Silverberry Landfill Capacity Expansion Project Description

08-088-20W6M

Submitted under:

Canadian Environmental Assessment Act, 2012

Submitted by:

Tervita Corporation

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1.0 General Information and Contacts

1.1 - Nature of Designated Project and Proposed Location

Tervita Corporation (Tervita) owns and operates the Silverberry Secure landfill (the Facility) which is approximately 50km north of Fort St John, British Columbia (BC). The Facility was originally constructed in 2003 and currently consists of seven landfill cells with one to be developed under the existing approval, for a total approved capacity of 6,000,000 tonnes. The Facility is constructed on privately owned land at 08-088-20W6M. Only solid, non-secure (non-hazardous) and select secure (hazardous) oilfield, forestry and industrial wastes are accepted for disposal at the landfill (see Section 2.2). The Facility currently holds approval PR 17150 from the BC Ministry of Environment (MoE) and approval PAC WD02-01 from the BC Environmental Assessment Office (EAO).

Tervita is seeking an amendment to PR 17150 and PAC WD02-01 to replace depleted landfill capacity, which will provide for an estimated additional 30 year lifespan of the Facility. The proposed capacity replacement project (the Project) consists of seven new cells with 6,000,000 tonnes of capacity constructed in a staged approach over time on freehold lands currently owned by Tervita. The Project will not increase the input capacity at the Facility but rather increase the total capacity.

Similar to the existing Facility footprint, the proposed Project is on privately owned land of which a majority has been previously cleared and cultivated. The Project is located immediately east of the current landfill footprint on 08-088-20W6M. This land was subject to an Environmental Impact Assessment as part of the original application for both the MoE and EAO approvals. The Project area and associated components are shown in the Detailed Site Plan.





1.2 - Proponent Information

The name of the designated project is the "Silverberry Capacity Replacement Project." The proponent information is as follows:

The name of the proponent and associated address:

Tervita Corporation 500, 140-10th Avenue SE Calgary, AB, T2G 0R1

The Chief Executive Officer of Tervita:

Chris Synek
Chief Executive Officer
csynek@tervita.com
D: (403) 231-1139

The Principal Contact Person for the Project:

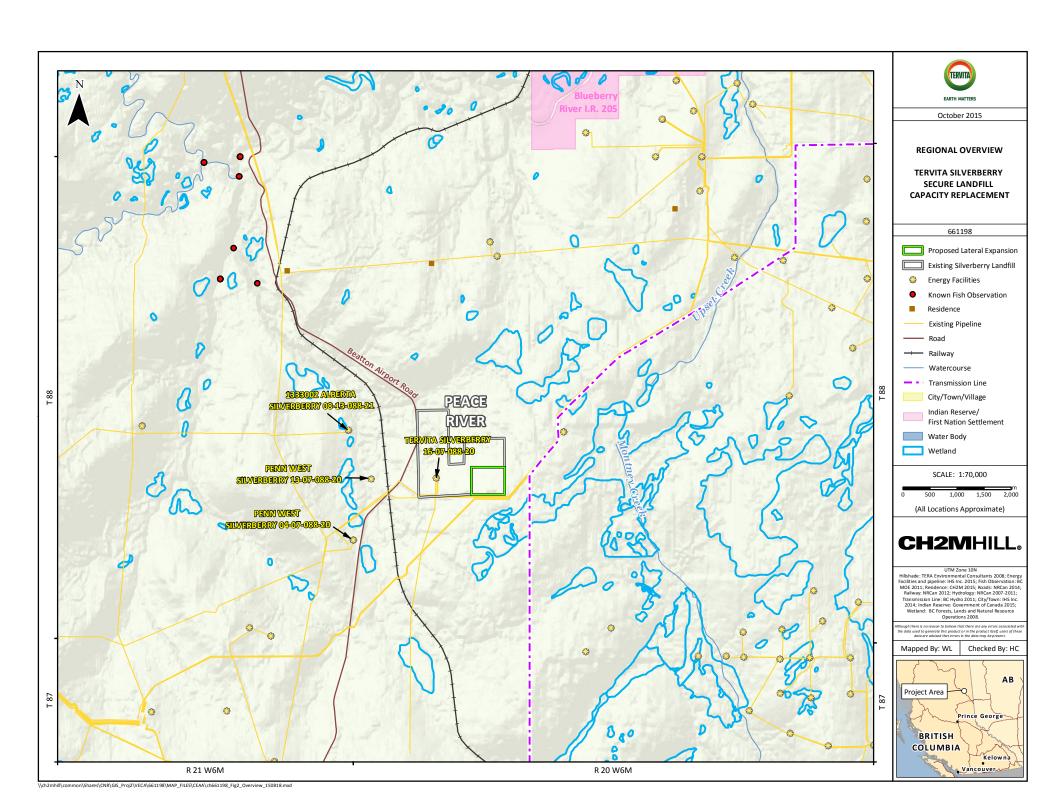
Peter Nelson Advisor, Environment & Regulatory pnelson@tervita.com D: (403) 234-4875

1.3 - Consultation with Other Parties Including Aboriginal Groups

In working with the EAO, consultation activities have been separated into a Public Consultation Plan and a First Nations Consultation Plan.

Public Consultation Plan

The Public Consultation Plan will utilize a 3.2km radius for consultation and 5km radius for notification to identify key stakeholder groups. Elected local municipal leaders will also be notified. Immediate residences, as well as the location of the designated Project relative to existing features are shown in the Regional Overview Map.





Information Package

Tervita will hand-deliver project specific information to residents within 3.2km, as well as to elected local municipal leaders. Packages will be mailed to other identified stakeholders between 3.2km and 5km and will also be available at scheduled information session(s) and on Tervita's website. Information provided in the public consultation package will contain, at a minimum, the following:

- A Project overview;
- Map of location and footprint;
- Proposed scheduling;
- Environmental considerations;
- Safety considerations; and
- Tervita contacts.

Information Session(s)

Tervita will schedule and host at least two formal public information sessions (Open Houses) at a location within reasonable distance from the Project, noting the closest feasible area is Buick, BC. Tervita project management employees and subject-matter experts will be in attendance to provide information, address questions and record public comment. The information sessions will be advertised in the local newspaper(s), while notifications will be sent via direct mail to residents, occupants, landowners and other interested parties (stakeholders) within the designated notification radius. Tervita will capture questions and comments along with the associated follow up/answers. Feedback forms will be available at the information sessions for participants to request additional material or who prefer written correspondence.

Tervita's objective is to work with potentially affected stakeholders and interested parties to identify adverse effects related to Tervita's Project activities. Tervita's objectives also include:

- Commencing consultation early in the Amendment planning process;
- Identifying how stakeholders and interested parties wish to be consulted and allowing flexibility in the manner and form of notification and consultation (e.g., in-person meetings, working groups, brochures, letters, phone calls, emails, mail and/or websites);
- Ensuring stakeholders and interested parties have an accurate understanding of the Amendment and are given the opportunity to provide their feedback;
- Communicating in plain language;
- Allowing sufficient time to review Amendment materials;
- Adequately responding to concerns raised; and
- Seek to avoid, address, mitigate or otherwise manage impacts identified through the consultation process in a timely manner.

First Nations Consultation Plan

Since July 2014, Tervita has been involved in preliminary discussions with identified First Nations as Tervita has worked to develop an understanding of issues, concerns and interests related to Project activities. Tervita will continue to consult with identified BC



Treaty 8 First Nations. The Treaty 8 First Nations communities identified by the EAO are identified below:

- Blueberry River First Nations; and
- Doig River First Nation.

While not specified by the EAO, Tervita has and will continue to communicate with, inform and notify the following additional Treaty 8 First Nations:

- Halfway River First Nation;
- West Moberly First Nation;
- Saulteau First Nation;
- Prophet River First Nations;
- McLeod Lake Indian Band; and
- Fort Nelson First Nation.

1.4 - Regulatory Requirements of Other Jurisdictions

The Facility currently operates under the following permits:

- MoE permit: PR 17150 (as amended February, 2012); and
- EAO permit: PAC WD02-01 (July 15, 2002).

The Project is subject to an Environmental Assessment as per the BC *Environmental Management Act* - Reviewable Project Regulations. A project description was submitted to the EAO in February 2014, with the EAO acknowledging that the project was reviewable.

1.5 - Presence of Environmental Study

The designated project will not be taking place in a federally sanctioned region that has been the subject of an environmental study as confirmed verbally with the Canadian Environmental Assessment Agency (CEAA) on August 10, 2015.



2.0 Project Information

2.1 - General Description under Regulations Designating Physical Activities

In 2002, Tervita (formally CCS Inc.) was issued approvals from the EAO and MoE. The EAO issued PAC WD02-01 and MoE issued PR 17150 for the construction and operation of the Facility. The landfill opened its first cell in October 2002, with additional cells constructed in 2003, 2006, 2008, 2011, 2012, and 2015. It is anticipated that the current operating cell (cell 6) will reach maximum capacity by 2016, and the final cell of the originally approved Facility footprint will be constructed and filled to capacity by 2018. Tervita is seeking to amend PAC WD02-01 and PR 17150 to incorporate an additional area approximately the same size as the original 25-hectare landfill, which would provide for an estimated additional 30 year lifespan of the Facility. The designated Project is deemed to fall under an activity listed in the CEAA Regulations Designating a Physical Activity as per Section 2.2 of this Project Description.

2.2 - Provisions in the Schedule to the Regulations Designating Physical Activities

As per previous communications and as deemed in a formal letter sent by CEAA August 6, 2015, Paragraph 30 of the *Act*, applies to Tervita's Project, as it has been deemed reviewable since "The construction, operation, decommissioning and abandonment of [the] Facility is used exclusively for the treatment, disposal or recycling of hazardous waste, or an expansion of a Facility that would result in an increase in its production capacity of more than 50%".

Tervita acknowledges CEAA's interpretation of Paragraph 30. Tervita is pleased to provide the following information on the operations of the landfill as context for CEAA in the review of the Project. The Silverberry landfill is not used exclusively as a hazardous waste facility. As seen in Table 2-1, a significant portion of the waste is non-hazardous, (non-hazardous by both provincial and federal standards).



Table 2-1: 2014 Tervita Silverberry Hazardous and Non-Hazardous Waste Volumes

able 2-1: 2014 Tervita Silverberry Hazardo Substance	Total Volume (Tonnes)	Non-Hazardous Volume	Hazardous Volume (%)	Applicable Provincial Hazardous Criteria	Applicable Federal Hazardous Criteria
Catalyst Non-Sulphur	343.25	100.00	0.00	N/A	N/A
Catalyst Sulphur	69.11	100.00	0.00	N/A	N/A
Cement	2,019.14	100.00	0.00	N/A	N/A
Construction & Demo Material	184.40	31.05	68.95	-Waste oil >3% content -Leachable Benzene, Toluene, Ethylbenzene, and or Xylenes (BTEX) -Flash Point < 60.5°C	-TDG substance, solids containing flammable liquids, Class 4.1 -Substances with Toluene, Ethylbenzene and Xylene greater than or equal to 100 mg/kg -Substances with Benzene producing a leachate in concentration greater than or equal to 0.5 mg/L
Contaminated Soil (Chemical/Solvent)	610.64				
Contaminated Soil (Crude Oil/ Condensate)	28,432.98				-TDG substance, solids containing flammable liquids, Class 4.1
Contaminated Soil (Mercury/ Metals)	6,931.11			-Waste oil >3% content	-Substances with Toluene, Ethylbenzene and Xylene greater than or equa
Contaminated Soil (Pesticide / Herbicide)	0.00	45.33	54.67	-Leachable Benzene, Toluene, Ethylbenzene, and or Xylenes (BTEX)	to 100 mg/kg
Contaminaed Soil (Produced / Salt Water)	35,230.80			-Flash Point < 60.5°C	-Substances with Benzene producing a leachate in concentration greater
Contaminated Soils (Refinded Fuels / Oils)	16,735.90				than or equal to 0.5 mg/L
Contaminated Soils (Sulphur)	205.44				
Dessicant	4.17	100.00	0.00	N/A	N/A
Frac Sand (Non- Radioactive)	154.03	100.00	0.00	N/A	N/A
Incinerator Ash/ Buffer	6,518.82	98.36	1.64	-Wood incinerator ash > pH 8	-TDG substance, corrosive solids, Class 8
Sand Produced	38.21	100.00	0.00	N/A	N/A
Flare Pit Material	29,530.04	100.00	0.00	N/A	N/A
Hydrocarbon Contaminated Material	11,432.67	100.00	0.00	N/A	N/A
Lime Sludge	238.02	100.00	0.00	N/A	N/A
Contaminated Process Material (Pad Waste)	6,172.69	100.00	0.00	N/A	N/A
Sulphur	1,252.75	69.28	30.72	-Waste oil >3% content -Leachable Benzene, Toluene, Ethylbenzene, and or Xylenes (BTEX) -Flash Point < 60.5°C	-TDG substance, solids containing flammable liquids, Class 4.1 -Substances with Toluene, Ethylbenzene and Xylene greater than or equa to 100 mg/kg -Substances with Benzene producing a leachate in concentration greater than or equal to 0.5 mg/L
Misc. Waste Industrial	37,690.38	100.00	0.00	N/A	N/A
Dri ll ing Waste Hydrocarbons	273,564.65				-TDG substance, solids containing flammable liquids, Class 4.1
Drilling Waste Gel Chemical	17,355.56	20.26	70.64	-Waste oil >3% content	-Substances with Toluene, Ethylbenzene and Xylene greater than or equa
Drilling Waste Advanced Chemical	49,559.34	20.36	79.64	-Leachable Benzene, Toluene, Ethylbenzene, and or Xylenes (BTEX) -Flash Point < 60.5°C	to 100 mg/kg -Substances with Benzene producing a leachate in concentration greater than or equal to 0.5 mg/L
NORM	16,775.32	5.73	94.27	-Waste oil >3% content -Leachable Benzene, Toluene, Ethylbenzene, and or Xylenes (BTEX) -Flash Point < 60.5°C	-TDG substance, solids containing flammable liquids, Class 4.1 -Substances with Toluene, Ethylbenzene and Xylene greater than or equa to 100 mg/kg -Substances with Benzene producing a leachate in concentration greater than or equal to 0.5 mg/L
Liner Disposal	1,348.42	100.00	0.00	N/A	N/A
Total	542,397.84	38.09	61.91	N/A	N/A



Only solid, non-hazardous and select hazardous oilfield, forestry and industrial wastes are accepted for disposal at the landfill. In determining the breakdown of hazardous versus non-hazardous waste, Tervita reviewed both Provincial and Federal criteria. In 2014, approximately 40% of the waste accepted into the landfill was non-hazardous. Of the remaining 60% of waste streams which have the potential to be hazardous, only a portion were deemed hazardous.

The Facility is permitted to accept only the following secure (hazardous) wastes based on Provincial HWR regulations.

- Waste Oil >3% Content;
- Leachable Benzene, Toluene, Ethylbenzene, and/or Xylenes (BTEX) less than a total combined concentration of 1,000 mg/kg;
- Flash Point <60.5°C (only applies to Solids containing Flammable Liquids TDGR UN3175); and
- Wood/Incinerator Ash >pH 8.0.

Federally, hazardous waste is determined using the *Export and Import of Hazardous Waste* and *Hazardous Recyclable Material Regulations* and align with the definition of provincially permitted hazardous waste. The Silverberry landfill can only accept the following hazardous waste based on Federal parameters:

- Section 1(b) TDG Substance, Solids Containing Flammable Liquids, Class 4.1 UN3175;
- Section 1(b) TDG Substance, Corrosive Solids, Class 8 (Silverberry only accepts wood ash or incinerator ash with a pH greater than 12.5);
- Section 1(d), substances with Toluene, Ethylbenzene and Xylene in total combined concentrations greater than or equal to 1,000 mg/kg (including Benzene); and
- Section 1(e), substances with Benzene producing a leachate (TCLP) in concentration greater than or equal to 0.5 mg/L.

Resultantly, only the following waste streams accepted at the Facility have the potential (depending on concentrations) to be hazardous:

- Contaminated Soils (Crude Oil / Condensate);
- Contaminated Soils (Refined Fuels / Oils);
- Flare Pit Material:
- Hydrocarbon Contaminated Material;
- Drilling Waste Hydrocarbons; and
- Incinerator Ash/Buffer.

As per in Table 2-1, these waste streams make up approximately 60% of the waste accepted at the Facility, of which only a portion meets the criteria for hazardous waste. It is important to note, given the variability in the nature of how these wastes are generated that they do not consistently meet the criteria for hazardous waste and thus only a portion of the 60% is hazardous.

Due to strict limitations within the Facility approvals on what hazardous wastes are accepted, the ability of the Facility to accept hazardous wastes is very limited when



compared to other Secure landfills in Alberta. This comparison is highlighted in Table 2-2, in which allowable limits for a Secure landfill in BC are compared to a Class I landfill in Alberta.



Table 2-2: BC Silverberry Secure Landfill and AB Hazardous Landfill Comparison

Table 2-2: BC Silverberry Secure Landfill and AB Hazardous Landfill Comparison				
Chemical Name / Parameter	BC – Silverberry Secure Landfill	AB – Hazardous Waste Landfill	Comments	
Flash Point	Less Than 60.5°C	Less Than 60.5°C	Silverberry landfill ONLY applies to Solids Containing Flammable Liquids TDGR UN3175	
рН	2.0 - 12.5	Greater than 12.5 applies to broad waste stream	Silverberry landfill pH greater than 8.0 ONLY applies to Wood ash and Incinerator ash	
Benzene	Combined total of	Combined total of		
Toluene	BTEX must be equal	BTEX must be equal		
Ethylbenzene	to or less than 1,000	to or less than 1,000	_	
Xylene(s)	mg/kg	mg/kg		
Waste Oil	Greater than 3% waste oil content	-	ONLY applies in the province of BC	
Leachable Metals				
Arsenic	Non-Haz levels only	Hazardous acceptance approved 500 mg/L	-	
Beryllium	Non-Haz levels only	Hazardous acceptance approved 100 mg/L	-	
Cadmium	Non-Haz levels only	Hazardous acceptance approved 100 mg/L	-	
Chromium (VI)	Non-Haz levels only	Hazardous acceptance approved 500 mg/L	-	
Lead	Non-Haz levels only	Hazardous acceptance approved 500 mg/L	-	
Mercury	Non-Haz levels only	Hazardous acceptance approved 20 mg/L	-	
Nickel	Non-Haz levels only	Hazardous acceptance approved 500 mg/L	-	
Selenium	Non-Haz levels only	Hazardous acceptance approved 200 mg/L	-	
Silver	Non-Haz levels only	Hazardous acceptance approved 100 mg/L	-	



Table 2-2: BC Silverberry Secure Landfill and AB Hazardous Landfill Comparison (continued)

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2.3 - Components Associated with the Designated Project

The waste acceptance volumes are expected to remain consistent with the volumes in 2014 and will not result in an increase of hazardous waste input capacity of 50% or more. There will be no new buildings or structures added to the Facility as part of the Project. Existing structures include a scale, a scalehouse, a quonset and a fuel tank for refueling equipment. The Project will replace the Facility capacity with an additional 6,000,000 tonnes of volume and increase the Facility's lifespan to support regional economic activity.

The design of the capacity replacement is comprised of six cells of varying sizes. Cell construction is staged over time, as one is filled the next is built. As each cell is developed, the liner and leachate collection systems will be tied together to provide a continuous liner system under the entire expansion area. This will allow development of the expansion area as one contiguous fill mass, rather than individual pockets, which is common landfill construction practice. Additionally, the design of the capacity replacement provides for a 50m wide secure buffer zone on the property owned by Tervita, surrounding the active area of the landfill.

Construction

Construction of the first cell is scheduled to start as soon as practicable following the receipt of Project approvals and seasonal limitations. The current estimate is for construction to start in summer 2017. The construction period for the initial cell will be approximately two months, starting with major earthworks, proceeding through liner installation and finishing with the leachate collection system installation.

Clearing and grubbing will be completed prior to excavation of the cell footprint. The topsoil, subsoil and common material (clay) from the excavation will be removed and stored in stockpile locations. Once the excavation is complete, select clay material (1,000mm) will be placed back into the cell, compacted, and sloped to a common collection point. Leak detection pipes overlaid by a double sided geocomposite drainage layer will be installed above the clay layer forming the leak detection system. This system is used to detect the presence of free liquids that may have permeated the main liner system from above, thereby, verifying physical integrity of the main cell. The main liner system consists of a double sided geocomposite drainage layer underlain by a high-density polyethylene (HDPE) liner and compacted clay liner (600mm). The main liner system is covered by a frost protection layer consisting of 200mm of granular buffer material and 500mm of select waste. Construction of a typical cell is illustrated in Photo 2-1.





Photograph 2-1: Typical Cell Construction Photo

The construction labor force will consist of project engineers, liner installation specialists, and contractors for general earthwork. The total labor force will vary from 5-20 persons at any time, depending on the stage of construction. There will be no construction camp onsite. Construction personnel will likely be accommodated in Fort St. John, BC.

Operations

Guidance for operation of the landfill is provided by the current landfill Operations Plan. The landfill Operations Plan is required to be approved by MoE as per PR 17150.

Waste will arrive at the site on trucks owned and operated by third party oilfield companies. There will be no increase in traffic volume as a result of the landfill expansion. Only solid, non-secure (non-hazardous) and select secure (hazardous) oilfield, forestry and industrial wastes are accepted for disposal at the landfill. Third-party food wastes or other readily biodegradable wastes are not permitted for acceptance or disposal at the Facility. Gases resulting from the decomposition of landfilled wastes are not expected due to the nature of the solid wastes. The Facility utilizes specific waste acceptance procedures, outlined in the Operations Plan, prior to accepting and processing all incoming waste to ensure only approved wastes are accepted.

The following procedures are designed to protect the environment, the interests of Tervita, its' customers, and to aid in ensuring only approved wastes are disposed of at the Facility. All material intended for disposal are subject to the following acceptance protocol:

- Representative samples taken by the generator at point of origin;
- Analysis completed by independent Standards Council of Canada accredited lab;



- Completion of a Waste Approval Application;
- Facility owner/operator review of waste documentation for issuance of Waste Conformation Form;
- Waste acceptance or refusal waste acceptance is conditional on the results of gate screening procedures; and
- Waste is screened and weighed prior to unloading with all documentation in place at that time.

Hydrocarbon odors may be present at times in the vicinity of the active landfilling area, but are not expected to be detectible at the Facility property boundaries. Emissions are negligible and are only attributed to onsite heavy machinery.

Landfill leachate will be collected and stored within engineered lined ponds and trucked offsite for disposal in injection wells. A third party provides trucking service while Tervita owns and operates the injection wells and sites. The water injection wells are permitted by the BC Oil and Gas Commission (OGC) and the BC MoE for disposal of non-hazardous waste. There will be no change to injection sites or wells as a result of the landfill expansion as the existing site(s) have the capacity to handle. Leachate volumes are expected to remain consistent as landfill cells are progressively capped in order to reduce the generation of leachate.

Closure

An updated closure plan was submitted for review to the MoE on March 26th, 2015. Closure costs for the Facility were updated in 2015 and the appropriate surety provided to the Province of BC. As a requirement of the MoE permit, Tervita has to update closure costs for the Facility annually and adjust financial security. The posting of security by Tervita serves to manage liability for the closure of the Facility. At the end of its operational life, the Facility will be decommissioned and post closure activities will commence. Closure activities will include the following:

- Grading and compaction;
- Capping;
- Soil cover (subsoil and topsoil);
- Vegetation capping;
- Removal of site infrastructure; and
- General site restoration.

Post closure activities will include the following:

- Leachate management;
- Environmental monitoring;
- Landfill cap maintenance; and
- General site maintenance.

Post closure activities will be completed for a minimum of 25 years upon Facility closure.



2.4 - Emissions, Discharges and Waste

The emissions, discharges and waste that will be generated as a result of construction and operation are summarized in Table 2-3.

Table 2-3: Facility Generated Emissions, Discharge and Waste

Waste Type	Source	Phase	Location
Air Emissions (SO _x , ,NO _x and Particulate Matter)	Construction equipment emissions while building new landfill and dust from roads	Construction and Operation	Throughout landfill roadways and expansion
Liquid Discharge	Surface water collection	Construction and Operation	Stormwater pond
Leachate	Water that comes into contact with waste in the landfill	Operation	Un-capped landfill cells stored within a lined leachate containment pond
Used Oil	From equipment at landfill	Construction and Operation	Used oil tank
Municipal Solid Waste	Day to day landfill operations	Construction and Operation	Operational Buildings

2.5 - Project Schedule

It is anticipated that the final cell of the existing Facility footprint will be constructed and filled to capacity by 2018. Tervita estimates that all amendments will be in place by spring 2017 with construction to commence in summer 2017. A schedule is outlined in Table 2-4.

Table 2-4: Project Schedule

Phase of Project	Activities	Date
EAO and MoE permits obtained	Permitting	Spring 2017
Equipment mobilized to site	Transportation	Spring 2017
Construction of landfill expansion	Land clearing, excavating, grading, stockpiling of excavated material, compaction and liner installation	Summer-Fall 2017
Demobilization of equipment	Transportation	Fall 2017
Landfill operation	Excavating, grading, and compaction	2017-2047
Closure or future expansion	See section 2.3	2047



3.0 Project Location

3.1 - Facility Coordinates

The Facility is located at Latitude 56.626814 and Longitude -121.157348.

Site Map/Plans

The conceptual capacity replacement is illustrated in the Detailed Site Plan and shows a total of six proposed cells. The area where the capacity replacement will occur is shown in the photographs below, which were taken from the center of the proposed Project area. In 1963, the land was purchased from the Ministry of Crown Lands (Province of BC 1963). Between 1970 and 1972, the south part of Block A, Section 8 and Block B, Section 7 was cleared. The Archeological Overview Assessment completed in 2002 deemed the area to have low archeological potential.



Photograph 3-1: North View



Photograph 3-2: East View





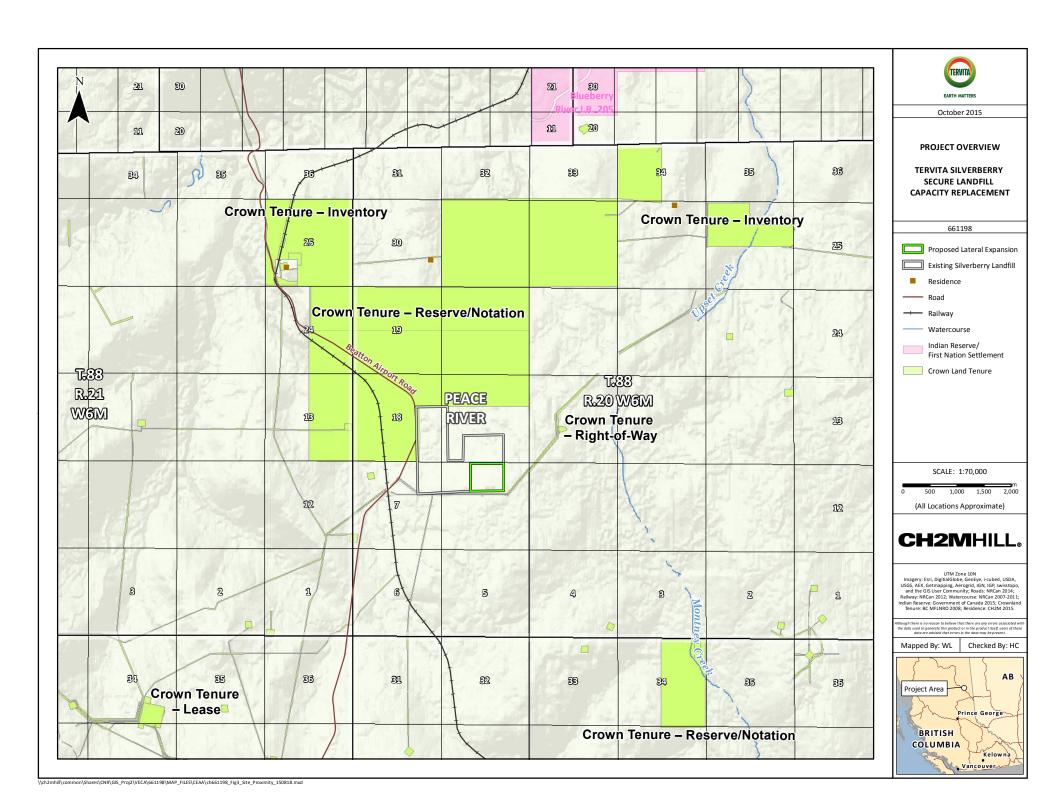
Photograph 3-3: South View

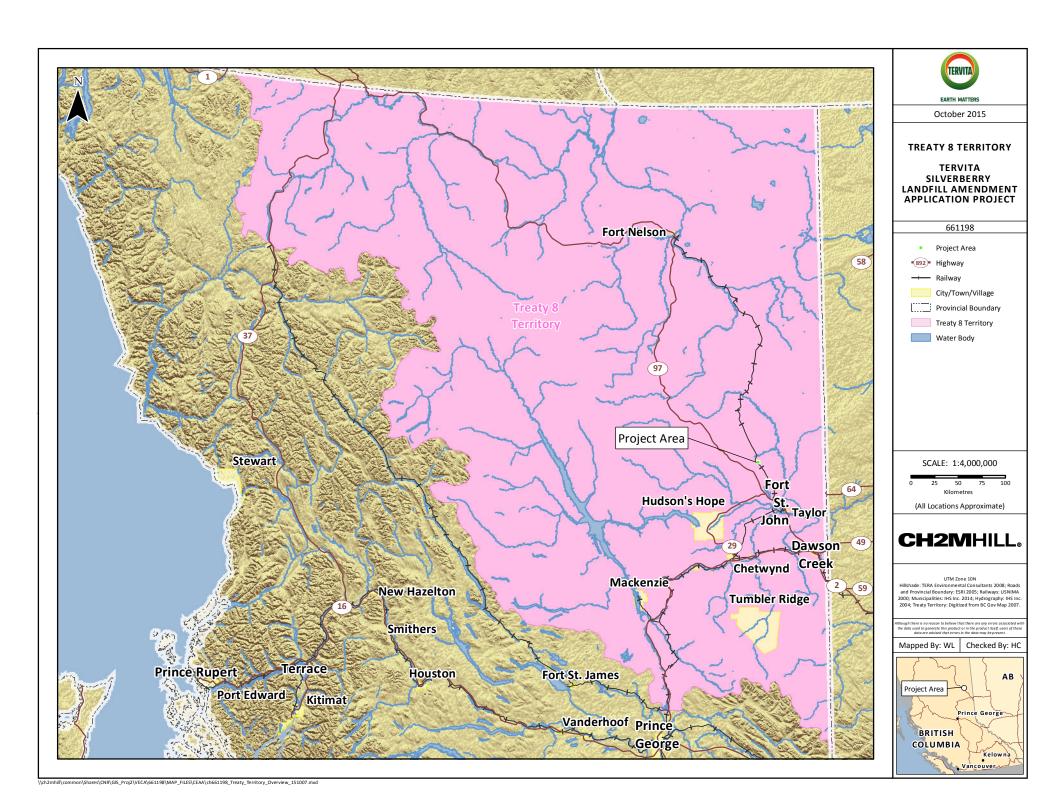


Photograph 3-4: West View

Photographs 3-1 through 3-4 were taken in August, 2015 and illustrate the surrounding landscape. The property was cleared more than 50 years ago and none of the proposed development area is native, except for a small stand of trees (0.016km²) to the eastside of the property

The Project Overview Map and Treaty 8 Territory Map illustrates the location of residences, Federal lands and instances of settlement land. There are no Federal lands in the vicinity except for the Blueberry First Nations reserve. The Project is within the Treaty 8 First Nations Territory as per the Treat 8 Territory Overview.







3.2 - Zoning Designation of Land

The legal land location of the Facility is 08-088-20W6M. The existing landfill and the Project are located on privately owned land.

On February 28, 2002, the property was rezoned from Public Use to Oil and Gas Production to accommodate the construction of a secure landfill. There are four main land and resources uses that occur within a 5km radius of the Facility – agriculture, forestry, oil and gas exploration and development, and trapping.

3.3 - Land/Water use Plans Near Project Site

The Project falls within the Fort Nelson Land and Resource Management Study area, but is not within any of the designated Resource Management Zones (Protected Zone, Special Management Zone, General Management Zone, or Enhanced Resource Development Area). The closest Resource Management Zone is the Enhanced Resource Development Zone which is approximately 100km northwest of the Facility.

3.4 - Impact on Aboriginal Traditional Land Use

The designated project area will not access, occupy, explore or develop land or resources currently being used for traditional purposes by regional Aboriginal peoples. The Archeological Overview Assessment completed in 2002 deemed the area to have low archeological potential. The current Facility is fenced to Provincial regulations. The Project is on private land, and once constructed, it will also be fenced to the same standard as the current Facility.



4.0 Federal Funding

4.1 - Financial Support from Federal Authorities

Tervita expects no financial support from Federal authorities.

4.2 - Federal Lands Used Under Designated Project

No Federal lands will be used for the purpose of the designated project.

4.3 - List Federal Permits, Licenses or Other Required Authorizations

No Federal permits, licenses or authorizations will be required.



5.0 Environmental Effects

5.1 - Physical and Biological Setting

Air Quality / Odor

The only source of emissions generation is from the excavators and bulldozers used to process waste at the Facility. There are no residents or neighbors near the Facility. Tervita believes there is no need to mitigate this source at this time.

During periods of low precipitation, the Facility will use water collected in runoff controls (i.e. ponds) to water roads for dust control. As there are no residents or neighbors near the Facility, concerns related to dust are not anticipated.

The proposed disposition of wastes in a landfill will store the carbon in the waste fill and result in negligible release of carbon dioxide to the atmosphere. Given the total volume of waste to be landfilled over the life of the Project and expected carbon content of the waste, there will be a significant net reduction of carbon dioxide released to the atmosphere. By direct landfilling materials, the carbon is being sequestered, thereby decreasing overall greenhouse gas emissions.

Wildlife / Animal Mortalities

No significant habitat loss or alteration will occur on the Project site (a large majority of the site was previously utilized for agriculture prior to the Facility being constructed). Any potential impacts from the proposed Project on wildlife resources are likely to be highest in the far east corner of the property, where there is a small treed area that is to be cleared. Prior to the removal of the trees, a wildlife survey will be completed to assess and help develop mitigations as required for potential wildlife impact(s). The wildlife survey will include a bird survey to identify potential and resulting effects to migratory birds.

Given the Project area is primarily cultivated land adjacent to the current operating landfill footprint, there is little expected impact on wildlife habitat and habitat effectiveness. Tervita will take into consideration when wildlife are most vulnerable (i.e. nesting or fledgling season) prior to any tree removal activities (Restricted Activity Period is between May 1 - August 10).

Fisheries and Surface Water

The closest naturally occurring fish-bearing watercourse is over 1.2km north of the Project footprint, and no permanent or defined drainage networks exists between the proposed Project and the identified watercourse. Pathways to surface water exist when Tervita discharges collected and tested water from the surface water control network. Tervita discharges surface water via a controlled release to the soil (ground) in proximity to the surface water pond on the northern boundary of the Facility. Tervita will take care not to discharge to saturated soil to minimize the potential of infiltration to nearby surface water bodies.



The potential impact of the proposed Project on fish populations is disturbance to or contamination of food sources in drainages upstream of fish-bearing habitat. The risk of disturbance and contamination is low due to the proximity of the water bodies.

There are several engineered surface water bodies designed to manage runoff at the Facility. Seasonal surface water drainage from the proposed Project (i.e., snow melt and rainfall) will be controlled by ditches, berms, and ponds. Surface drainage flows northwest from the Facility, toward a surface water pond. All surface water within the Facility footprint is directed and contained onsite. Engineered onsite surface controls do not contain fish and are not considered suitable habitat.

Considering the characteristics of the natural environment as previously described, and the scope of the Project operations and Project design, no potential impacts to aquatic resources in the area are anticipated. The Facility will be constructed to meet design requirements as per Section 27 of the HWR.

Groundwater

Potential impacts to the groundwater at the Facility and the surrounding area are contamination of groundwater from landfill operations. The landfill is designed with liners, leak detection and leachate collection systems that meet or exceed all applicable requirements.

The groundwater flow at the site is to the northwest. The horizontal groundwater velocity beneath the site was estimated to be less than 0.3m/year in 2014. The groundwater below the landfill generally shows recharge conditions.

Tervita maintains a Groundwater Monitoring Program that samples onsite groundwater wells and leachate collection points four times annually (spring, summer, fall, and winter). The objectives of the Groundwater Monitoring Program are to meet the requirements of the Facility's MoE permit, to provide long-term monitoring of groundwater conditions at the landfill, and to assess whether there are any effects on groundwater due to the landfill operations.

Regular groundwater monitoring has been conducted at the landfill before and after site commissioning. The current groundwater monitoring well network consists of 11 active monitoring wells. As documented in current and historical groundwater reports, data shows the activities of the Silverberry landfill have not impacted groundwater. Review of the leak detection sample data indicates that the current leachate collection and containment system(s) are operating properly.

Soils

The soils in the region are dominated by Orthic Gray, Orthic Dark, Gleyed Gray and Gleyed Dark Gray Luvisols. The Orthic Gray Luvisols have a thin grayish Ae horizon, a transitional AB or B4 horizon and a slowly pervious Bt horizon. The Dark Gray Luvisol is similar to the Orthic profile except for the presence of an Ah horizon greater than 5cm thick. The Bt horizon in these soils slows downward water movement, which often results in a perched



water table, during spring break up or after lengthy rainfall events. Color change from the A to B horizons is generally poor.

Vegetation

The proposed Project footprint will primarily be on cultivated land. There is a small treed area to the east of the Facility and approximately $0.016 \mathrm{km}^2$ of vegetation will be removed. Upon Facility closure, reclamation activities will be completed with the capped landfill cells seeded with an approved regional seed mixture.

An Ecological assessment was completed and indicated that the treed area contains young aspen-rose-creamy peavine. One moist, shrubby area was observed at the eastern side of the study area composed of willows, alder and bluejoint reedgrass. No invasive plant species or rare plant species were documented.

Terrain

The topography of the site is sloped from the southeast to northwest at approximately 45 horizontal to 1 vertical (45:1). Approximately 30m of vertical relief is present within the proposed landfill site.

Noise

There will be vehicle noise generated by both construction and operational phases of the Project. Truck traffic, heavy equipment, back-up beepers, and speaker systems are typical noises generated from Facility activities. These noise sources may be temporarily increased during times of construction, however during normal Facility operations it is not expected to increase from current noise conditions.

The noise generation will occur regularly during the daylight hours where vehicular traffic is at its peak; however, such noises are generally of a volume that would not normally be noticeable outside the boundaries of the Facility. The closest seasonal neighbor is approximately 2.5km away. No significant noise impacts are anticipated from the Facility.

Economic and Social

The socio-economic effects resulting from the Project will be regionally positive. The Facility and the community will continue to benefit through regular, full-time employment in Facility operations, as well as an increased number of jobs during construction phases of the Project.

The landfill provides the oil and gas industry with an economically viable and environmentally responsible waste management solution in northeastern BC. The existence of competitive disposal facilities in the area increases the economic viability of BC oil and gas within the North American market, encourages further development leading to increased royalty revenues for the Crown, and enhances employment and economic opportunities within the region extending from Fort Nelson to Fort St. John.



The Facility will continue to provide permanent and contract employment positions throughout the construction, operation, maintenance, expansion, and closure phases over the lifetime of the Facility. The Facility currently employs 10 people to manage day to day operations. During the addition of new landfill cells, up to 20 additional employees are expected to be onsite throughout the construction phases.

Project activities such as construction may affect noise, air quality, surface water quality and groundwater quality. The nearest residence is located farther than 3.5 km from the proposed Project area. No noise complaints have been received at the existing Silverberry secure landfill and the location of the proposed project is beside the existing landfill and as such, the location of the source of noise will not alter how far the nearest residence is located.

Cultural and Heritage

Impacts to cultural and physical heritage as a result of the Project are not anticipated. In 1963, the land was purchased from the Ministry of Crown Lands. Between 1970 and 1972, the south part of Block A, Section 8 and Block B, Section 7 was cleared. The Archeological Overview Assessment completed in 2002 deemed the area to have low archeological potential.

5.2 - Potential Impact to Fish and Fish Habitat, Marine Plants and Migratory Birds

Pathways to surface water exist when Tervita discharges collected and tested water from the surface water control network. Tervita take care not to discharge to saturated soil to minimize the potential of infiltration to nearby surface water bodies.

Given the Project area is primarily cultivated land adjacent to the current operating landfill footprint, there is little expected impact on wildlife habitat and habitat effectiveness. On the east edge of the proposed footprint, there is a stand of young aspen and alders that are going to be mulched (approximately $0.016 \mathrm{km}^2$). The removal of the trees will result in reduced habitat effectiveness in the immediate area; however, mitigation measures such as timing of mulching will be reviewed prior to removal of trees.

Peace Forest District lands surrounding the Project may provide habitat for wildlife species, including mammals, birds and amphibians. Boreal forests, including coniferous, deciduous and mixed wood stands, may provide nesting and foraging habitat for birds (e.g., songbirds and raptors), as well as thermal and security cover for mammals (e.g., moose). Seasonally and permanently wet areas may provide nesting habitat for waterfowl and riparian birds, breeding habitat for amphibians, and foraging habitat for mammals. The BC Conservation Data Centre, identified 47 potentially occurring species at risk in the Peace Forest District (which includes the Project Area), including 42 species on the provincial red and blue lists, and 15 species listed as Threatened, Endangered or Special Concern on Schedule 1 of the *Species At Risk Act* (SARA), and 20 migratory bird species. Recent wildlife fieldwork identified 4 mammal species, 23 bird species (of which 21 are migratory and 19 are not at risk) and 1 amphibian species within the Project Area. As per Table 5-1, three species of conservation concern were observed including Canada warbler (Blue listed in BC, designated as Threatened on the SARA (Schedule 1), common nighthawk (designated as Threatened on SARA Schedule 1), and western toad (Blue listed in BC, designated as



Special Concern on SARA Schedule 1). The Project footprint is dominated by an agricultural hayfield that is unlikely to provide suitable nesting or breeding habitat. However, construction related noise is likely to be heard several hundred meters away before dissipating to levels below ambient noise, which will likely result in sensory-related disturbance to bird species in the forested portion of the Project footprint, or in nearby habitats. Noise-related sensory disturbance could induce nest abandonment, or interfere with mating rituals. Mitigation measures will include: restrict clearing outside of known fledging times and performing pre-construction surveys for active migratory bird nests within the Project Footprint.

Table 5-1: Species Observed During Field Work

Birds			
Species	Migratory Species (Yes/No)	Special Status	
American redstart	Yes	N/A	
American robin	Yes	N/A	
Black-and-white warbler	Yes	N/A	
Black-capped chickadee	No	N/A	
Canada warbler	Yes	SARA (Threatened)	
Chipping sparrow	Yes	N/A	
Clay-colored sparrow	Yes	N/A	
Common nighthawk	Yes	SARA (Threatened)	
Golden-crowned kinglet	Yes	N/A	
Hermit thrush	Yes	N/A	
House sparrow	No	N/A	
Lazuli bunting	Yes	N/A	
Northern harrier	Yes	N/A	
Red-breasted nuthatch	Yes	N/A	
Red-eyed vireo	Yes	N/A	
Ruby-crowned kinglet	Yes	N/A	
Savannah sparrow	Yes	N/A	
Swainson's thrush	Yes	N/A	
Townsend's solitaire	Yes	N/A	
White-throated sparrow	Yes	N/A	
Wilson's warbler	Yes	N/A	



Table 5-1: Species Observed During Field Work (continued)

Birds				
Species	Migratory Species (Yes/No)	Special Status		
Yellow-rumped warbler	Yes	N/A		
Mammals				
Deer species	N/A	N/A		
Elk	N/A	N/A		
Moose	N/A	N/A		
Red squirrel	N/A	N/A		
Amphibians	Amphibians			
Western toad	N/A	SARA (Special Concern)		

5.3 - Changes to the Environment on Federal Lands, Provinces or Outside Canada

There will be no changes to the environment on Federal lands or any other province, besides BC. The Project is being reviewed by the EAO.

5.4 - Effects on Aboriginal Peoples

Environmental effects of the Project will be contained onsite and will have minimal effects to the Aboriginal peoples. Ongoing consultation in the form of project updates will be completed with Aboriginal Peoples as the Project progresses. Potential environmental effects related to Aboriginal peoples have been identified through the Canadian Environmental Assessment Act 2012 (CEAA 2012), Section 5(1)(c). Environmental effects on Aboriginal people include:

- Health conditions;
- Socio-economic conditions;
- Physical and cultural heritage;
- · Current use of lands and resources; and
- Historical/archaeological.

Health Effects

Health may be affected through air, surface water and groundwater pathways. Impacts to these pathways are expected to be limited to the Facility footprint.

The regional study area for air quality will encompass a 5.0km radius extending outwards from the proposed Project Footprint boundary, including associated physical works and activities. Heavy equipment will produce emissions which will be increased during construction but remain the same as they are now during operations. Perception of odour and dust from construction equipment and wind erosion can affect quality of life; however, due to the nature of the landfill materials, landfill gas generation will be minimal. Dust from construction material handling and earth grading can affect terrestrial vegetation. Tervita limits the impact of dust through watering site roads and waste, revegetation of soil



stockpiles and limiting the speed limit onsite. Implementing the above measures will limit dust impacts to Tervita's property boundary.

There is potential for contamination of surface water by the proposed Project due to stormwater runoff. Runoff that has come into contact with waste will be handled as leachate and segregated to ensure it is handled and disposed of properly. Leachate is collected in engineered lined ponds and shipped to water injection wells. The water injection wells are permitted by the BC Oil and Gas Commission (OGC) and the BC MoE for disposal of non-hazardous waste.

There are berms around the outside landfill boundary to stop the run-on of clean surface water and limit potential contamination. Ditching around the inside of the landfill boundary collects surface water within the footprint and directs the water to an engineered surface water pond. Surface water from the pond is tested for criteria laid out in the BC HWR prior to discharge to ensure contaminants are not released to the environment. Surface water quantity is not expected to be a concern as no changes to surface water quantity have been observed at the existing landfill. Construction and operation may introduce groundwater contamination. Groundwater contamination may affect downstream surface water, aquatic habitat or drinking water through migration of leachate through the soil to groundwater or aguifers. The landfill liner system is designed to prevent contamination of groundwater. Silverberry is built to Secure Landfill specifications as laid out in the BC HWR. The composite primary liner system is a 1.5 mm thick HDPE primary liner with a 0.6 m thick Compacted Clay Liner (CCL) immediately below the HDPE. This is underlain by a leak detection system and a secondary 0.6 m thick CCL. Liner materials may vary from each cell development noting that design requirements of the HWR will be met. Information from previous site investigations and data collection efforts (i.e., annual groundwater monitoring program) will be completed on a scheduled basis to ensure the groundwater is not being contaminated.

Socio-economic Effects

The socio-economic effects resulting from the Project will be positive for the Aboriginal communities in the area as the Facility and the communities will continue to benefit through potential opportunity in full-time employment in Facility operations, or work during construction phases of the Project.

Physical and Cultural Heritage Effects

The proposed Project will not result in effects to the physical and cultural heritage of the area as the proposed Project footprint will primarily be on cultivated land. There is a small treed area to the east of the Facility and approximately 0.016km^2 of vegetation will be removed. The project on cultivated land and the removal of vegetation will not alter the landscape in such a manner that it will effect physical and cultural heritage or alter the current land and resources for traditional purposes. Tervita has initiated consultation with local Aboriginal trappers and any concerns will be addressed.



Current use of lands and resources

The current lands of the proposed footprint is owned by Tervita is not used for any traditional purposes. Except for the vegetation onsite (0.016km²), the proposed footprint is cultivated and hayed on a yearly. The land surrounding the proposed project area

Through meetings with the community, it was confirmed verbally that trapping was active in the 1970s near the project area. However, due to development in the area, active trapping by local first nations has not been conducted in the area for approximately 30 years.

Historical/Archaeological Effects

A previous Archeological Overview Assessment was completed in 2002 and deemed the area to have low archeological potential. There are no structures, sites or things of historical, archaeological, paleontological, or architectural significance that will be impacted.



6.0 Proponent Engagement and Interaction with Aboriginal Groups

6.1 - List of Aboriginal Groups Potentially Interested / Affected by Designated Project

Since July 2014, Tervita has been involved in preliminary discussions with the identified First Nations and has worked to develop an understanding of issues, concerns and interest related to Tervita's activities. Tervita will continue to consult with identified BC Treaty 8 First Nations. Specifically, the Treaty 8 First Nations communities identified by the EAO are:

- Blueberry River First Nations (BRFN); and
- Doig River First Nation (DRFN).

While not specified by the EAO, Tervita has and will continue to communicate with, inform and notify the following Treaty 8 First Nations:

- Halfway River First Nation (HRFN);
- West Moberly First Nation (WMFN);
- Saulteau First Nation (SFN);
- Prophet River First Nations (PRFN);
- McLeod Lake Indian Band (MLIB); and
- Fort Nelson First Nation (FNFN).

The Project land is not currently and historically has not been used for traditional purposes by Aboriginal groups or peoples. A previous Archeological Overview Assessment was completed in 2002 deemed the area to have low archeological potential.

6.2 - Engagement and Consultation Activities with Aboriginal groups

Tervita has provided Project information through pre-consultation communications with all identified Treaty 8 First Nations. During preliminary discussions, questions were raised with regards to general operations, odor control, groundwater/surface water quality, wildlife management and an increase in truck traffic during construction. Questions were addressed through personal communications in which operations, standard operating practices as well as best management practices were discussed. Tervita will continue ongoing communications with the various Communities.

It was previously determined that the Project area would be subject to review under the Archaeology Branch of the BC Ministry of Forests, Lands and Natural Resource Operations (*Heritage Conservation Act*). An Archaeological Impact Assessment was completed and it was determined that no archaeological resources have been found on the Project Footprint. The proposed Project has a low probability of affecting archaeological sites and historic sites through direct disturbance.



Blueberry River First Nations

On April 14, 2015, Tervita met with BRFN Chief and Council for an initial meet and greet and discussion of Silverberry Cell 7 construction (existing footprint). On April 30, 2015, Tervita attempted to meet Chief and Council with Tervita's CEO. On May 4, 2015, Tervita's CEO and BRFN sat down for a Chief to Chief meeting. On May 20, 2015, Tervita met with Blueberry River Enterprises to discuss opportunities to work together through the Cell 7 construction and possible future expansion. On June 30, 2015, Tervita notified BRFN about the Amendment (capacity replacement) in an in person meeting with BRFN Council. Tervita committed to work with BRFN to mitigate concerns, assist with community initiatives, provide capacity development and enhance awareness about Tervita operations.

Doig River First Nations

Tervita has met with DRFN and discussed the proposed Amendment. On October 2, 2014, DRFN Elders, land staff and youth toured the Facility. On April 16, 2015, Tervita met with DRFN Chief and Council for preliminary discussions. On June 3, 2015, Tervita notified DRFN of the Amendment in an in person meeting with DRFN Chief and Council. On July 5, 2015, Tervita spent the day with DRFN at the Calgary Stampede (no formal project discussions took place). Tervita committed to continue working with DRFN to mitigate concerns, assist with community initiatives, provide capacity development and enhance awareness about Tervita operations.

Halfway River First Nation

Tervita has met with HRFN and discussed the proposed Amendment. On June 2, 2015, Tervita met with HRFN Land representatives to notify HRFN of the Amendment. No concerns were expressed. HRFN requested to be included throughout the Amendment process by phone, mail and email notification.

West Moberly First Nations

Tervita had scheduled a meeting with WMFN on June 2, 2015 that WMFN requested to cancel. On June 4, 2015, Tervita sent an Amendment information package to WMFN by mail and followed up with a telephone call. No concerns have been identified by WMFN to date. Unless otherwise requested, Tervita will update WMFN regarding the Amendment by registered mail or courier.

Saulteau First Nations

Tervita has met with SFN and discussed the proposed Amendment. On October 7, 2014, SFN Elders, lands staff and youth toured the facility. On June 2, 2015, Tervita met with SFN Land representatives to notify SFN of the Amendment. No concerns were expressed. SFN requested to be included throughout the Amendment process by phone, mail and email notification.



Prophet River First Nation

Tervita has met with PRFN and discussed the proposed Amendment. On June 1, 2015, Tervita met with the PRFN Chief and Lands representatives to notify PRFN of the Project. No concerns were expressed. PRFN requested to be included throughout the Amendment process by phone, mail and email notification.

McLeod Lake Indian Band

On June 4, 2015 Tervita sent an Amendment information package to MLIB by mail and followed up with a telephone call. No concerns have been identified by MLIB to date. Unless otherwise requested, Tervita will update MLIB regarding the Amendment by registered mail or courier.

Fort Nelson First Nation

On June 4, 2015, Tervita sent an Amendment information package to FNFN by mail and followed up with a phone call. No concerns have been identified by FNFN to date. Unless otherwise requested, Tervita will update FNFN regarding the Amendment by registered mail or courier.

6.3 - Consultation and Notification Plan

Consultation and information gathering will be to the satisfaction of the EAO and the MoE. Consultation will be conducted with the DRFN and BRFN in accordance with the EAO. Tervita will address all pertinent concerns with these First Nations. A Project Description has been given to SFN, WMFN and PRFN. Tervita is exceeding EAO requirements by engaging the above First Nations to ensure positive relations by way of regular Project updates.



7.0 Consultation with the Public and Others

7.1 - Key Comments, Concerns and Response Expressed to date by Stakeholders

The Public Consultation Plan will utilize a 3.2km radius for consultation and 5km radius for notification to identify key stakeholder groups as well as to elected local municipal leaders. The stakeholder group, methods and timing of consultation and notification activities are outlined below in Table 7-1. Consultation completed with the public to date has not resulted in any concerns. As consultation is ongoing, any new information will be recorded, updated and communicated.

Table 7-1: Public Consultation Schedule

Phase	Stakeholders	Activities
1) Initial Consultation July 1, 2015 – Ongoing	 Municipal Government Residence, occupants and landowners 	Introduce the Amendment Share conceptual
	(3.2km) • Residence, occupants	 Share conceptual drawings and Amendment materials
	and landowners (5.0km)	Request stakeholder feedback
	• Industry	Facility tours
	 Regulators 	Identify potential adverse effects and
	General Local Public	develop measures to avoid, reduce, mitigate or otherwise manage such effects



Table 7-1: Public Consultation Schedule (continued)

Table 7-1: Public Consultati Phase	Stakeholders	Activities
2) Consultation during	Municipal Government	Ongoing information
Amendment process August 6, 2015 – July 31, 2016	Residence, occupants and landowners (3.2km)	sharing and Amendment updates for all stakeholders
	 Residence, occupants and landowners (5.0km) 	 Discuss consultation protocols with stakeholders and interested parties
	IndustryRegulatorsGeneral Local Public	Open house meetings and information sharing sessions with public stakeholders and interested parties
		Identify potential adverse effects and develop measures to avoid, reduce, mitigate or otherwise manage such effects
3) Post-Amendment Consultation	Municipal Government	Assess and evaluate mitigation strategies
July 31, 2016	 Residence, occupants and landowners (3.2km) 	Continued communication and
	 Residence, occupants and landowners (5.0km) 	stakeholder engagement • Identify potential
	• Industry	adverse effects and develop measures to
	Regulators	avoid, reduce, mitigate or otherwise
	General Local Public	manage such effects



8.0 References

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Appendix A - General Consultation and Notification Plan

Public Consultation Plan for the Proposed Silverberry PAC Amendment WD02-01

Submitted to the Environmental Assessment Office By Tervita Corporation

October, 2015



1.0 INTRODUCTION

Tervita Corporation (Tervita) is a leading environmental solutions provider. Tervita's integrated earth, water, waste and resource solutions deliver safe and efficient results through all phases of a project by minimizing impact and maximizing returns. More than 2,000 dedicated employees are trusted sustainability partners to oil and gas, construction, mining, government and communities. Safety is our highest priority: it influences our actions and shapes our culture.

Tervita is implementing a Public Consultation Plan (the Plan) in order to communicate our plans for engaging with public stakeholders and interested parties regarding the proposed Silverberry Project Certificate Amendment (PAC) WD02-01 (the Amendment).

The Plan is required under British Columbia's (BC) *Environmental Assessment Act* and Regulations and was developed to meet the consultation requirements as set out in the letters received by Tervita on November 6, 2014 and August 6, 2015, from BC's Environmental Assessment Office (EAO). The August 6, 2015 letter indicated that the following details must be included in Tervita's Plan:

- Consultation principles;
- Consultation activities conducted to date and the proposed consultation activities for the amendment;
- Information delivery methods to provide notices and Silverberry information to stakeholders;
- Timelines for consultation;
- · Procedures for tracking and reporting of consultation; and
- List of identified stakeholders.

2.0 PROJECT OVERVIEW

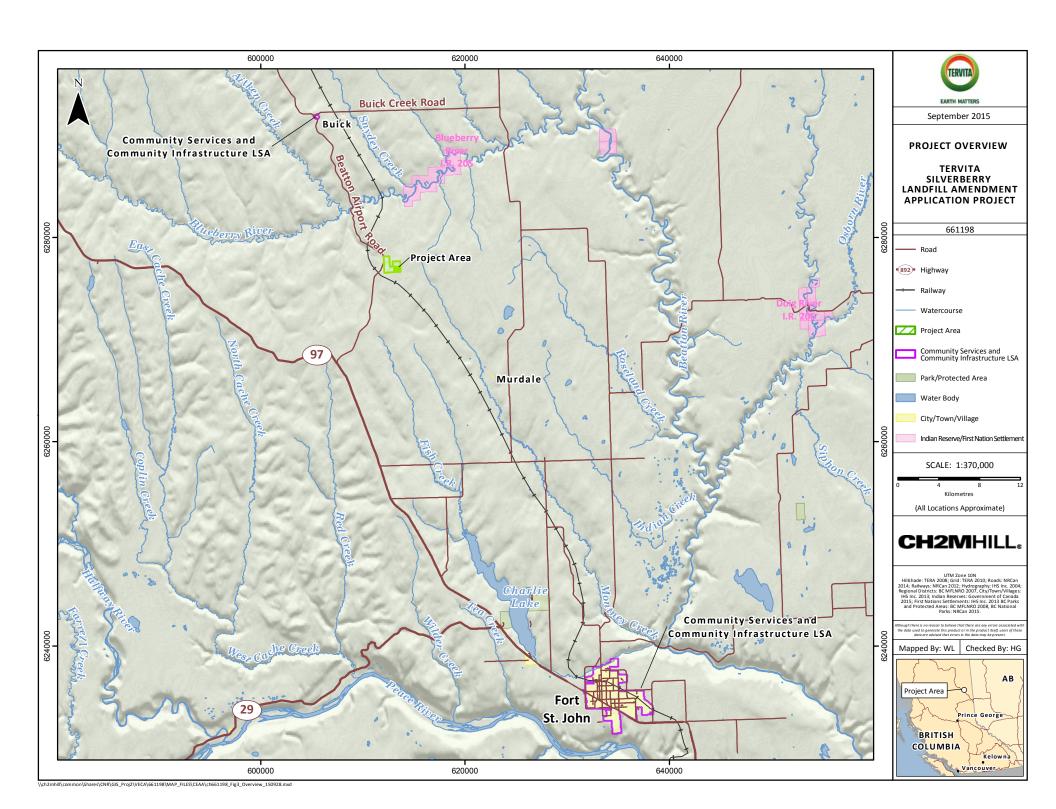
Tervita owns and operates the Silverberry Landfill approximately 50km north of Fort St John, BC. Tervita is proposing to replace the depleted capacity of the Silverberry Landfill through the Amendment. The application for PAC WD02-01 was originally submitted to the BC EAO in March 2002 and approved in July 2002. It is Tervita's intention to submit the Amendment in Q1, 2016.

Tervita's Silverberry Landfill was constructed in 2003 and currently consists of six secure landfill cells as defined under the Hazardous Waste Regulation. The current and future landfill layout is illustrated in the Detailed Site Map. The cells are constructed in a staged manner dependent on fill rate and typically only one cell is operated at a time. Within the current approved landfill footprint, two more landfill cells (7 and 8) will be constructed, with cell 7 currently under construction. Associated infrastructure and facilities located on the same property include access roads, drainage ditches, groundwater monitoring wells, an office and weigh scales. Infrastructure and associated facilities are in operation for the existing landfill and will continue to be used for the landfill capacity replacement area. Stormwater, leachate management, and monitoring systems are in place at the facility, and will be expanded or upgraded, where appropriate, to account for stormwater retention and the leachate generation associated with the proposed landfill capacity replacement.

As shown in the Overview Map, the landfill capacity replacement is proposed on privately owned land located immediately east of the current landfill footprint at 8-88-20 W6M and is approximately the same size as the existing landfill footprint (roughly 25 hectares). Similar to the existing landfill footprint, the proposed project will be developed as a series of cells. The future landfill development area has been conceptually designed to accommodate six cells of varying sizes. As additional cells are developed, the liner and leachate collection systems will be tied together to provide a continuous liner system under the entire project area. This will allow final development of the area as one contiguous fill mass rather than six individual pockets. This is standard landfill operating and construction practice and how the currently approved landfill is maintained. The location of the capacity replacement area provides for a 50m wide secure buffer zone on the property owned by Tervita, surrounding the active area of the secure landfill, as required by the Hazardous Waste Regulation, Section 25 (10).

Based on current knowledge of the types and volumes of oilfield waste in the northeast BC area, Tervita estimates that the facility will handle approximately 600,000 tonnes per year of solid waste. There is potential for variability in annual solid waste quantities accepted by the facility.





3.0 PROPOSED PROGRAM FOR PUBLIC CONSULTATION

Tervita recognizes that meaningful consultation with potentially impacted stakeholders and all interested parties is an important part of project development and operations. Tervita's consultation program is guided by our Stakeholder Relations Guiding Principles.

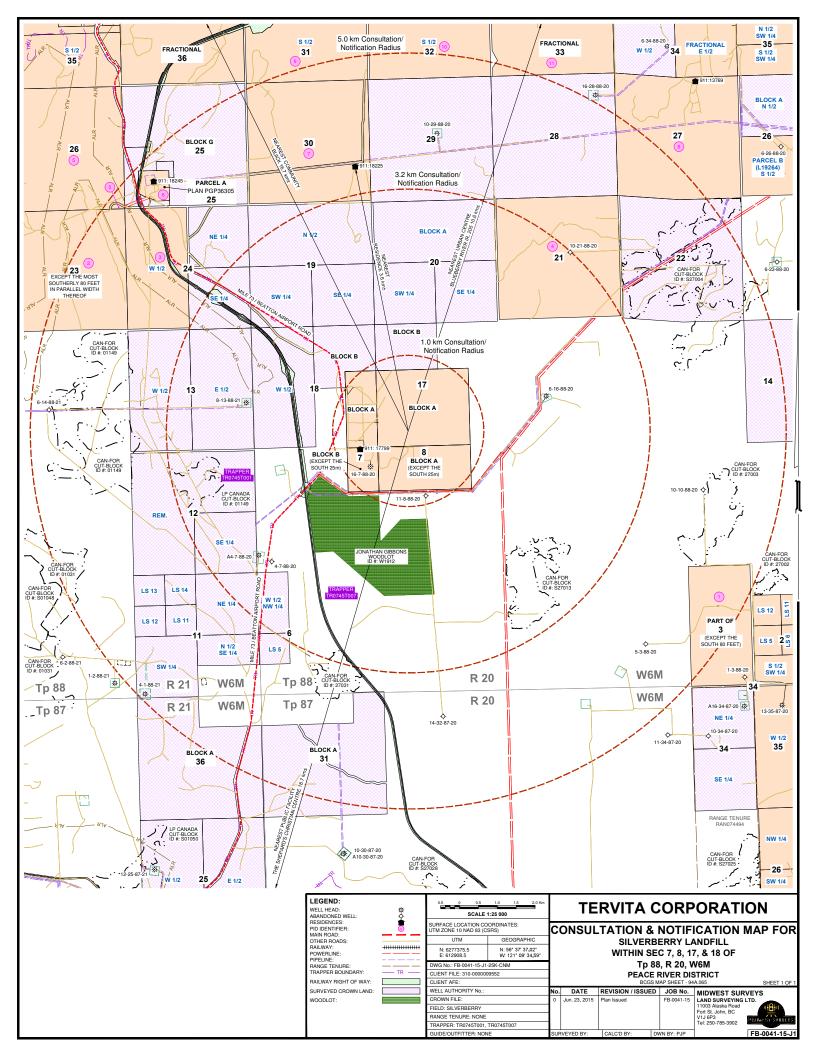
3.1 Guiding Principles – Stakeholder Relations

- Tervita is committed to building positive relationships with stakeholders and all interested parties based on respect, trust and open communication;
- Tervita supports local community initiatives that reflect our commitment to sustainability and the quality of life of communities where we live and work;
- Tervita's relationships with stakeholders and interested parties are based on the development of new projects and existing
 operations as well as community interests; and
- Tervita has defined consultation objectives (See Section 3.4).

The proposed public consultation program is designed to identify and engage stakeholders and/or other interested parties early in the development process for this Project, and to provide them with an opportunity to participate and comment. The results of the public consultation program will be documented and submitted to EAO as requested and incorporated into the final version of the Plan.

3.2 Public Consultation Overview

In seeking to determine the most appropriate consultation radius, Tervita looked first to the Oil & Gas Commission (OGC) guidelines for similar projects. The OGC direction for the consultation radius is 1,300m and 1,800m for notification radius for projects similar to the Silverberry PAC amendment. However, Tervita has chosen to utilize a larger radius and base our consultation and notifications from the Alberta Energy Regulator radius for similar projects in using 3,200m for consultation and 5000m for notification as a guideline. Tervita would utilize the principles of inclusiveness in the instance of a landowner residing immediately adjacent to the applicable radius as per the Consultation and Notification Map.



3.3 Methods of Sharing Information

The following methods will be used to share Amendment information:

- Status report newsletters Tervita will provide regular updates throughout the Project to identified stakeholders within our 3200m radius and those that request regular updates;
- Information packages documents will be hand delivered (dependent on distance from the facility), mailed (registered mail), or emailed;
- A dedicated public feedback and information request e-mail has been established to facilitate communication and information sharing – consultation@tervita.com;
- One on one in-person meetings as requested by public stakeholders and interested parties;
- Information sessions (open house) will be held either at the facility or in Buick, BC (dependent upon location availability)
 with open invitations sent to those within the 5,000m notification radius and advertised in the local newspaper;
- Facility tours stakeholders will be invited to tour the facility and obtain a first-hand understanding of the operations; and
- Newspaper notifications project details will be shared in local newspapers, as required.

3.3.1 Status Report News Letter

Quarterly or at major milestones as determined throughout the project Tervita will provide status report news letters to all identified key stakeholders or those who request status reports. Status reports may include various details about regulatory approvals and/or detail of advancement in the project.

3.3.2 Information Package

Tervita will hand-deliver project specific information to residents within 3,200m, as well as to elected local municipal and provincial leaders. Packages will be mailed to other identified stakeholders and will also be made available at information session(s) and on the Tervita website.

Information provided in the public consultation package will contain, at a minimum, the following:

- A Project overview;
- Map of location and footprint;
- Proposed scheduling;
- Environmental considerations;
- Safety considerations; and
- Tervita contacts.

3.3.3 Information Session(s)

Tervita will schedule and host at least two public information sessions (Open Houses) at a location within reasonable distance from the Project for stakeholders to attend. The closest town is Buick, BC. Tervita project management employees and subject-matter experts will be in attendance to provide information, address questions and record public comment. The information session will be advertised in the local newspaper(s), through direct mail to residents, occupants, landowners and other interested parties (stakeholders) within the consultation and notification radius. Feedback forms will be available for participants who prefer a written response, or are asking Tervita to contact them following the information session.

3.3.4 Facility Tours

Identified key stakeholders and those who request Facility tours will be accommodated throughout the Project. Tervita plans to begin facility tours September 21st – 25th, 2015 and October 12th – 16th, 2015 and continue as determined.

3.4 Objectives of Consultation

Tervita's objective is to work with potentially affected stakeholders and interested parties to identify adverse effects related to Tervita's project activities. Tervita's objectives also include:

- Commencing consultation early in the Amendment planning process;
- Identifying how stakeholders and interested parties wish to be consulted and allowing flexibility in the manner and form of consultation and notification (e.g., in-person meetings, brochures, letters, phone calls, emails);
- Ensuring stakeholders and interested parties have an accurate understanding of the Amendment;

- All stakeholders will have a chance to provide comments during the public comment period;
- Communicating in plain language;
- Documentation of communications through a log or line list (Appendix 1);
- Adequately responding to concerns/comments raised; and
- Seeking to avoid, address, mitigate or otherwise manage impacts identified through the consultation process in a timely manner.

3.5 Tracking and Reporting Consultation

Tervita maintains an up-to-date record of all communications with identified stakeholders and/or interested parties to identify issues raised throughout the consultation process. All contact with stakeholders and interested parties is recorded in an electronic database that identifies who was consulted, when the consultation took place, the nature of the conversation, and any follow-up items.

Tervita will provide stakeholders and interested parties with notice of any records of communications or consultation summaries provided to the EAO.

Consultation reports to be used for sorting and aid in issue identification will be provided to the Project Assessment Manager every second month (or as otherwise required). Consultation reports will include the following information:

- Date of communication;
- Form of contact;
- Persons present or involved in communication;
- Content of communication;
- Actions required and/or status (resolved/outstanding); and
- Follow up completed, as required.

4.0 TIMELINES FOR CONSULTATION

Tervita has developed Table 1 to illustrate the schedule and associated activities regarding consultation and notification.

Table 1: Consultation and Notification Schedule

PHASE IDEN	NTIFIED KEY STAKEHOLDERS	ACTIVITIES (refer to Section 3.3)
July 1, 2015 – Ongoing • •	Municipal Government (City of Ft. St. John, Peace River Regional District, town of Buick, BC) Provincial Government (Ministry of Environment and EAO) Consult with residences, occupants and landowners within 3,200m (line list attached) Notify residences, occupants and landowners within 5,000m (line list attached) Industry (line list attached) Other Regulators (Canadian Environmental Assessment Agency) General Local Public	 Introduce the Amendment Share conceptual drawings and Amendment materials Request stakeholder feedback Facility tours Identify potential adverse effects and develop measures to avoid, reduce, mitigate or otherwise manage such effects. Will utilize EAO Working Group to complete this activity

Table 1: Consultation and Notification Schedule (continued)

PHASE	IDENTIFIED KEY STAKEHOLDERS	ACTIVITIES (refer to Section 3.3)
2) Consultation during Amendment process August 6, 2015 – July 31, 2016	 Municipal Government (City of Ft. St. John, Peace River Regional District, Village of Buick, BC) Provincial Government (Ministry of Environment and EAO) Consult with residences, occupants and landowners within 3,200m (line list attached) Notify residences, occupants and landowners within 5,000m (line list attached) Industry (line list attached) Other Regulators (Canadian Environmental Assessment Agency) General Local Public 	 On-going information sharing and Amendment updates for all stakeholders Opportunity to comment through EAO public comment periods on both the Valued Components (VC) document and Amendment Application. Advertising, tracking of and responding to, comments and updating the VC document will occur as required Discuss consultation protocols with stakeholders and interested parties Open house meetings and information sharing sessions with public stakeholders and interested parties Identify potential adverse effects and develop measures to avoid, reduce, mitigate or otherwise manage such effects On September 23rd, Tervita staff toured the OGC and MoE staff around Silverberry. A general discussion regarding the operation of the Facility was had and the expansion area and plans were shared.

Table 1: Consultation and Notification Schedule (continued)

PHASE	IDENTIFIED KEY STAKEHOLDERS	ACTIVITIES (refer to Section 3.3)
3) Post-Amendment Consultation July 31, 2016	 Municipal Government (City of Ft. St. John, Peace River Regional District, Village of Buick, BC) Provincial Government (Ministry of Environment and EAO) Consult with residences, occupants and landowners within 3,200m (line list attached) Notify residences, occupants and landowners within 5,000m (line list attached) Industry (line list attached) Other Regulators (Canadian Environmental Assessment Agency) General Local Public 	 Assess and evaluate mitigation strategies Continued communication and stakeholder engagement Identify potential adverse effects and develop measures to avoid, reduce, mitigate or otherwise manage such effects

Appendix 1 - Line List Template

Personal Consultation & Notification

Project: Tervita Silverberry Landfill Capacity Replacement



Tervita File No: S00383, 84, 678, 79

Map Number	PID Number	Legal Description	Land Interest (i.e. Landowner, Occupant, etc.	Notification Disclosure Requirement Met Yes/No Date	Personal Consultation Yes/No Date	Confirmation Yes/No Date	Type of Contact (i.e. by phone, fax, reg'd mail, regular mail, email, in person)	Project Description Distributed (& all necessary AER Public Info. Documents) Yes/No	Comments/ Conditions
1	014645971	Sec 3-88-20 W6M EXCEPT THE SOUTH 80 FEET	HARRIS, JOHN EDWARD <contact information="" removed=""> LANDOWNER WITHIN 5000m</contact>	-	-	-	-	-	-
2	004700741	SEC 23-88-21 EXCEPT THE MOST SOUTHERLY 80 FEET IN PARALLEL WIDTH THEREOF							
3	004700619	W 24-88-21 W6M EXCEPT BLOCK A (PLAN 19762) AND THE MOST SOUTHERLY 80 FEET IN PARALLEL WIDTH THEREOF	BLUE HILLS RANCH LTD. 8825 SUNFLOWER PLACE VERNON, BC V1B 2G2 LANDOWNER WITHIN 5000m	-	-	-	-	-	-
5	004699726	SEC 26-88-21 W6M							

Personal Consultation & Notification

Project: Tervita Silverberry Landfill Capacity Replacement



Tervita File No: S00383, 84, 678, 79

Map Number	PID Number	Legal Description	Land Interest (i.e. Landowner, Occupant, etc.	Notification Disclosure Requirement Met Yes/No Date	Personal Consultation Yes/No Date	Confirmation Yes/No Date	Type of Contact (i.e. by phone, fax, reg'd mail, regular mail, email, in person)	Project Description Distributed (& all necessary AER Public Info. Documents) Yes/No	Comments/ Conditions
4	023474483	SEC 21-88-20 W6M	VELIE, EVA LOUISE MARY <contact information<br="">removed> LANDOWNER WITHIN 3200m</contact>	Yes	Yes –Sept 10, 2015	Yes	Phone Sept 9, 2015 In person meeting Sept 10, 2015	Yes	Met with Grant Carter who lives close to the facility. We discussed our expansion project and Grant had no concerns. I also left 2 packages he could share with Eva and get back to me if there were any further concerns or requests to conduct a site visit.
6	017816904 Residence #18425	PARCEL A SEC 25- 88-21 W6M PLAN PGP36305	WESTCOAST ENERGY INC. P.O. BOX 11162, SUITE 1100 1055 WEST GEORGIA STREET VANCOUVER, BC V6E 3R5 (604) 488-8000 LANDOWNER WITHIN 5000m	-	-	-	-	-	-
7	025399012 Residence # 18225	SEC 30-88-20 W6M	MARLATT, DOUGLAS ROBERT <contact information="" removed=""></contact>	Yes	Yes – Sept 10, 2015	Yes	In person Sept 10, 2015	Yes	Property and home is owned by Spectra Energy. Spoke with plant worker and provided notification package.

Personal Consultation & Notification

Project: Tervita Silverberry Landfill Capacity Replacement



Tervita File No: S00383, 84, 678, 79

Map Number	PID Number	Legal Description	Land Interest (i.e. Landowner, Occupant, etc.	Notification Disclosure Requirement Met Yes/No Date	Personal Consultation Yes/No Date	Confirmation Yes/No Date	Type of Contact (i.e. by phone, fax, reg'd mail, regular mail, email, in person)	Project Description Distributed (& all necessary AER Public Info. Documents) Yes/No	Comments/ Conditions
8	025329332 Residence #13769	SEC 27-88-20 W6M	SNIDER, DARREN WESLEY <contact information="" removed=""> LANDOWNER WITHIN 5000m</contact>	Yes	Sept 10, 2015	No	Registered mail	Yes	-
9 10 11	024630161 024630187 024630195	S 31-88-20 W6M EXCEPT PLANS 19762 AND 26994 S 32-88-20 W6M THE FRACTIONAL SEC 33-88-20 W6M	BLUEBERRY FIRST NATIONS HOLDINGS LTD. PO Box 3009 BUICK CREEK, BC VOX 2R0 (250) 630-2584 WITHIN 5000m	-	-	-	-	-	-

Personal Consultation & Notification

Project: Tervita Silverberry Landfill Capacity Replacement



Tervita File No: S00383, 84, 678, 79

Map Number	PID Number	Legal Description	Land Interest (i.e. Landowner, Occupant, etc.	Notification Disclosure Requirement Met Yes/No Date	Personal Consultation Yes/No Date	Confirmation Yes/No Date	Type of Contact (i.e. by phone, fax, reg'd mail, regular mail, email, in person)	Project Description Distributed (& all necessary AER Public Info. Documents) Yes/No	Comments/ Conditions
CUT BLOCK #01031 #01149 #27031 #S27013 S27004 #27003	-	CUT BLOCK OWNER	CANADIAN FOREST FORT ST. JOHN SAWMILL 9312 – 259 ROAD RR 1, SITE 13 COMPOUND 2 FORT ST. JOHN, B C V1J 4M6 ATTENTION: JILLIAN (250) 787-3600 INDUSTRY WITHIN 3200m and 5000m	Yes	Yes – Sept 10, 2015	-	Phone	No	Requested package be send via registered mail on Sept 10, 2015
-	-	S 3-88-20 W6M	APACHE CANADA LTD. 2800, 421 – 7 AVENUE SW CALGARY, ALBERTA T2P 4K9 INDUSTRY WITHIN 5000m	Yes	No	Sept 10, 2015	Registered Mail	Yes	-

Personal Consultation & Notification

Project: Tervita Silverberry Landfill Capacity Replacement



Tervita File No: S00383, 84, 678, 79

Map Number	PID Number	Legal Description	Land Interest (i.e. Landowner, Occupant, etc.	Notification Disclosure Requirement Met Yes/No Date	Personal Consultation Yes/No Date	Confirmation Yes/No Date	Type of Contact (i.e. by phone, fax, reg'd mail, regular mail, email, in person)	Project Description Distributed (& all necessary AER Public Info. Documents) Yes/No	Comments/ Conditions
-	-	S 4-88-20 W6M	HARVEST OPERATIONS CORP. 2100, 330 – 5 AVENUE SW CALGARY, AB T2P 0L4 INDUSTRY WITHIN 5000m	Yes	No	Sept 10, 2015	Registered Mail	Yes	-
-	-	S 5-88-20 W6M	ENERMARK C/O ENERPLUS RESOURCES CORPORATION 3000, 333 – 7 AVENUE SW CALGARY, ALBERTA T2P 2Z1 INDUSTRY WITHIN 5000m	Yes	No	Sept 10, 2015	Registered Mail	Yes	-
-	-	S 1-88-20 W6M	LEUCROTTA EXPLORATION INC. 700, 639 – 5 AVENUE SW CALGARY, ALBERTA T2P 0M9 INDUSTRY WITHIN 5000m	Yes	No	Sept 10, 2015	Registered Mail	Yes	-

Personal Consultation & Notification

Project: Tervita Silverberry Landfill Capacity Replacement



Tervita File No: S00383, 84, 678, 79

Map Number	PID Number	Legal Description	Land Interest (i.e. Landowner, Occupant, etc.	Notification Disclosure Requirement Met Yes/No Date	Personal Consultation Yes/No Date	Confirmation Yes/No Date	Type of Contact (i.e. by phone, fax, reg'd mail, regular mail, email, in person)	Project Description Distributed (& all necessary AER Public Info. Documents) Yes/No	Comments/ Conditions
-	-	N 10-88-20 W6M	UNOCAL CANADA RESOURCES 3500, 700 – 2 STREET SW CALGARY, AB T2P 2W2 INDUSTRY WITHIN 3200m	Yes	No	Sept 10, 2015	Registered Mail	Yes	-
-	-	N 7-88-20 W6M	PENN WEST PETROLEUM LTD. 2200, 425 – 1 STREET SW CALGARY, AB T2P 3L8 INDUSTRY WITHIN 3200m	Yes	No	Sept 10, 2015	Registered Mail	Yes	-
-	-	N 32-87-20 W6M	GOLDEN EAGLE OIL AND GAS C/O NEXEN 801 – 7 AVENUE SW CALGARY, ALBERTA T2P 3P7 INDUSTRY WITHIN 5000m	Yes	No	Sept 10, 2015	Registered Mail	Yes	-

Personal Consultation & Notification

Project: Tervita Silverberry Landfill Capacity Replacement



Tervita File No: S00383, 84, 678, 79

Map Number	PID Number	Legal Description	Land Interest (i.e. Landowner, Occupant, etc.	Notification Disclosure Requirement Met Yes/No Date	Personal Consultation Yes/No Date	Confirmation Yes/No Date	Type of Contact (i.e. by phone, fax, reg'd mail, regular mail, email, in person)	Project Description Distributed (& all necessary AER Public Info. Documents) Yes/No	Comments/ Conditions
-	-	S 2-88-21 W6M	ARTEK EXPLORATION LTD. 2300, 520 – 5 AVENUE SW CALGARY, ALBERTA T2P 3R7 INDUSTRY WITHIN 5000m	Yes	No	Sept 10, 2015	Registered Mail	Yes	-
-	-	S 7-88-20 W6M	IMPERIAL OIL RESOURCES 237 – 4 AVENUE SW CALGARY, ALBERTA T2P 0H6 INDUSTRY WITHIN 3200m	Yes	No	Sept 10, 2015	Registered Mail	Yes	-
WOOD LOT #W1912	-	7-8-88-20 W6M	JONATHAN GIBBONS Address/contact information requested from Federation of BC Woodlot Associations Sep 4/15 Contact is Lisa Marak: <contact information="" removed=""> WOOD LOT OWNER WITHIN 3200m</contact>	Yes	No	Sept 10, 2015	Registered Mail	Yes	-

Personal Consultation & Notification

Project: Tervita Silverberry Landfill Capacity Replacement



Tervita File No: S00383, 84, 678, 79

Map Number	PID Number	Legal Description	Land Interest (i.e. Landowner, Occupant, etc.	Notification Disclosure Requirement Met Yes/No Date	Personal Consultation Yes/No Date	Confirmation Yes/No Date	Type of Contact (i.e. by phone, fax, reg'd mail, regular mail, email, in person)	Project Description Distributed (& all necessary AER Public Info. Documents) Yes/No	Comments/ Conditions
-	-	N 16-88-20 W6M N 29-88-20 W6M	CANADIAN NATURAL RESOURCES LIMITED 2500, 855 – 2 STREET SW CALGARY, ALBERTA T2P 4J8 INDUSTRY WITHIN 3200m (16-8) and 5000m (29-88)	Yes	No	Sept 10, 2015	Registered Mail	Yes	-
-	-	N 21-88-20 W6M	BAYTEX ENERGY LTD. 2200, 205 – 5 AVENUE SW CALGARY, AB T2P 2V7 INDUSTRY WITHIN 3200m	Yes	No	Sept 10, 2015	Registered Mail	Yes	-
TPA 745T007	-	-	JERRY DAVIS <contact information="" removed=""> TRAPPER WITHIN 3200m</contact>	-	-	-	-	-	-

Personal Consultation & Notification

Project: Tervita Silverberry Landfill Capacity Replacement



Tervita File No: S00383, 84, 678, 79

Map Number	PID Number	Legal Description	Land Interest (i.e. Landowner, Occupant, etc.	Notification Disclosure Requirement Met Yes/No Date	Personal Consultation Yes/No Date	Confirmation Yes/No Date	Type of Contact (i.e. by phone, fax, reg'd mail, regular mail, email, in person)	Project Description Distributed (& all necessary AER Public Info. Documents) Yes/No	Comments/ Conditions
TPA 745T007	-	-	WILLIAM DAVIS <contact information="" removed=""> TRAPPER WITHIN 3200m</contact>	-	-	-	-	-	-
TPA 745T007	-	-	LANA WOLF <contact information="" removed=""> TRAPPER WITHIN 3200m</contact>	-	-	-	-	-	-

Appendix B - First Nations Consultation Plan

First Nations Consultation Plan for the Proposed Silverberry PAC Amendment WD02-01

Submitted to the Environmental Assessment Office By Tervita Corporation

October, 2015



1.0 INTRODUCTION

Tervita Corporation (Tervita) is a leading environmental solutions provider. Tervita's integrated earth, water, waste and resource solutions deliver safe and efficient results through all phases of a project by minimizing impact and maximizing returns. More than 2,000 dedicated employees are trusted sustainability partners to oil and gas, construction, mining, government and communities. Safety is our highest priority: it influences our actions and shapes our culture.

Tervita is implementing a Treaty 8 First Nations Consultation Plan (the Plan) in order to communicate our plans for engaging with Treaty 8 First Nations regarding the proposed Silverberry Project Certificate Amendment (PAC) WD02-01 (the Amendment).

The Plan is required under British Columbia's (BC) *Environmental Assessment Act* and Regulations and was developed to meet the consultation requirements as set out in the letters received by Tervita on November 6, 2014 and August 6, 2015, from BC's Environmental Assessment Office (EAO). The August 6, 2015 letter indicated that the following details must be included in Tervita's consultation plan for First Nations:

- Consultation principles;
- Consultation activities conducted to date and the proposed consultation activities for the Amendment;
- Information delivery methods to provide notices and information to the First Nations;
- Timelines for consultation;
- Procedures for tracking and reporting of consultation; and
- List of First Nations.

2.0 PROJECT OVERVIEW

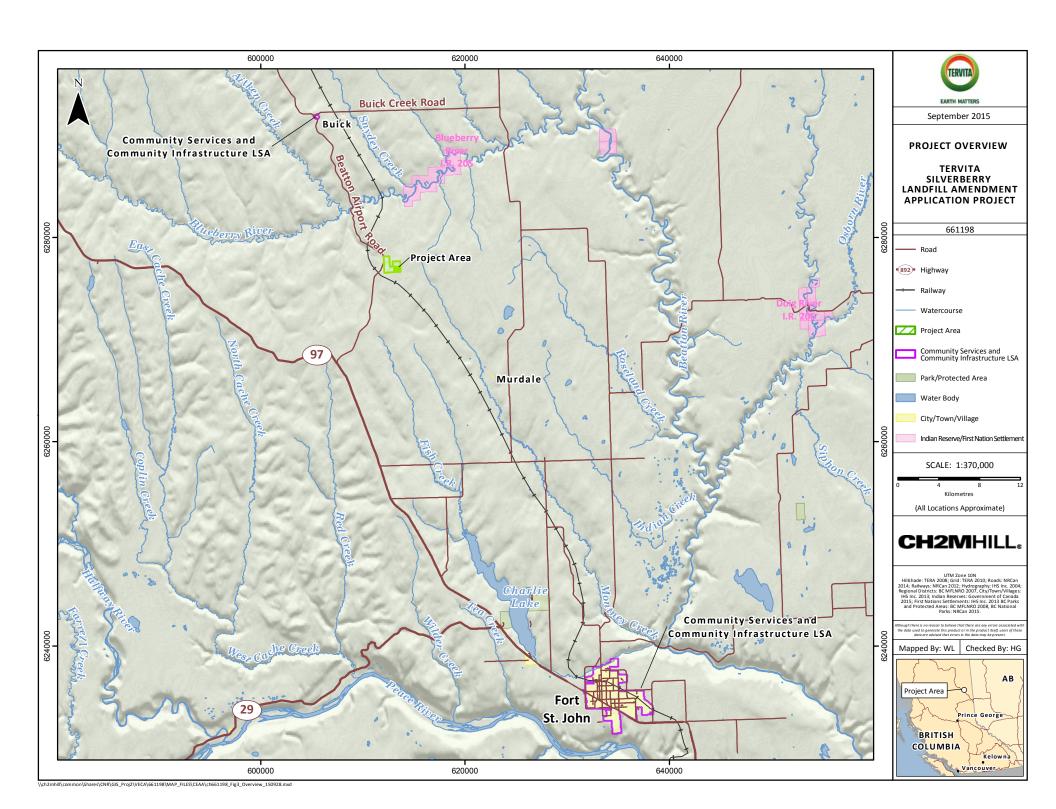
Tervita owns and operates the Silverberry Landfill approximately 50km north of Fort St John, BC. Tervita is proposing to replace the depleted capacity of the Silverberry Landfill through the Amendment. The application for PAC WD02-01 was originally submitted to the BC EAO in March 2002 and approved in July 2002. It is Tervita's intention to submit the Amendment in Q1, 2016.

Tervita's Silverberry Landfill was constructed in 2003 and currently consists of six secure landfill cells as defined under the Hazardous Waste Regulation. The current and future landfill layout is illustrated in the Detailed Site Map. The cells are constructed in a staged manner dependent on fill rate and typically only one cell is operated at a time. Within the current approved landfill footprint, two more landfill cells (7 and 8) will be constructed, with cell 7 currently under construction. Associated infrastructure and facilities located on the same property include access roads, drainage ditches, groundwater monitoring wells, an office and weigh scales. Infrastructure and associated facilities are in operation for the existing landfill and will continue to be used for the landfill capacity replacement area. Stormwater, leachate management, and monitoring systems are in place at the facility, and will be expanded or upgraded, where appropriate, to account for stormwater retention and the leachate generation associated with the proposed landfill capacity replacement.

As shown in the Overview Map, the landfill capacity replacement is proposed on privately owned land located immediately east of the current landfill footprint at 8-88-20 W6M and is approximately the same size as the existing landfill footprint (roughly 25 hectares). Similar to the existing landfill footprint, the proposed project will be developed as a series of cells. The future landfill development area has been conceptually designed to accommodate six cells of varying sizes. As additional cells are developed, the liner and leachate collection systems will be tied together to provide a continuous liner system under the entire project area. This will allow final development of the area as one contiguous fill mass rather than six individual pockets. This is standard landfill operating and construction practice and how the currently approved landfill is maintained. The location of the capacity replacement area provides for a 50m wide secure buffer zone on the property owned by Tervita, surrounding the active area of the secure landfill, as required by the Hazardous Waste Regulation, Section 25 (10).

Based on current knowledge of the types and volumes of oilfield waste in the northeast BC area, Tervita estimates that the facility will handle approximately 600,000 tonnes per year of solid waste. There is potential for variability in annual solid waste quantities accepted by the facility.





3.0 IDENTIFIED FIRST NATIONS

The EAO's August 6, 2015 letter directed Tervita to consult with the Blueberry River First Nations (BRFN) and the Doig River First Nation (DRFN) for consultation in relation to the Amendment. In addition, Tervita has included the following First Nations in its consultation program:

- Halfway River First Nation (HRFN);
- West Moberly First Nation (WMFN);
- Saulteau First Nation (SFN)
- Prophet River First Nations (PRFN);
- McLeod Lake Indian Band (MLIB); and
- Fort Nelson First Nation (FNFN).

4.0 CONSULTATION PRINCIPLES

Tervita recognizes that meaningful consultation with potentially impacted First Nations is an important part of project development and operations. Tervita's consultation program is guided by our Aboriginal Relations Guiding Principles.

4.1 Aboriginal Relations Guiding Principles

- Tervita is committed to building positive relationships with Aboriginal communities based on respect, trust and open communication;
- Tervita supports local community initiatives that reflect our commitment to sustainability and the quality of life where we live and work;
- Tervita's relationships with Aboriginal communities are based on the development of new projects and existing operations, as well as community interests;
- Tervita is an equal-opportunity organization and encourages Aboriginal people to seek employment and business opportunities with our company; and
- Tervita partners with regional and national organizations that foster increased participation of Aboriginal community members in our industry.

4.2 Objectives of Consultation

Tervita's objective is to work with potentially affected First Nations to identify adverse effects related to Tervita's activities. Tervita's objectives include:

- Commencing consultation early in the Amendment planning process;
- Identifying how the First Nations wish to be consulted and allowing flexibility in the manner and form of notification and consultation (e.g, in person meetings, working groups, brochures, letters, phone calls, emails, mail and/or websites);
- Ensuring community members of First Nations identified by the EAO will have an accurate understanding of the Amendment and are given an opportunity to provide their feedback;

- Communicating in plain language;
- Identifying that First Nations are allowed to exercise their Treaty No. 8 rights;
- Allowing sufficient time to review Amendment materials;
- Adequately responding to concerns raised; and
- Seeking to avoid, address, mitigate or otherwise manage impacts identified through the consultation process in a timely manner.

5.0 CONSULTATION ACTIVITIES CONDUCTED TO DATE

On July 14, 2014, Tervita attended at a Chiefs Gathering at the Treaty 8 Tribal Association Office to informally notify the Chiefs of Tervita's desire to expand the facility. Tervita invited all of the First Nations for an informal site visit to learn more about our operations. Since that time, Tervita has met with most of the First Nations and advised them as early in the process as possible of our intent to expand our secure landfill.

As outlined below, Tervita has conducted tours of the facility with SFN and DRFN. Tervita is currently working with the other First Nations and will facilitate additional tours of the facility for interested First Nations.

Blueberry River First Nations

Tervita has met with BRFN and discussed the proposed Amendment.

On April 14, 2015, Tervita met with BRFN Chief and Council for an initial meet and greet and discussion about Silverberry cell 7 construction.

On April 30, 2015, Tervita attempted to meet Chief and Council with Tervita's CEO.

On May 4' 2015, Tervita's CEO and BRFN sat down for a meeting.

On May 20 2015, Tervita met with Blueberry River Enterprises to discuss opportunities to work together through our cell 7 construction and possible future expansion.

On June 30, 2015, Tervita notified BRFN about the Amendment in an in person meeting with BRFN Council.

On August 27, 2015 Tervita circulated the draft Consultation Plan and no feedback has been received to date.

Tervita committed to work with BRFN to mitigate concerns, assist with community initiatives, provide capacity development and enhance awareness about Tervita operations.

Doig River First Nations

Tervita has met with DRFN and discussed the proposed Amendment.

On October 2, 2014, DRFN Elders, land staff and youth toured the facility.

On April 16, 2015, Tervita met with DRFN Chief and Council for preliminary discussions.

On June 3, 2015, Tervita notified DRFN of the Amendment in an in person meeting with DRFN Chief and Council.

On July 5, 2015, Tervita spent the day with DRFN at the Calgary Stampede (no formal project discussions took place).

On August 27, 2015 Tervita circulated the draft Consultation Plan and no feedback has been received to date.

Tervita committed to continue working with DRFN to mitigate concerns, assist with community initiatives, provide capacity development and enhance awareness about Tervita operations.

Halfway River First Nation

Tervita has met with HRFN and discussed the proposed Amendment.

On June 2, 2015, Tervita met with HRFN land representatives to notify HRFN of the Amendment. No concerns were expressed.

HRFN requested to be included throughout the Amendment process by phone, mail and email notification.

West Moberly First Nations

Tervita had scheduled a meeting with WMFN on June 2, 2015 that WMFN requested to cancel.

On June 4, 2015, Tervita sent an Amendment information package to WMFN by mail and followed up with a telephone call. No concerns have been identified by WMFN to date.

Unless otherwise requested, Tervita will update WMFN regarding the Amendment by registered mail or courier.

Saulteau First Nations

Tervita has met with SFN and discussed the proposed Amendment.

On October 7, 2014, SFN Elders, lands staff and youth toured the facility.

On June 2, 2015, Tervita met with SFN Land representatives to notify SFN of the Amendment. No concerns were expressed.

SFN requested to be included throughout the Amendment process by phone, mail and email notification.

Prophet River First Nation

Tervita has met with PRFN and discussed the proposed Amendment.

On June 1, 2015, Tervita met with the PRFN Chief and Lands representatives to notify PRFN of the project. No concerns were expressed.

PRFN requested to be included throughout the Amendment process by phone, mail and email notification.

McLeod Lake Indian Band

On June 4, 2015 Tervita sent an Amendment information package to MLIB by mail and followed up with a telephone call. No concerns have been identified by MLIB to date.

Unless otherwise requested, Tervita will update MLIB regarding the Amendment by registered mail or courier.

Fort Nelson First Nation

On June 4, 2015, Tervita sent an Amendment information package to FNFN by mail and followed up with a phone call. No concerns have been identified by FNFN to date.

Unless otherwise requested, Tervita will update FNFN regarding the Amendment by registered mail or courier.

6.0 PROPOSED CONSULTATION ACTIVITIES

Tervita will invite representatives from the BRFN and DRFN to engage in additional in-person meetings with the objective of identifying Treaty rights that may be affected by the proposed Amendment and to develop measures to avoid, reduce, address, mitigate or otherwise manage potential adverse effects.

The meetings will take place with representatives selected by the First Nation and may include Chief and Council or other First Nation representatives or community members (as authorized by Chief and Council).

In advance of such meetings, Tervita will provide copies of Amendment materials for BRFN and DRFN to consider. Unless BRFN or DRFN request otherwise, Tervita will offer to meet at least quarterly with BRFN and DRFN in the community. Tervita will meet more frequently, if it is requested. Tervita will offer to conduct community open houses and information sharing sessions with DRFN and BRFN.

All identified First Nations will receive regular updates of the Amendment application and, if they request consultation, Tervita will consult with them in the form and manner of their preference. Other types of consultation activities may include:

- Meetings to review documents and technical information;
- Attending community meetings and public open houses;
- · Participation in an environmental assessment working group; and
- Responding to written submissions, including comments or information requests pertaining to the Amendment application.

This Plan is a framework for Tervita's engagement with the identified First Nations regarding the proposed Amendment. Tervita will maintain flexibility in the Plan to reflect the needs of the identified First Nations. Feedback from the First Nations communities has been and will continue to be incorporated into the Plan.

7.0 CONSULTATION METHODS

7.1 Methods of Sharing Information

The following methods will be used to share Amendment information:

- Status report newsletters Tervita will provide regular updates throughout the project as we reach milestones and before the EAO process comment periods. All reports will be shared with BRFN and DRFN and other First Nation stakeholders as requested, posted with their lands departments and delivered to Chiefs and Councils for review.
- Delivery of documents time sensitive documents will be hand delivered or emailed (marked urgent) and followed up by telephone communication. All other correspondence will be sent by courier or registered mail.

Tervita will be available for in-person meetings with Chief and Council and community meetings as requested by the First Nations. The purpose of these meetings will be to share development, drawings and correspondence relating to the project and identify and address concerns, issues and/or environmental mitigation measures.

7.2 Tracking and Reporting Consultation

Tervita maintains an up to-date record of communications with identified First Nation communities to recognize issues that have been raised throughout the consultation process. All contact with First Nation communities is recorded in an electronic database that identifies who was consulted, when the consultation took place, the nature of the conversation, and any follow-up items. Tervita will provide First Nations with notice of any records of communications or consultation summaries provided to the EAO.

Consultation reports will be provided to the Project Assessment Manager every second month (or as otherwise required). Consultation reports will include the following information:

- Date of communication;
- Form of contact;
- Persons present or involved in communication;
- Content of communication/comments;

- General information and topics;
- Specific issues or concerns and status (outstanding or resolved);
- Actions required; and
- Follow up completed, as required.

8.0 TIMELINES FOR CONSULTATION

Tervita has developed Table 1 to illustrate the schedule and associated activities regarding consultation and notification.

Table 1: Consultation and Notification Schedule

PHASE	ACTIVITIES	TASKS		
Initial Consultation	Informal community visits	 Sharing draft First Nation 		
July 1, 2014 – June 30, 2015	Involve First Nations earlyIntroduce the Amendment	 Consultation Plan Sharing draft Valued Components document 		
	 Share conceptual drawings and Amendment materials 	Sharing draft Application Information Requirements		
	 Request First Nations feedback 	document		
	Facility tours	 Sharing draft application Amendment 		
	 Identify potential adverse effects and develop measures to avoid, reduce, mitigate or otherwise manage such effects 	Capturing initial feedback from key documents and documenting responsiveness		

Table 1: Consultation and Notification Schedule (continued)

PHASE	ACTIVITIES	TASKS			
2) Consultation during Amendment process August 6, 2015 – July 31, 2016	 On-going information sharing and Amendment updates for all First Nations Discuss consultation protocols with BRFN and DRFN Community open houses with BRFN and DRFN Community and Chief and Council meetings with BRFN and DRFN Identify potential adverse effects and develop measures to avoid, reduce, mitigate or otherwise manage such effects 	 Sharing First Nation Consultation Plan Sharing Valued Components document Sharing Application Information Requirements document Sharing application Amendment Capturing feedback from key documents and documenting responsiveness 			
3) Post-Amendment Consultation July 31, 2016	 Assess and evaluate mitigation strategies Continued communication and community engagement Identify potential adverse effects and develop measures to avoid, reduce, mitigate or otherwise manage such effects 	Capturing ongoing feedback and document responsiveness			