Kudlik Construction Ltd.

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WORK METHODOLOGY PLAN

CAM-D DEW Line Environmental Remediation

SIMPSON LAKE, NUNAVUT

Presented to

Public Works and Government Services Canada

Review: November 2009

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WORK METHODOLOGY PLAN

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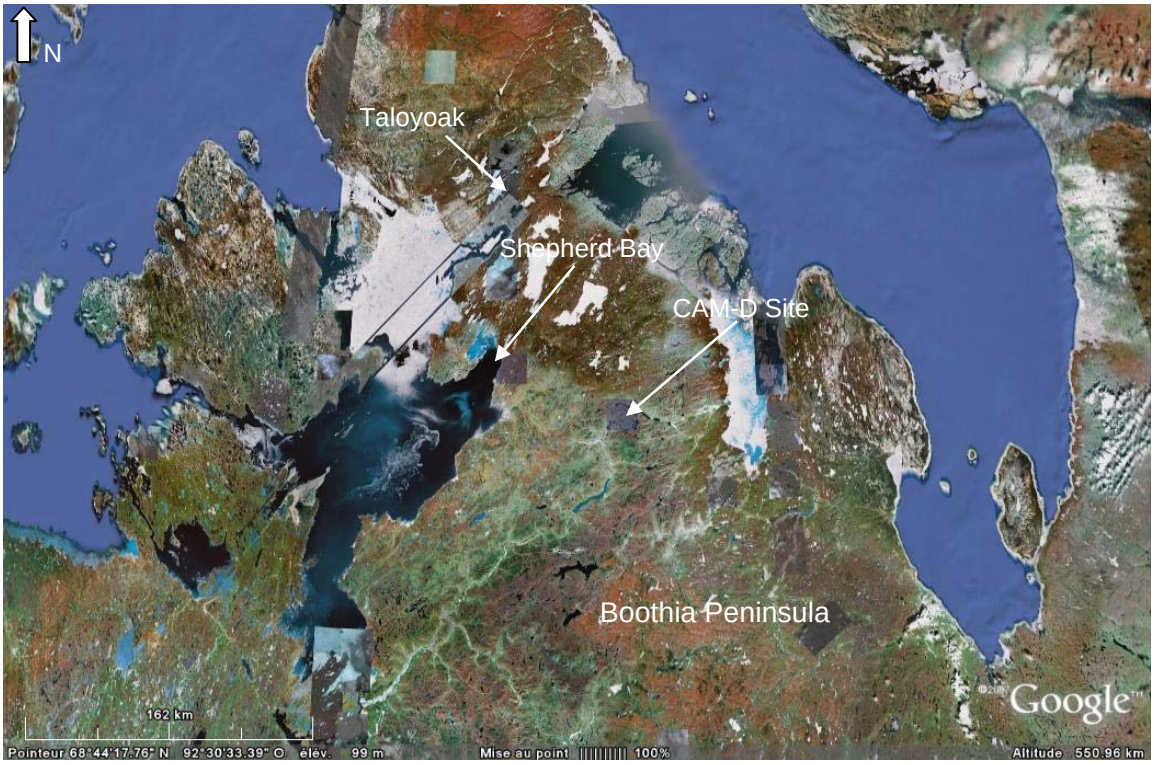
1. INTRODUCTION

The purpose of this document is to present the work methodology plan for the remediation of the CAM-D DEW Line site project. CAM-D is located in the middle of the Boothia Peninsula (Nunavut), approximately 4.5 km south of Simpson Lake and approximately 120 km southwest of Taloyoak (Spence Bay) in Nunavut.

The remediation project was awarded to Kudlik Construction Ltd. in December 2008. In August 2009, heavy equipments, camp facilities, material and all consumables were delivered by sealift to Shepherd Bay, located about 100 km northwest of CAM-D. Nearby the beach landing area, a camp was installed on INAC property in order to support further mobilization activities: All equipment, material and consumables required to achieve the remediation project at CAM-D must be transported by CAT train during the spring 2010 from Shepherd Bay to CAM-D.

The actual document describes the camp facilities at CAM-D and presents the work methodology of each project activity. The mobilization methodology is not discussed in this document since it is presented in a separate document called “Mobilization Plan”.

Figure 1: Localization map

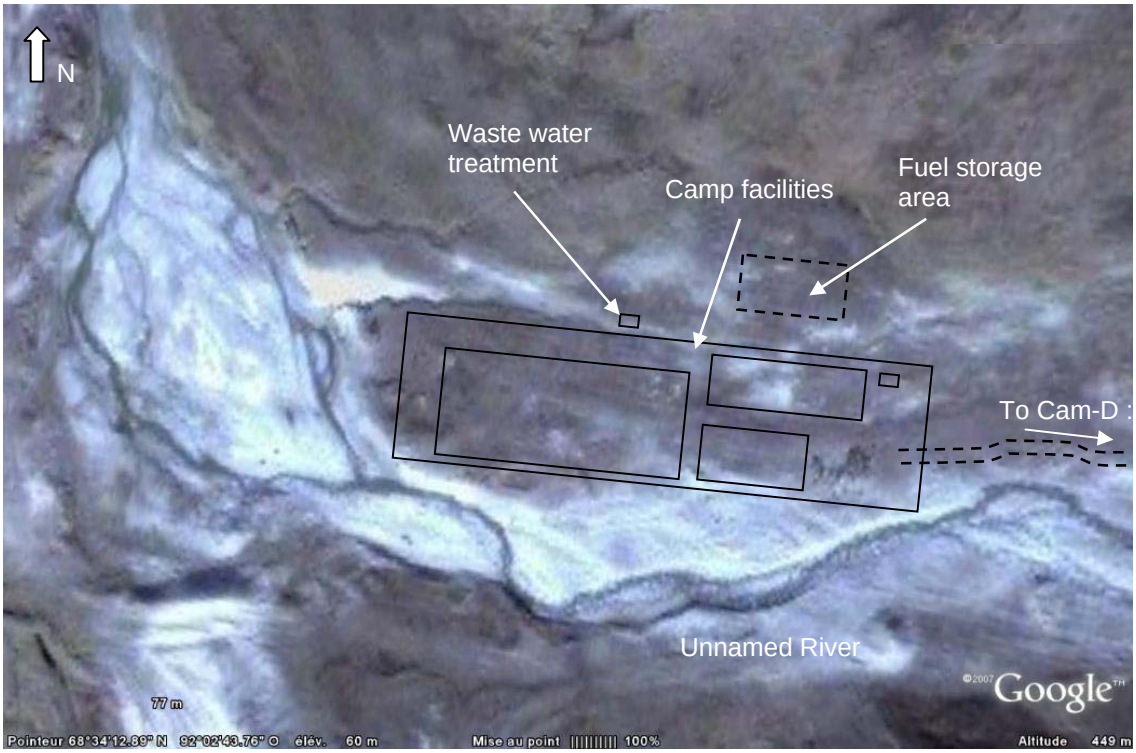


2. CONSTRUCTION CAMP

2.1 CAMP LOCATION

The camp will be located inside the borrow area no.2 boundaries, nearby an unnamed river, which is a tributary of the Murchison River. The camp facilities will include dormitories, washrooms, kitchen, offices and the maintenance garage. The area is mainly flat, covered with sand and gravel and already disturbed by past activities.

Figure 2: Camp Location



2.2 CAMP OPERATION

2.2.1 Potable water

The potable water for the camp will be pumped directly from the unnamed river located nearby the camp. Water will be treated with UV and a filtration system. The water quality will be frequently monitored to ensure that it meets or exceeds the Guidelines for Canadian Drinking Water Quality. An off-road water trailer will be available on site for emergency water supply.

2.2.2 Camp waste

Domestic garbage will be temporarily stored into a marine container and burned everyday with an incinerator. Ashes will be disposed according to the analytical results. Metal and other non-hazardous debris that are not suitable for incineration will be disposed into the project non-hazardous landfill.

2.2.3 Garage waste

Used oils will be incinerated on site with a device specially made for this purpose (*Smart Ash* drum burner). Ashes will be disposed according to analytical results. Used antifreeze, as other products that cannot be incinerated will be containerized in drums and shipped back to southern recycling and disposal facilities.

2.2.4 Waste water

The camp waste water will be pumped through a waste water treatment system which will be installed outside of the north camp boundaries. The system, made by “Kodiak”, was developed specifically for northern applications. All components of the “Bionest” treatment system are installed into a 20 feet marine container. The primary treatment is a conventional septic tank equipped with an effluent filter. The second treatment is made into the “bioreactor” where wastewater is put in contact with microbiological cultures naturally fixed on a synthetic material. Continuous aeration of the first compartment of the “bioreactor” is provided with a linear air pump and fine bubble air diffusers. The tertiary treatment is made by ultraviolet rays. The treated water will be released onto the ground, on the flat area located north of the camp. Treated water quality will be monitored when the system will be started, during the middle of the

summer and at the end of the working season. If the system must be stopped for any reason, a lined basin will be constructed nearby to provide temporary storage. Sludge generated by the system will be emptied at the end of each working season. Sludge will be disposed according to analytical results.

The waste water treatment unit specifications are presented in Appendix 1.

3. EQUIPMENT DETAILS

3.1 HEAVY EQUIPMENT

The following table is showing the heavy equipment and vehicles that will be used at CAM-D:

Equipment list		
Qty	**Description**	
2	ATV	Honda foreman 500
2	ATV	Honda foreman 350
1	ATV	Gator
1	Bulldozer	Komatsu D-41-E
1	Compactor	SD 70 Closed cab
1	Drilling rig	Worthington
1	Excavator	Hitachi EX160 LC5 + 2 buckets
1	Excavator	PC 300 LC-6 + 3 buckets + ripper
1	Excavator	PC 400 LC-8 + 3 buckets+ ripper
1	Flatbed	+ Dolly
1	Grader	Champion 740
1	Loader	WA-500 + bucket & forks
1	Loader	WA-420 + Bucket & forks
2	Off road dump truck	Komatsu HM300-2
2	Off road dump truck	Volvo A-25 & 5350B
1	Off road trailer	Fuel tank and vacuum pump, 18,000 l
1	Off road trailer	Water tank 10,000 l
5	Pick-up crew cab	F350 4x4, diesel
1	Screener	Power Screen Titan
1	Snow groomer	for mobilization route maintenance
1	Snowmobile	Arctic Cat
3	Snowmobile	Bombardier
8	Steel sleigh	for CAT train
3	Tractor	Challenger 855D/2009

3.2 INCINERATOR

As mentioned in a previous section, camp wastes will be burned everyday with an incinerator. For this purpose, three (3) Smart Ash cyclonic barrel burners were brought on site. This is a simple system composed of an high efficiency blower mounted on a standard 205 l (45 Gallon) barrels. It promotes complete combustion of liquid/solid waste without any pollutant emission in the air. The burner specifications are presented in appendix 2. These burners will also be utilized to eliminate used oils generated from equipment maintenance as well as all POL products, tank sludge, glycol/alcohol coming from landfill barrels, Tyvek coveralls, absorbent sheets, and oily rags from the garage.

Ashes will be disposed according to the analytical results. Metal and other non-hazardous debris that are not suitable for incineration will be disposed into the project non-hazardous landfill.

3.3 CONTAMINATED WATER TREATMENT UNIT

All contaminated water found or generated during the cleanup activities will be handled with the following methodology and equipment:

3.3.1 Methodology for contaminated treatment:

Two (2) types of contaminated water can be generated during the cleanup activities: wash water and excavation water.

To be discharged into the environment, the water will have to conform to the guidelines. This implies that all water generated at the processing area, inside the site areas or landfill excavation, will have to be temporary stored to be sampled and analysed before being released. Furthermore, all treated water will also need temporary storage while awaiting for the test results.

Therefore, the success behind the water handling and treatment will be directly related to the availability and efficient management of the temporary storage. All existing tanks must then be cleaned and kept for temporary storage until the last season before being destroyed. Some temporary ponds made of welded HDPE liner may also be built to store treated water if the existing tanks are not sufficient.

The other key parameter will be the water treatment system deployment. All water not conforming to the guidelines criteria will be treated following these steps:

1) Decantation*:* If possible, waste water with a lot of suspended solids will have been allowed to decant for a day or two before being run through the treatment system. This step is not essential but it will decrease maintenance of the filtering media;

2) Sand/oil/grease removal: From the storage tank, the waste water will go through a sand/oil/grease trap to remove bigger suspended solids (sand & silt) and POL free products;

3) Suspended solids removal: From the trap, the water will be pumped through auto-cleaning sand filters to remove remaining finer suspended solids (silt and clay). Remaining free POL products (oil and diesel) and part of its dissolved fraction will also be removed in the process;

4) Dissolved POL products and dissolved metals removal: From the sand filters, the water will carry on through activated carbon filters to remove by adsorption all dissolved POL products (oil and diesel) as well as all dissolved metals (cadmium, chromium, cobalt, copper, lead, nickel and zinc) and other harmful contaminants (PCB);

5) Clean water sampling and analysis: The water flowing out of the activated coal filter is now considered clean but it must be sampled and analysed to confirm it meets the guidelines criteria.

6) Temporary storage of the clean water: While waiting for the sample results before being released, the clean water will be stored in the cleaned existing tanks or temporary ponds made of welded HDPE liner;

7) Discharge of the clean water: Any clean water not intended for reuse will be discharged into the environment upon reception of the test results confirming achievement of the Wastewater Discharge Criteria.

3.3.2 Equipment for contaminated water handling, storage and treatment

Handling and pumping of contaminated water:

Three (3) types of pump will be used to handle waste water:

- *Electrical sump pumps* (2" and 3" outlet) will be mostly used to empty excavation or facilities of water presenting high content of suspended solids. They will also be used to feed contaminated water through the sand/oil/grease trap and discharge clean water from existing tanks or temporary ponds into the environment;

- *Air driven diaphragm pumps* will be used to handle wash water with a lot of free and dissolved POL products, like the tank and barrel cleaning water.

- *Electrical turbine pumps will be used* to push the waste water through the water treatment system. It may also be used to discharge cleaned water from existing tanks or temporary ponds to the environment.

The water treatment system (WTS) designed for CAM-D has a treatment capacity varying from 1 to 900 litres/min. The WTS will dispose of the following equipments to reach this capacity while removing the suspended solids, free and dissolved POL products and dissolved metals from the wastewater as described in the previous section:

- One (1) 15 kw generator and basic electrical system;

- Two (2) portable containers sheltering the WTS equipments;

- Two (2) electrical sump pumps 1.5 hp – 100 gpm used to feed water from storage tank or ponds through the sand/oil/grease traps;

- Two (2) sand/oil/grease traps 100 gpm used to remove bigger suspended solids (sand and silt) and free POL products from wastewater

- Four (4) 1000 l plastic tote tanks with overflow used to feed wastewater though the WTS;

- Two (2) electrical turbine pumps 1.5 hp – 100 gpm used to push the wastewater through the filtering mediums;

- Four (4) 100 gpm auto-cleaning sand filters parallel mounted used to remove the remaining suspended solids (silt and clay), remaining free and dissolved POL products from the waste water;

- Fourteen (14) 22 gpm activated coal filters parallel mounted used to remove remaining dissolved POL products and dissolved metals;

- Two (2) 1000 l plastic tote tanks to receive, visually assess and sample the treated water before reusing it for washing purposes or sending it to the temporary storage;

- One (1) kit of miscellaneous 2" flex pipes, quick connect fittings and ball valves to join or disconnect the WTS in the desired configuration.

Handling of waste residuals

Three (3) residues will be generated by the water treatment system and they will be disposed as follows:

- Sand, silt and clay particles collected in the sand/oil/grease traps and sand filters will be piled on an area of the processing pad to allow to dry. Once dried, the fines will be analysed and disposed according to the analytical results.

- *Free POL Products* collected in the sand/oil/grease traps and sand filters will be accumulated in 205 L (45 Gallon) barrels and incinerated in the Smart Ash II with other POL products recovered on site;

Activated Coal saturated with POL products and metals will be taken out of the filters, piled on an area of the processing pad to allow to dry. Once dried, the coal will be analysed and disposed according to the analytical results.

4. PROJECT ACTIVITIES

4.1 INFRASTRUCTURE IMPROVEMENTS

4.1.1 Runway

The objective is to make the runway conditions favourable for the use of a Cesna Caravan type airplane. The runway needs to be in good conditions on a minimum length of 800 meters. Only minor improvements will be done on the runway. Appropriate compaction will be performed and lower spots will be filled with granular material and re-compacted.

4.1.2 Road improvements

The improvement to the Murchison River's road is a priority in order to allow the circulation of all vehicles from the camp located in the borrow area #2 to the work site. Granular material must be added and compacted all along the road path, which has a total length of about 4.5 kilometres. The drainage must be improved and many culverts will have to be replaced or repaired. The road will be one way with at least 3 bypasses.

The road from the runway leading to the work site will be the second priority. This 1.5 kilometre section also needs major improvements as the Murchison River's road.

Roads must also be built to access the main dump areas.

4.2 COLLECTION, CONTAINERIZATION AND DISPOSAL OF HAZARDOUS MATERIALS

4.2.1 Asbestos removal and disposal

The first step of demolition involving hazardous material will be to remove asbestos components. Basically, all asbestos material removed will be placed in pre-labelled polyethylene bags or glove bags or wrapped in polyethylene sheeting of at least 6 mil thick. Friable asbestos will be sprayed with a capping agent prior to bagging. Then, prior to transportation to the non-hazardous landfill site, all asbestos material, with the exception of the intact wall panels (1/4" sheet), will be double bagged. The intact wall

panels will be double-wrapped in polyethylene sheets. All asbestos-containing material will be disposed in the landfill within the same area.

4.2.2 PCB material removal and containerization

The first step will be to remove all loose PCB amended paint (PAP) using metal scrappers and to collect the flakes and dust with an HEPA-filtered vacuum. All flakes and dust will be disposed in 6 mil polyethylene bags and placed inside sea-cans to be loaded in the marine container for off-site transportation once full.

The next step will be to remove the doors and door frames. As they are strong and have standard practical size, the doors will be kept to put against the wood brace inside the marine container to secure the PAP material.

Once exposed, all PAP plywood and planks from the inside/outside/partition walls and ceiling will be removed with crowbars and hand packaged inside the marine container.

All packaging and off-site transportation of the PAP material will be done using 8' x 8' x 20' barge containers approved for transportation by sea, road and rail. Furthermore, all small PAP debris like paint chips, wood chips, steel chips and concrete chips, will initially be placed inside a wooden sea-can lined with a 6 mil polyethylene bag before being loaded in the marine container for off-site transportation

4.2.3 POL products removal and containerization

Before the fuel storage tanks can be pressure washed and reused or disposed, the remaining volumes of POL and sludge present in the tanks need to be removed. The following procedures will be used to clean the tanks and dispose of the POL products and sludge.

- *Incinerate the POL:* Depending on analytical results, all remaining products in the POL fuel storage tank will be incinerated on site. If the POL products do not meet the incineration criteria, they will be containerized into drums.

- *Open and aerate the tank:* Then the lids of the tank will be opened and the tank ventilated for an hour using an explosion proof ventilator;

- *VOC measurement:* Once ventilated, the volatile organic compound (VOC) will be measured directly inside the tank to make sure it is below 20% Lower Explosive

Limit (LEL). According to the result, the tank may be aerated longer or washed/pumped with a small amount of hot water to take out the remaining POL products generating the VOC;

- *Personnel protection:* According to the VOC results, the Hazmat specialist will decide if the cleaning team of two (2) will either wear half-mask with VOC cartridges or full mask with air supply (Scott Air Pack) to enter the tank. Note that each individual entering a tank will be "confine space" certified and their certificate will be provided to the PWGSC site representative. The personnel will also wear neoprene suits, steel toe rubber boots, rubber gloves, sealed protective glasses (with half-mask) and hard hat;

- *Sludge removal:* All sludge inside the tank will be shovelled out and placed inside empty 205 l (45 Gallon) barrels;

- *Wipe the tank:* Before being pressure washed, the inside of the tank will be neatly wiped with absorbent sheets. Sheets will be stored in 6 mil polyethylene bags awaiting to be burned;

- *Wash the tank:* Finally the tanks will be pressure washed with water and destroyed. The wash water will be collected and treated.

4.2.4 Miscellaneous hazardous waste material removal and containerization

During landfill excavation or surface debris removal, other miscellaneous hazardous waste materials should obviously be found. According to past experiences, PCB Ballasts and lead-acid batteries are most likely to be found either complete and undamaged or broken with only parts of it remaining.

These hazardous materials will be taken care of as follows:

- *PCB ballasts:*

In the case of complete PCB ballasts, they will be placed inside 20 l (5 Gal) pails and taken to the processing area to be identified using the Environment Canada publication "Identification of Fluorescent Lamp Ballasts Containing PCB's". Ballasts identified as containing PCBs will be placed inside 205 l (45 Gal) 18 gauge steel barrels. Once full, these barrels will be neatly packaged and cushioned two by two inside lined and strapped sea-cans for a safer transportation. Both the barrels and sea-cans will be numbered and labelled according to their content.

Broken PCB ballasts showing the lost of their PCB content will be disposed in the Non-Hazardous Waste Landfill.

- *Lead-acid Batteries:*

In the case of complete and undamaged lead-acid batteries, they will be placed inside plastic containers and taken to the processing area. Once there, the batteries will be placed upright inside 210 l (45 Gallon) polyethylene barrels and will be securely cushioned with acid absorbent material in a way to avoid short circuiting. Once full without being overloaded, each barrel will be numbered and labelled. A package orientation “this end up” will also be added to avoid the batteries to be stored upside down with potential leaking of the acid. The barrels will then be neatly packaged and cushioned two by two inside lined and strapped sea-cans for a safer transportation. Both the barrels and sea-cans will be numbered and labelled according to their content and the information will be provided to the PWGSC site representative.

In the case of broken batteries or parts of broken batteries, especially pieces of lead electrodes, special care must be taken to avoid spreading potential lead contamination or leachable lead contaminated soil over a large area. When broken batteries will be encountered during landfill excavation or during surface debris pickup, the PWGSC site representative will be advised right away to assess the situation and take appropriate action in case leachable lead soil are associated with the broken batteries.

4.2.5 Disposal of hazardous waste off site

All contaminated material containerized on site will be transported to the temporary storage area located in Shepherd Bay. After marine transportation, the containers will be unloaded in Montreal. From there, according to the contamination type, the contaminated materials will be transported to the appropriate disposal facilities.

4.3 NON-HAZARDOUS DEBRIS COLLECTION

4.3.1 Building demolition

Once all hazardous materials will have been removed, the structure to be demolished will be cut in big sections and transported into the non-hazardous waste landfill. Once unloaded, the structure parts will be cut in smaller pieces and crushed with the excavator in order to reduce volume as much as possible.

4.3.2 Collection of site surface debris

Surface debris will be collected from the fourteen areas identified on drawings. To make sure all terrain will be covered, each of these sections will be roughly staked out on the field and a sketch of it will be made out of the drawings. The team will be systematically walking all sections until the complete area is completely covered. According to their size, the surface debris spotted will be removed and handled as follows:

- *Small debris:* All debris that can be lifted by hand will be picked up by the labourers and either piled up near an access road or directly placed inside an ATV trailer to be hauled directly to the Non-Hazardous Waste Landfill. Once enough volumes will have been accumulated, the piles of debris will be loaded inside an off-road truck and hauled to the Non-Hazardous Waste Landfill;

- *Large debris:* Large debris or those stocked in the ground will be identified using a wood pole and flag tape. At the end of each day, all these large debris will be identified on the drawings. Once an area will have been covered and cleaned from small debris, an excavator or loader will be sent to each large debris location to pick it up and haul it to an access road. As it has the lowest ground pressure or if digging is necessary, the excavator will be privileged for areas covered with tundra or for deeply buried debris. Once all large debris will have been hauled to an access road, they will be loaded inside an off-road truck and taken to the Non-Hazardous Waste Landfill.

- *Heavy equipment:* All heavy equipments will be inspected in order to identify and remove all hazardous components before the disposal. Once this is done, the equipment will be transported into the non-hazardous waste landfill. It will be cut in smaller pieces and crushed with the excavator in order to reduce the volume as much as possible.

As soon as debris removal will have been completed over an area, the PWGSC site representative will be invited to tour and approve it, so the labourers can move on to another area. Any hazardous or potentially hazardous waste debris likely to be found during surface debris removal will be handled by the Hazmat Specialist.

4.4 LANDFILL CONSTRUCTION

The non-hazardous waste landfill construction will begin once the road to the Murchison's borrow area will have been upgraded. During that time, all type 2 granular material will have been produced and stockpiled. The area where the landfill will be constructed will be reshaped, compacted and surveyed. This new surface will be used later on as a reference for the volume calculation. The surveyor will place all pickets for the first lift and the gravel transportation will begin. The type 2 gravel will be transported, placed in 250 mm lift, wetted and compacted as per spec requirement. Once the first lift finished and accepted, subsequent lifts will be placed until the final elevation is reached. The berms will be surveyed and the volume will be calculated.

To access the interior of the landfill, a ramp will be built on one side of the berm. Non-hazardous waste will be brought in, placed and compacted. Once the first lift of waste will have been completed, PHC impacted soils will be transported, placed on debris and compacted. It may happen that some impacted soils will be stockpiled in one corner of the landfill in order to gradually cover the compacted debris.

4.5 EXCAVATION AND OFF SITE DISPOSAL OF CONTAMINATED SOILS

4.5.1 Contaminated soil excavation

The first step will be to identify the areas to be excavated. If standing water is found nearby a site, a water sample will be taken. The samples will be collected early in the summer in order to give enough time to receive the analytical results. Depending on the results, the standing water will be pumped out of the area or containerized for further treatment. The empty wooden seacans or "superbags" will be brought on the excavation site. Once the area will have been well drained, the excavation will begin. The contaminated soils will be placed carefully directly into the wooden seacans and or "superbags". Most of the containers will be filled directly in the contaminated area. At the end of the excavation, a large piece of geomembrane will be placed beside the contaminated area and the last containers will be filled on this containment area. A picture of each filled containers will be taken and the containers will be closed and transported to the temporary storage area which will be located inside the borrow area 2.

When possible, the excavator will stay outside of the contaminated area. In this way, only the excavator bucket will have to be cleaned. Otherwise, excavator tracks will be cleaned over the containment area.

When soil analytical results will confirm that no further excavation is required, it will be backfilled with type 3 granular material. If secondary excavation is needed, it will be done according to above-mentioned procedures.

Regarding the PHC impacted soils, the identified areas will be excavated when material will be needed to cover the debris into the non-hazardous waste landfill. However, as mentioned previously, it may happen that PHC impacted soils need to be temporary stockpiled in a landfill section. The excavated material will be directly placed in the truck boxes and transported into the landfill. The PHC impacted soils will be placed over debris and compacted.

4.5.2 Contaminated soil disposal

All containerized soils will be transported from the temporary storage area located in CAM-D up to the temporary storage area in Shepherd Bay. After marine transportation, the containers will be unloaded in Montreal. From there, according to the contamination type, the contaminated soils will be transported to the appropriate disposal facilities.

4.6 BURIED DEBRIS EXCAVATION

As frozen soils condition will likely be encountered all season, to speed up the process, excavation of all landfills and buried debris will be done using the biggest excavator. To haul the frozen mix of soils/debris, one (1) or two (2) off-road trucks will be needed between the landfill and material processing area where the frozen soil/debris piles will be temporarily stored awaiting for debris removal, characterization and disposal. Each pile will be composed of two (2) truck loads dumped against each other to obtain a volume of ~20 m^3. The debris will be removed from the stockpiles by using an excavator with a sorting basket. There, the following procedures will be followed to manage the soils and debris:

- *Identification of the piles:* Each pile will be clearly numbered and a sketch of the piles made and updated every day. The origin of each pile within the excavation will also be indicated on a sketch;

- *Melting and drying of the piles:* The material will be allowed to thaw and dry for a couple of days;

- *Piles sampling by the PWGSC site representative:* While the piles will be melting, soil samples will be collected by the PWGSC site representative to determine if the piles are clean or contaminated;

- *Debris management and disposal:* Once enough piles will have melted, the debris will be extracted from the piles using an excavator equipped with a sorting basket. The excavator standing next to the piles will take out, segregate and stockpile the debris into similar material. During the process, two (2) labourers will be standing by to help out sorting and piling pieces that cannot be efficiently handled by the excavator. The trained labourers will also be looking for any potentially hazardous waste that may have been missed during the excavation. Finally, once there will be enough volume, the piles of debris will be loaded inside off-road trucks with an excavator and taken to the Non-Hazardous Waste Landfill;

- *Disposal of the soil piles:* Upon receiving the sampling results, the piles will be identified by the PWGSC site representative and the soils will be loaded in trucks and disposed as follows:

- Clean soil piles will be hauled back to the excavation for backfilling;

- According to the type of contamination, contaminated soil piles will either be disposed inside the non-hazardous waste landfill or containerized;

The material processing area will be installed nearby the existing garage, in the main station area, as shown on Figure 3.

Figure 3: Material Processing Area

5. SCHEDULE

5.1 GENERAL APPROACH

The following table is indicating the general approach for the project schedule:

Main activities	**Year**			
Description	*2009*	*2010*	*2011*	*2012*
Mobilization to Shepherd Bay by sea-lift	X			
Overland mobilization to CAM-D		X		
Site infrastructure improvement		X		
Granular material production		X		
Non-hazardous waste landfill facility construction		X		
Demolitions		X		
Contaminated soils excavation		X	X	
Surface debris removal		X	X	
Buried debris excavation			X	
General regrading and reshaping			X	
Non-hazardous waste landfill facility closing			X	
Equipment and material demobilization from CAM-D				X
Contaminated soils and material demob. from CAM-D			X	X
Equipment demobilization from Shepherd Bay				X
Cont. soils & material transportation to disposal facilities				X

5.2 GANT CHART SCHEDULE

The Gant chart schedule is presented in Appendix 3. The main components of the two cleanup seasons are discussed in the following sections.

5.2.1 Summer 2010

During the first summer, the priority will be placed on the camp setting, the infrastructure improvements and the granular material production in order to complete the construction of the non-hazardous waste landfill and to stockpile the gravel required for the realization of all the project activities. The contaminated soils that must be shipped of site will be excavated and containerized in order to be demobilized during the winter 2011. All other scheduled activities are not considered as priority since they can be completed during the next summer. However, all efforts will be undertaken to achieve as much work as possible during the first summer in order to have additional room for contingency and potential additional work during the last summer.

Camp Setup

The construction camp will be set up during June 2010 in order to initiate the contractual activities early in July 2010. As for the pre-mobilization activities, a crew will be sent on site to assemble the camp and the other facilities.

Granular material production

All the type 2 granular materials require for the non-hazardous landfill facility will be prepared at the beginning of the season. The production shall be completed when the road will have been repaired.

All the type 3 granular material required for the project activities will be taken from the same borrow area, transported and stockpiled nearby the main site.

Non-hazardous waste landfill construction

Once the road to the Murchison's borrow area will have been upgraded, the construction of the non-hazardous waste landfill will begin with the type 2 gravel.

Demolitions

The demolition works are scheduled to begin once the main station road will have been repaired. Hazardous material will be removed and containerized. All demolitions were scheduled to be done during the first summer. However, the priority will be placed on the POL tank and pumphouse since contaminated soils must be excavated under these structures.

Surface debris removal

The labourer team affected to the demolition will be re-assigned to the surface debris removal. The barrel dump and the main dump sites were scheduled to be cleaned first, considering the large amount of barrels that to be processed. The surface debris removal will be completed during the second summer.

Contaminated soils excavation

The excavation of the contaminated soils to be containerized was scheduled during the first summer in order to transport them at Shepherd Bay during the following winter. Some PHC impacted soils were also scheduled to be excavated in order to be used as an intermediate cover for all non-hazardous debris that will have been placed in the landfill.

5.2.2 Summer 2011

For the second summer, the excavation of contaminated soils and buried debris will be our priority. These work items have been scheduled early in the season since considerable delays are generated by the confirmatory soil sample analysis. The surface debris removal and barrel processing will be completed. The non-hazardous waste landfill closing is the last scheduled activity and was planned to be done after the interim completion inspection.

APPENDIX 1
CAMP WASTE WATER TREATMENT UNIT SPECIFICATIONS

APPENDIX 2
SMART ASH BURNER SPECIFICATIONS

APPENDIX 3
GANT CHART SCHEDULE