

Clean Harbors operates a network of 13 groundwater monitoring wells throughout and surrounding the Ryley Facility. To date, there have been no impacts to groundwater quality that have been attributed to the construction or operation of the Ryley Facility; variations in some parameters have been observed but were considered to be attributed to local agricultural activities, the historic sewage lagoon on which the Ryley Facility is now located and naturally occurring background levels.

Surface Water

An unnamed, ephemeral drainage, locally known as “Bible Creek”, crosses the southeast areas of the Ryley Facility and is located less than 200 m south from the Project footprint. Bible Creek drains east from the vicinity of the Project then north to its confluence with Beaverhill Lake.

There is a depression with potential to support wetland vegetation identified within the Project footprint, however it appears to have been altered by construction of a dugout (Figure 2). Numerous potential wetlands of ephemeral to temporary inundation have been reported from within the Project footprint, however their ecological and hydrological function has likely been affected by local land use change and has yet to be confirmed (Figure 2).

Similar to monitoring of groundwater resources, Clean Harbors monitors up to 20 actively used dugouts within a 1.6 km radius from the Ryley Facility. Assessed parameters were similar to that assessed for groundwater quality. To date, there have been no impacts to surface water quality that have been attributed to the construction or operation of the Ryley Facility; variations in some parameters have been observed but were considered to be attributed to local agricultural activities and runoff from nearby roads and highways.

Fish and Fish Habitat

In addition to Bible Creek, numerous potential wetlands are located within the Project footprint and in the vicinity of the Project and the Ryley Facility. Although these waterbodies may sustain seasonal inundation or flooding following high precipitation events, lack of connectivity to permanently flooded waterbodies precludes the potential for providing habitat of value for sustaining local sport fish populations. Permanent waterbodies located in the vicinity of the Project are shallow and likely to freeze to the bottom in most years; waterbodies deep enough to avoid complete freezing are likely to experience overwinter anoxia due to high rates of vegetation decomposition.

There are no records of fish within a 5 km buffer of the Project, according to the ESRD Fish and Wildlife Management Information System.

Soils

Soils within the Central Parkland Natural Subregion are primarily characterized by Orthic Black Chernozems with remaining areas comprised of solonchic soils or soils with solonchic characters. Other less common soil



types, primarily associated with northern reaches of the Subregion, consist of Orthic Dark Gray Chernozemic and Dark Gray Luvisolic soils. Wetland soils are typically characterized by Humic and Orthic Gleysols.

Soils within the Project footprint predominantly consist of Black Solonchic soils characteristic of the Camrose soil series. Humic Gleysols associated with the Haight soil series occur in isolated depressions, typically generating wetlands and other depression environments.

Terrain

Terrain within the Central Parkland Natural Subregion is typically characterized by undulating till plains and hummocky uplands. Within the Project footprint, terrain is primarily level with minor depressions associated with poorly-drained lowlands.

Vegetation

Upland areas are mostly agricultural lands of improved pasture or forage cover types. A single depression dominated by shrub and herbaceous wetland vegetation is encountered within the Project footprint.

There are no vegetation elements (i.e., plant species and ecological communities) of conservation concern that are known to occur from within 5 km of the Project footprint.

Wildlife and Wildlife Habitat

Remnant areas of native vegetation within and adjacent to the Project footprint are anticipated to provide habitat for wildlife including amphibians, migratory birds, ungulates and small canines. Numerous wildlife species of conservation concern were considered to have potential to occur in the vicinity of the Project; however there are no previously identified occurrences encountered within a 5 km buffer of the Project identified within the ESRD Fish and Wildlife Management Information System. Anecdotal evidence for the presence of coyote, fox and deer have all been reported by Clean Harbors staff within the vicinity of the Project and the existing Ryley Facility.

Beaverhill Lake, located approximately 5.8 km northwest from the Project footprint, is a wetland that has been designated as a Ramsar site according to the International Union for Conservation of Nature and as an Environmentally Significant Area of international significance for its regional importance not only as substantial nesting habitat for diverse assemblages of waterfowl and shorebirds, but also as a significant migration staging area. Although much of the data pertaining to bird populations in the vicinity of the Village of Ryley can be attributed to the surveys conducted by the Beaverhill Bird Observatory, assemblages of birds occurring either as migrants or breeding populations were also considered likely to occur within the vicinity of the Project. However, aside from a single dugout, permanent waterbodies are not found within the Project footprint. Given the proximity to Beaverhill Lake and a lack of seasonal to permanent waterbodies with shallow grades and suitable emergent vegetation, habitats within the Project footprint are unlikely to support substantial populations of waterfowl and shorebirds.

A remnant occurrence of immature aspen woodland is encountered within the southeast corner of the Project footprint. Furthermore, habitats encountered by the Project are predominantly low to mid height grasslands likely to be of non-native origin. Consequently, migratory bird populations are anticipated to be predominantly composed of migratory songbirds and members of the crow family (i.e., Corvidae). Parkland adapted raptor species may occur within the remnant area of immature trembling aspen, however given the proximity to, and industrial vehicle traffic associated with the operation of, the Ryley Facility, their likelihood of occurrence is considered low.



Potential Environmental Effects

Construction and operation of the Project is likely to contribute to off-site deposition of fugitive dust as well as the off-site carry of odours associated with exposed landfill cells and noise caused by the operation of heavy machinery and transport vehicles. Clean Harbors will implement its ongoing dust and noise control measures to reduce the level of impact associated with the construction and operation of the Project to the greatest extent feasible. Since the construction and operation of the Project will overlap with end-of-life landfilling and closure activities for approved landfill cells at the Ryley Facility, additive cumulative effects to local air quality, odour and noise may be anticipated, however these impacts are anticipated to be low in magnitude and less than five years in duration.

The Project will result in a loss of vegetated areas for the duration of the associated construction and operation phases; however the Project footprint will be reclaimed to an equivalent land cover type upon closure and decommissioning of the landfill cell. Potential low-lying areas that may support wetlands will be lost during construction of the Project and, given the planned profile of the planned landfill cell, will not be restored following closure and decommissioning. Where wetlands are confirmed to be affected by construction of the Project, Clean Harbors will adhere to applicable regulatory policies of no-net-loss to wetland areas by paying compensation to an approved wetland restoration agency (e.g., Ducks Unlimited Canada). Consequently, potential environmental effects associated with the loss of wetland areas will be mitigated by restoration of wetlands outside of the Project footprint.

Effects on Fish and Fish Habitat

No waterbodies of permanent inundation or seasonally inundated areas providing fish habitat are present. Consequently, direct mortality of fish or loss of fish habitat attributed to construction of the Project is not anticipated.

Off-site deposition of fugitive dust, spills, and discharge of contaminated groundwater or surface water into waterbodies may cause indirect effects to fish by introduction of contaminants that may interact with or disrupt physiological processes (e.g., reproduction) or habitat quality (e.g., dissolved oxygen content). These potential effects were identified to be negligible to low in magnitude and, given the proposed design for the Project and the likelihood of encountering fish within the associated study area, were considered to be not significant.

Given the similarity to the cell liner design for the Ryley Facility, construction and operation of the Project has potential to result in similar predicted impacts to fish and fish habitat. Construction of the Project to the presently planned design specifications, in addition to implementation of those measures for the protection of soils, groundwater and surface water resources is anticipated to reduce the magnitude of potential impacts to fish and fish habitat to such a level that the residual effects are likely to be considered not significant.

Effects on Aquatic Species at Risk

The Project footprint does not contain any aquatic environments, nor are there any potential effects that extend beyond the Project footprint (e.g., off-site deposition of fugitive dust) likely to interact with aquatic environments. Consequently, there are no anticipated effects on aquatic species as defined in the federal *Species at Risk Act*.

Effects on Migratory Birds

Construction of the Ryley Facility was predicted to result in loss of vegetated areas with potential to provide habitat for wildlife and, therefore by extension, habitat for migratory birds. Furthermore, activities associated with the operation of the Ryley Facility would create sensory disturbance (i.e., noise, odours, visual disturbance) that may deter migratory birds from approaching, and utilizing habitat areas in the Project footprint and surrounding



area. Vehicle traffic associated with operation of the Project also has the potential to cause mortality of migratory birds located within the Project footprint. Potential for contamination of habitat and food sources that may cause disruption of physiological processes (e.g., development, reproduction) may occur via trophic linkage to impacts to air, groundwater, and surface water quality.

Since the nature of the Project is similar in scope and design to the landfill disposal cells originally proposed for the Ryley Facility, construction and operation of the Project may have potential to cause loss of habitat, deterrence from utilizing nearby habitat, mortality and contamination of food sources and habitat that may affect reproductive success, potentially causing declines in local migratory bird populations.

Depending on the approved closure plan for the Project, reclamation and revegetation of the Project footprint may result in a neutral or net positive effect on impacts to migratory bird habitat. Furthermore, deterrence of habitat utilization in the vicinity of the Project will cease upon final closure of planned landfill subcells. Mortality associated with operation of the Project will be reduced to the greatest extent feasible by enforcement of maximum posted speeds onsite. Contamination of food sources or habitat will be reduced to the greatest extent feasible by implementation of ongoing monitoring of air and groundwater quality as well as retention of onsite surface water prior to testing and treatment before pumping offsite. Habitat utilization by migratory birds of infrastructure within the Project footprint (e.g., stormwater retention ponds) will be discouraged by the implementation of barriers and preventing establishment of vegetation that may provide habitat and sources for food.

Project-specific impacts to migratory birds and their habitat are anticipated to be limited to the construction, operation and closure phases of the Project. Given the distance from Beaverhill Lake, current land use within the Project footprint and implementation of applicable operational and closure measures described previously, impacts to migratory birds are anticipated to be limited in extent and severity and are considered to be reversible during the period following closure and reclamation of the Project footprint.

Potential Interprovincial/International Effects

Construction and operation of the Project is not anticipated to result in any interprovincial or international effects or any effects to federal lands.

Potential Effects on Aboriginal Peoples

Given the distance between the Project and the nearest aboriginal land, the potential for construction and operation of the Project to affect the health, rights and socio-economic conditions of aboriginal peoples is considered to be unlikely. Furthermore, the lands on which the Project is located have been under freehold title and have not been accessed for the purposes of traditional use and/or resource harvesting following settlement in the region. Consequently, impacts to the environment associated with the Project footprint are not anticipated to have an effect on the physical and cultural heritage of, or traditional use by, aboriginal peoples.

Proponent Engagement and Consultation with Aboriginal Stakeholders

Engagement and consultation with aboriginal groups has not yet been initiated. Implementation of the aboriginal consultation plan will commence following the first open house, that was held in June 2014. Clean Harbors has reviewed the location of aboriginal communities with nearest proximity to, and therefore most likely to be affected by, the Project.



The aboriginal groups identified as having the greatest potential to be affected by the Project include:

- Kikino Métis Settlement;
- Buffalo Lake Métis Settlement;
- Saddle Lake Cree First Nation;
- Louis Bull First Nation;
- Ermineskin First Nation;
- Samson First Nation;
- Enoch Cree First Nation; and
- Montana First Nation.

Clean Harbors is committed to identifying and addressing aboriginal concerns regarding the Project, including those concerns related to aboriginal rights, health, safety and the environment. The conceptual phases of engagement and consultation with aboriginal groups will consist of:

- Notification of the Project and development of community-specific consultation plans;
- Consultation regarding potential environmental, health, socio-economic and cultural impacts;
- Engagement in the collection and sharing of Aboriginal Traditional Knowledge; and
- Mitigation planning, ongoing consultation and follow-up planning.

Proponent Engagement and Consultation with Public Stakeholders

The following stakeholders were consulted as part of the community engagement program established for the Environmental Impact Assessment for the expansion of the Ryley Facility that was completed by Laidlaw in 1995: Alberta Environmental Protection (now ESRD), Village of Ryley Liaison Committee, Beaver County Environmental Protection Association, Village of Ryley, Canadian Parks and Wilderness Society, Federation of Alberta Naturalists, Toxics Watch Society, and Edmonton Friends of the North, as well as local landowners and residents of the Village of Ryley. Clean Harbors will provide preliminary notification to each of the historically consulted public stakeholder groups, in addition to local landowners and residents of the Village of Ryley.

Issues identified during previous stakeholder consultation for the Ryley Facility included: the image of the Village of Ryley and Beaver County; local real estate values; and the need for comprehensive decision making that is sensitive to the community needs. Clean Harbors acknowledges these issues as likely still relevant to affected stakeholders, and is committed to structuring and implementing a consultation plan that will ensure that stakeholders' input is received, understood, and responded to.

A comprehensive consultation plan will be developed and implemented as part of the environmental assessment that will consist of the following opportunities to provide information to and receive feedback from public stakeholders:

- Open Houses;
- Project Website;
- Newsletters.
- Environmental Assessment Telephone Line; and
- Personal Interviews.

It is the goal of the consultation plan to provide meaningful and accessible opportunities for interested public stakeholders to engage with Clean Harbors, providing feedback and requesting information regarding the



project design, results of the public stakeholder consultation program and progress of the environmental assessment.

Additional Regulatory Consultation

A development permit must be obtained for proposed activities occurring within lands designated to be for “general industrial” land use. In accordance with the Inter-municipal Development Plan, Beaver County and the Village of Ryley may require that an environmental impact assessment be conducted for activities proposed to be conducted within lands designated for industrial development. Clean Harbors will determine the need for an environmental impact assessment through consultation with the Village of Ryley and Beaver County.

Clean Harbors prepared a Project Summary Table that was submitted for review by ESRD on March 17, 2014. On April 10, 2014, ESRD confirmed that the completion of an EIA in accordance with the EPEA shall not be required for the Project. Although ESRD has ruled that an EIA is not required, the Project is subject to an Approval under the EPEA. Clean Harbors has initiated consultation with ESRD regarding project-specific requirements in the application for Approval in which it will include the findings of the aboriginal and public stakeholder consultation programs as well as the environmental assessment for the CEAA.

Pursuant to Section 37(2) of the Alberta *Historical Resources Act* (HRA), ground disturbance activities with potential to cause alteration, damage or destruction of historical resources may require an assessment to determine the effect of the proposed activity on historic resources in the area where the activity is carried out. Alberta Culture (AC) issues Clearance under the HRA where impacts to historical resources are determined to be unlikely. Clean Harbors will submit an application for Clearance under the HRA and, if required, will conduct a Historical Resources Impact Assessment and meet any conditions as required by AC.

Pursuant to Section 36(1) of the Alberta *Water Act*, Approval must be obtained prior to commencing an activity that has potential to impact a waterbody. In the event that construction and/or operation of the Project will result in impacts to a waterbody, Clean Harbors will submit the necessary applications for Approval and notifications to ESRD in accordance with the Alberta *Water Act* and, if required, will implement any environmental or mitigation measures required as a condition of Approval.