.3 The Contractor shall be responsible for all costs associated with the packaging, handling and off-site transport of the laboratory equipment, as identified in Section 01410 - Laboratory Testing, to the location designated by the Engineer. These costs will be reimbursed to the Contractor, and paid under the Prime Cost Allowance - Schedule C: 01591-1 of the Tender Form for Engineer's Office Supplies.

4 Unknown Hazardous Waste Material Collection

.1 Costs for the collection and containerization of unknown hazardous waste material will be paid under the Unknown Hazardous Waste Material Collection Prime Cost Allowance, Schedule C, Item C.02090-1 of the Tender Form.

.2 Unknown hazardous waste material is that waste material designated as hazardous in accordance with the definition of hazardous material in Section 02090 - Hazardous Waste Material, and which has not been specifically identified for collection and disposal as part of other work components.

.3 As part of the Prime Cost Allowance, Unknown Hazardous Waste Material shall include:

.1 Hazardous debris scattered over the site area.
.2 Hazardous waste material encountered during landfill excavation.
.3 Hazardous barrel contents.
.4 Unknown hazardous material encountered during demolition operations.

.4 As part of this Prime Cost Allowance, Unknown Hazardous Waste Materials shall not include:

.1 Materials from facilities to be demolished that are coated with PCB-amended paint where the PCB concentrations, with consideration of the substrate, are in excess of 50 parts per million.
.2 Asbestos containing materials from facilities to be demolished.
.3 Fuel and fuel residual product from fuel tanks and pipelines to be demolished.
.4 Sewage and sewage sludge from sewage tanks and sewage lines to be demolished.
.5 Hazardous Contaminated Soil as defined in Section 02066 - Contaminated Soils.
.6 Any hazardous material identified in the Demolition Inventory contained in the Appendix.

Costs for the collection and containerization (including supply of containers) for the above items shall be included in the demolition costs for the various facility components, the contaminated soil costs for the hazardous contaminated soil.

.5 The Unknown Hazardous Waste Material Collection Prime Cost Allowance shall cover costs for:

.1 Classification of unknown hazardous demolition and site debris for disposal requirements.

.2 Supply and transport to the site of containers for unknown hazardous waste materials.

.3 On-site transport of unknown hazardous waste materials following their confirmation as hazardous waste material by the Engineer.

.4 Containerization of unknown hazardous waste materials.

.5 Transport of unknown hazardous waste materials to the Temporary Storage Area at PIN-3.

.6 The Unknown Hazardous Waste Material Collection Prime Cost Allowance will be adjusted to actual costs as certified by the Engineer. Actual costs will include:

.1 Costs for the supply and transport of containers to the site.

.2 Equipment and labour costs for the containerization and on-site transportation of unknown hazardous waste materials to the Temporary Storage Area at PIN-3, Lady Franklin Point.

.7 Obtain cost estimates from a minimum of three suppliers or service companies for the cost items identified in Clause 4.6.1 of this Section. Provide copies of these estimates to the Engineer as verification that the Contractor has obtained the lowest available cost.

.8 The actual costs to be certified by the Engineer shall not include any Contractor mark-up.

1 General

.1 The work specified in this section comprises the provision of all labour, equipment and materials, and the performance of all work necessary for mobilization to and demobilization from the PIN-3 site.

.2 Mobilization shall include transportation to the site of the Contractor's labour, equipment, and materials in readiness to start work, all in accordance with the approved site cleanup program.

.3 Demobilization shall include the dismantling and removal from the site of all of the Contractor's equipment and materials, cleanup of the site, and transportation of labour from the site.

.4 Primary construction cleanup activities are those activities described in this contract up to the satisfactory cleanup of the site, removal from the site of the construction camp, equipment and materials, and submission to the Engineer of all Contractor submittals.

.5 Secondary construction clean up activities are those activities carried out in support of the operation of the landfarm subsequent to primary construction, including the closure of the landfarm.

2 Measurement for Payment

.1 All direct costs for mobilization are to be included in the lump sum price for Mobilization, Item B.01110-1, as indicated in Schedule B, Schedule of Lump Sum Items in the Tender Form. The lump sum payment for Mobilization will be paid upon installation and start-up of the Construction Camp at the site as specified in Section 01591, transport and delivery to the site of all equipment required to carry out the work and including the Engineer's vehicles, site office and laboratory, and acquisition of all necessary permits and authorizations designated to be obtained by the Contractor.

.2 All direct costs for demobilization, of all equipment and materials, excluding equipment to support ongoing Landfarming Operations, are to be included in the lump sum price for Primary Demobilization, Item B.01110-2, as indicated in Schedule B, Schedule of Lump Sum Items in the Tender Form. The lump sum price tendered for Primary Demobilization will be paid after satisfactory cleanup of the site, removal from the site of the construction camp, equipment and materials, and submission to the Engineer of all Contractor submittals.

.3 All direct costs for demobilization of all equipment and materials to support the Landfarming Operations are to be included in the lump sum price for Secondary Demobilization, Item B.01110-3, as indicated in Schedule B, Schedule of Lump Sum Items in the Tender Form. The lump sum price tendered for Secondary Demobilization will be paid after satisfactory closure of the landfarm and removal of equipment and materials.

1 General

.1 This section specifies general requirements and procedures for Contractor's submissions of shop drawings, product data, samples and mock-ups to the Engineer for review. Additional specific requirements for submissions are specified in individual sections of Division 2. Submission requirements of Division 2 include, but are not limited to, the following:

.1 Hazardous Waste Material Containers (Section 02060 - Demolition, Section 02090 - Hazardous Materials).
.2 PCB Contaminated Concrete Containers (Section 02060 - Demolition).
.3 Hazardous Contaminated Soil Containers (Section 02066 - Contaminated Soil).
.4 Granular Nutrient (Section 02067 - Landfarm Operation).
.5 Granular Fill (Section 02209 - Grading).
.6 Geotextiles (Section 02498 - Geotextiles).
.7 Geomembranes (Section 02499 - Geomembranes).

.2 Submit to Engineer, for review, shop drawings, product data and samples specified.

.3 Do not proceed with work until relevant submissions are reviewed by Engineer.

.4 Present shop drawings, product data, samples and mock-ups in SI Metric units. Where items or information are not produced in SI Metric units, converted values are acceptable.

.5 Contractor's responsibility for errors and omissions in submission is not relieved by Engineer's review of submissions.

.6 Notify Engineer, in writing at time of submission, identifying deviations from requirements of Contract Documents and stating the reasons for deviations.

.7 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Engineer's review of submission, unless Engineer gives written acceptance of specific deviations.

.8 Make any changes in submissions which Engineer may require consistent with Contract Documents and resubmit as directed by Engineer.

.9 Notify Engineer, in writing, when resubmitting, of any revisions other than those requested by Engineer.

2 Submission Requirements

.1 Coordinate each submission with requirements of work and Contract Documents. Individual submissions will not be reviewed until all related information is available.

.2 Verify:

.1 Field measurements;
.2 Field construction criteria;
.3 Catalogue numbers and similar data.

.3 Allow 21 calendar days for Engineer's review of each submission.

.4 Accompany submissions with transmittal letter, in duplicate, containing:

.1 Date.
.2 Project title and number.
.3 Contractor's name, address, and telephone and fax number.
.4 Specification Section number.
.5 Identification and quantity of each shop drawing, product data and sample.
.6 Other pertinent data.

.5 Submissions shall include:

.1 Date and revision dates.
.2 Project title and number.
.3 Name and address of:
.1 Subcontractor.
.2 Supplier.
.3 Manufacturer.
.4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
.5 Details of appropriate portions of Work as applicable:
.1 Fabrication
.2 Layout, showing dimensions, including identified field dimensions, and clearances.
.3 Identification of product or material.
.6 Performance characteristics.
.7 Applicable standards.
.8 Specification Section numbers.
.9 Relationship to adjacent work.

.6 After Engineer's review, distribute copies.

3 Shop Drawings

.1 Shop drawings: original drawings, or modified standard drawings provided by Contractor, to illustrate details of portions of Work, which are specific to project requirements.

.2 Identify details by reference to sheet and detail numbers shown on Contract drawings.

.3 Maximum sheet size: 212.5 x 275 mm. Apart from suppliers' standard product data sheets, all shop drawings shall be 212.5 x 275 mm sheets.

.4 Submit shop drawings as follows:

.1 One reproducible transparency on plastic film and one opaque diazo print.
.2 When reproducible transparency is not available, submit opaque diazo prints. Number of prints to be as Contractor requires for distribution plus six copies which will be retained by Engineer.

.5 Cross-reference shop drawing information to applicable portions of Contract Documents.

4 Product Data

.1 Product data: Manufacturers' catalogue sheets, brochures, literature, performance charts and diagrams, used to illustrate standard manufactured products will be accepted for review in lieu of shop drawings.

.2 Number of copies of product data to be as Contractor requires for distribution plus six copies which will be retained by the Engineer.

.3 Delete information not applicable to project.

.4 Supplement standard information to provide details applicable to project.

.5 Cross-reference product data information to applicable portions of Contract Documents.

5 Samples

.1 Submit samples of materials, equipment, quality, finishes, workmanship in sizes and quantity specified in individual sections of the Specifications.

.2 Reviewed and accepted samples will become standard of workmanship and material against which installed work will be verified.

6 Engineer's Review of Submissions

.1 Engineer will review shop drawings, product data and sample submissions.

.2 Upon completion of review, Engineer will return the following to Contractor noted either "Reviewed/No Comment"; "Revise and Resubmit"; "Rejected/See Remarks"; or "Not Reviewed", as applicable:

.1 Reproducible transparency.
.2 Number of copies of opaque diazo prints and product data submitted by Contractor for his own use.
.3 Statement of acceptance or rejection of samples.

.3 Correct and resubmit marked up reviewed drawings, and distribute reviewed drawings as required.

.4 Document changes made to the work during the installation and completion of the works by submitting to the Engineer a revised final submission of one reproducible transparency of applicable drawings, or six copies of opaque prints and product data. Provide revised submittals within two months of Completion of Works and noted "Revised As-Built". Reproducible transparencies shall be 3 mil thick mylar, matte both sides.

7 Measurement for Payment

.1 Work of this section will not be measured. Include all costs in Schedule D - Balance of Project Complete in the Tender Form. Indicate the cost of this work as a separate line item in the cost breakdown specified in Section 01005 - General Instructions.

1 General

.1 This section specifies general requirements and procedures for Contractor's submissions of project photographs.

2 Progress Photographs

.1 Sizes: 100 x 125 mm.

.2 Finish: Colour photocopy reproduced sheets.

.3 Place one photograph in each compartment jacket of the 3-compartment jacket.

.4 Acetate sheets to be punched, ready for insertion into three-ring binder. Binder(s) to be vinyl, hard-covered, 3 inch D ring, sized for 280 x 215 mm paper, with spine pocket.

.5 Identification: typewritten name and number of project to be provided on each acetate sheet; labels must be permanently affixed to the acetate, and positioned so as not to interfere with the view of the main activity or feature presented on the photograph. Also provide a description of the photograph beneath each photo. Description to include:

.1 Name or description of feature
.2 View direction
.3 Date of exposure.

.6 Frequency: Submit progress photos, monthly with progress statement or as directed by Engineer.

.7 Quantity: provide sufficient number of photographs to adequately describe the work activities carried out during the reporting period. A minimum of two photographs taken from two view points shall be provided for each cleanup/ construction operation.

3 Final Photographs

.1 Sizes: 100 x 125 mm.

.2 Finish: semi-matt, colour, with binding margin at one end.

.3 Paper: single weight.

.4 Container: acetate 3-compartment jacket; jacket to be three-hole punched. Acetate sheets to be assembled in a three-ring binder. Binder(s) to be vinyl, hard-covered, 3 inch D ring, sized for 215 x 280 mm paper, with spine pocket.

.5 Number of prints required: 3 sets in 3 separate binders.

.6 Identification: typewritten name and number of project to be indicated on cover and spine of binder. Provide a description of each photograph in a photographic log format. Photographic log to be included in binder. Description to include:

.1 Name and description of feature
.2 View direction
.3 Date of exposure.

.7 A minimum of two photographs taken from two view points shall be provided for each cleanup/construction operation.

.8 Viewpoint locations to be determined by Engineer.

.9 Submit final photographs prior to final progress payment request.

.10 Quantity: Provide sufficient number of photographs to adequately describe the work activities carried out during the reporting period. A minimum of two photographs taken from two viewpoints shall be provided for each clean up/construction activity.

4 Progress Photographs and Final Photographs - Digital (Alternative)

.1 Digital photographs may be substituted as an alternative to Clauses 2 and 3 of this section.

.2 Sizes: 100 mm x 125 mm.

.3 Two digital photographs per 8.5" x 11" page.

.4 Digital photos to have a minimum of 1,280 x 1,024 pixel resolution.

.5 Pages to be white, of high quality and to be three-hole punched, ready for insertion into a three ring binder.

.6 Final digital photographs to be placed in a binder. Binders to be vinyl, hard covered, 3 inch D-ring, with spine pocket.

.7 Identification: typewritten or generated by computer name and number of project on each page, and positioned to not interfere with the view of the main activity or feature presented on the photograph. Also provide a description of the photograph beneath each photograph. Description to include:

.1 Name and description of feature
.2 View direction
.3 Date of exposure.

.8 For final digital photographs, a minimum of two pictures from two view points shall be provided for each cleanup/construction operation.

.9 Viewpoint locations for final digital photographs to be determined by Engineer.

.10 Provide three sets in three binders of final digital photographs.

.11 Include a copy on computer disk or CD of all final digital photographs. Provide two copies of all computer disks or CDs.

.12 Submit progress photographs monthly with progress statement or as directed by the Engineer.

.13 Submit final photographs prior to final progress payment request.

.14 Quantity: Provide sufficient number of photographs to adequately describe the work activities carried out during the reporting period. A minimum of two photographs taken from two viewpoints shall be provided for each clean up/construction activity.

5 Negatives

.1 Submit all negatives of colour prints.

.2 Insert negatives in envelopes and identify with name and number of project.

.3 Include negatives with corresponding submissions of progress photographs, final photographs and colour slides.

6 Digital Files (Alternative)

.1 Digital files may be submitted as an alternative to negatives referenced in Clauses 5.1 to 5.3 above.

.2 Digital files shall be in Joint Photographic Experts Group (.jpg) format.

.3 Cross reference digital file names to photographic logs.

7 Measurement for Payment

.1 All direct costs for project photographs, including descriptions, binding copies and negatives, are to be included in the lump sum price for Project Photographs, Item B.01380-1 in the Schedule of Lump Sum Items in the Tender Form.

.2 All indirect costs associated with the work described in Clause 7.1 above, including supervision, overhead, profit, etc., shall be included in Schedule D, Balance of Project Complete, in the Tender Form.

1 General

.1 Particular requirements for inspection and testing to be carried out by a testing laboratory designated by the Engineer are specified under various sections.

2 Appointment and Payment

.1 The Owner will appoint and pay for services of a testing laboratory required for the following:

.1 Confirmatory testing as described in Clause 5 of this Section.
.2 Confirmatory testing following removal of PCB contaminated concrete (>50 ppm).
.3 Testing for the classification of hazardous contaminated soil for licensed disposal facility acceptance requirements.
.4 Testing associated with the characterization of barrel contents for the purpose of determining incineration requirements.
.5 Leachate extraction testing of the solid residual material resulting from the incineration of barrel contents, as required.
.6 Testing of solvent rinsate used during the cleaning of barrels.
.7 Testing associated with the identification and characterization of soil and waste materials excavated from landfills.
.8 Testing associated with the identification and characterization of hazardous waste materials.
.9 Testing of hydrocarbon contaminated soils during operation of the landfarm.
.10 Testing of granular materials including compaction testing.
.11 Testing required for quality assurance.

.2 Appoint and pay for testing services for quality control of Contractor's own work including the following:

.1 Inspection and testing required by laws, ordinances, rules, regulations or orders of public authorities.
.2 Inspection and testing performed exclusively for Contractor's convenience.
.3 Testing of the water supply source to be used for the Contractor's construction camp.
.4 Testing of water resulting from the cleaning of fuel tanks, sewage lines, pipelines and equipment decontamination operations.
.5 Testing of water resulting from dewatering operations.
.6 Testing of sewage effluent as indicated in Section 01560 or as directed by the Engineer.
.7 Testing to determine the disposal requirements of oil-absorbent material used as a filter for liquid wastes resulting from equipment decontamination, fuel tank/pipeline cleaning, and barrel processing operations.
.8 Testing of meltwater and leachate associated with landfill excavations and key trench excavations.

.9 Testing of contact water associated with the development and operation of the Landfarm for the treatment of hydrocarbon contaminated soil.

.10 Testing associated with the packaging and including future transport of hazardous waste material to be removed from the site.

.11 Air monitoring during demolition and asbestos removal operations.

.12 Testing of explosive vapour concentrations associated with degassing of tanks.

.13 Mill tests and certificates of compliance.

.14 Tests specified to be carried out by Contractor under the supervision of Engineer.

.15 All tests required by the Contractor to ensure conformance and quality control of the Contractor's work.

.16 Inspection and testing required by the conditions of permits issued for the work.

.17 Additional tests specified in Clause 2.3 below.

.3 Where tests or inspections by the designated testing laboratory reveal work not in accordance with contract requirements, Contractor shall pay costs for additional tests or inspections as Engineer may require to verify acceptability of corrected work.

.4 The analytical testing laboratory appointed by the Contractor to carry out off-site tests, shall be approved by the Engineer and certified by the Canadian Association of Environmental Analytical Laboratories (CAEAL) for the specific tests required. Submit copies of the laboratory's CAEAL certification to the Engineer upon request.

3 Contractor's Responsibilities

.1 Furnish labour and facilities to:

.1 Provide access to work to be inspected and tested.

.2 Facilitate inspections and tests.

.3 Make good work disturbed by inspection and test.

.4 Provide storage on site for laboratory's exclusive use to store equipment.

.2 Notify Engineer a minimum of 72 hours in advance of operations to allow for assignment of laboratory personnel and scheduling of test.

.3 Where materials are specified to be tested, deliver representative samples in required quantity to testing laboratory.

.4 Pay costs for uncovering and making good work that is covered before required inspection or testing is completed and approved by Engineer.

4 Field Laboratory

.1 Supply and pay for a field laboratory, complete with furniture, for the use by the Engineering staff.

.2 Locate the field laboratory on a site designated by the Engineer and make ready for use three days prior to the first day work commences for which testing is required, and remain available for the duration for which testing is required.

.3 Provide and maintain two satellite phone lines at the lab, or equivalent communication approved by the Engineer. The building will have a minimum floor area of 50 square metres complete with two satellite telephone lines, one satellite telephone, one standard paper (not thermal film paper) fax machine, heating system, lighting system, a minimum of three 110 and one 220 volt, 60 cycle electric outlets, washroom with one toilet and one shower, water and sewer system, laboratory area complete with sink, work benches, garbage cans, stove, hood and fan, shelving and clothes rack, one desk, two 0.75 m x 1.50 m tables, three chairs, four-drawer filing cabinet, adequate windows, and be suitable for the type of testing specified in the Contract Documents. Provide a minimum of 60 square metres of shelf area. The fax machine is to include a Space Fax interface, as described in Clause 9.4 of Section 01591 - Construction Camp.

.4 Establish an electronic mail (E-mail) address through the satellite phone provider.

.5 Satellite charges, long distance charges, and/or E-mail account charges for the telephone, fax machine, and E-mail transmissions are to be paid by the Contractor. The Contractor will be reimbursed for these costs in accordance with the Prime Cost Allowance for Engineer's Office Supplies as described in Section 01020 - Prime Cost Allowances.

.6 DUE TO THE REMOTENESS OF THE SITE, IT IS CRITICALLY IMPORTANT THAT THE COMMUNICATION EQUIPMENT PROVIDED BY THE CONTRACTOR FOR THE ENGINEER'S USE IS RELIABLE AND OF THE HIGHEST QUALITY. IMMEDIATELY REPAIR OR REPLACE FAULTY EQUIPMENT. THIS EQUIPMENT SHALL BE OPERATIONAL FROM TIME WORK COMMENCES AT THE SITE.

.7 Equip the laboratory with a standard refrigerator with a total minimum capacity of 0.48 cubic metres (17 cubic feet). One-third of this capacity shall comprise the freezer component of the refrigerator.

.8 Equip the laboratory with the following new granular material testing equipment, or approved equivalent:

.1 Dispatch LBB-69 laboratory oven.
.2 One rack of sieves: Gilson 200 mm metric sieves, or equivalent. Sieve sizes: 0.080, 0.160, 0.425, 1.25, 2.5, 5.0, 10.0, 25.0, 50.0, 75.0 and 100.0 mm.
.3 One wash sieve.
.4 Pans and Tares:
- 2 each 13 x 9 x 2" Gilson SC163
- 2 each 26 x 18 x 3.5" Gilson SC149
- 2 each 9.3 x 5.3 x 2.7" Gilson SC153

- 100 Royal China paper plates - 200 mm min. diameter (for use in microwave).
- 100 aluminum pie plates - 200 mm min. diameter (for use in oven).

.5 One sieve brush: Gilson TSA 170.

.6 One electronic scale: Melter PC8000.

.7 One polyethylene tarp for sample splitting: 1.8 m x 1.8 m minimum size.

.8 Sieve shaker: Gilson SS8R.

.9 One pair of oven mitts.

.10 Salinity Refractometer, Leica No. 10419 as supplied by Fisher Scientific (BL-10).

.9 All of the items specified in Clause 4.8 will remain the property of the Owner. Transport these items off-site to the location, as designated by the Engineer, at the completion of the Contract.

.10 Equip the laboratory with an industrial microwave oven. This will remain the property of the Contractor at the completion of the Contract.

.11 Clean the laboratory at least two times per week, and maintain all electric lights, heating, water and sewer systems in good working condition during the period the laboratory is required. Maintain building in acceptable condition. Clean and sanitize washroom and shower facilities daily.

.12 Provide power to the laboratory and storage container on a 24 hour/day basis while the cleanup activities requiring laboratory services are in operation. Equip all power supplies with adequate surge protection. Damage to equipment resulting from power surges will be repaired or replaced at no cost to the Owner.

.13 Submit to the Engineer for approval, a sketch of the proposed laboratory before fabrication or construction, in accordance with Section 01340 - Shop Drawings, Product Data, Samples and Mock-Ups.

.14 Provide Engineer key-locks for field laboratory prior to commencement of activities requiring laboratory services being in operation.

5 Confirmatory Testing

.1 Confirmatory testing will be carried out on contaminated soil areas by the Owner's testing laboratory as follows:

.1 The actual location, frequency and method of testing will be determined by the Engineer.

.2 Soil sampling will be carried out within the perimeter of each contaminated soil excavation and at depth within the completed excavation area, immediately upon completion of excavation.

.2 Classification testing will be carried out at the Landfill Waste Excavation Material Processing Areas to classify and delineate contaminated soil and other materials.

.3 Confirmatory testing will be carried out by the Engineer's authorized personnel if removal of PCB (CEPA) contaminated concrete is required.

.4 It is anticipated that test results will be available within approximately seven working days (ten working days for landfill excavation samples) from the date that samples are transported from the site for laboratory analysis. This is based on a maximum of 30 analyses per day. The samples will be transported via the air transport service provided by the Contractor to Cambridge Bay. From Cambridge Bay, the samples will be transported by commercial air service to the Owner's testing laboratory. Transfer samples to commercial air cargo for the next available flight south (maximum 24 hours from site departure).

.5 The Contractor shall be responsible for all costs associated with the packaging, handling, and transport of the samples to the Owner's testing laboratory. These costs will be reimbursed to the Contractor, and paid under Prime Cost Allowance for Engineer's office supplies, Part C, Item C.01591-1 of the Tender Form. IT IS CRITICALLY IMPORTANT THAT THE CONTRACTOR ENSURES THAT THE SOIL SAMPLES ARE EXPEDITIOUSLY DELIVERED FROM THE SITE AND TRANSFERRED TO COMMERCIAL AIR SERVICE.

6 Measurement for Payment

.1 Costs for the off-site transport of soil, concrete, and/or water samples for confirmatory laboratory analysis will be included in the Prime Cost Allowance for Engineer's office supplies, Schedule C, Item C.01591-1 of the Tender Form. Refer to Section 01020 - Prime Cost Allowances.

.2 Costs for Engineer's satellite and/or long distance telephone, fax, and e-mail account charges will be reimbursed to the Contractor, and paid under Prime Cost Allowance for Engineer's office supplies, Schedule C, Item C.01591-1 of the Tender Form. Refer to Section 01020 - Prime Cost Allowances.

.3 The off-site transport of laboratory equipment at the conclusion of the Contract will be paid under Prime Cost Allowance for Engineer's Office Supplies, Schedule C, Item 01591-1 of the Tender Form. Refer to Section 01020 - Prime Cost Allowance.

.4 The provision of satellite or long distance telephone links for the Engineer and authorized personnel will be measured for payment by the line-week for each week that the communication systems are available and operational. Communication lines will be paid under Item A.01591-4 in the Schedule of Unit Prices, as described in Section 01591 - Construction Camp.

.5 Except as indicated in Clause 6.1 to 6.4 above, work of this Section will not be measured. Include all costs in Schedule D - Balance of Project Complete in the Tender Form. Indicate the cost of this work as a separate line item in the cost breakdown specified in Section 01005 - General Instructions.

1 General

.1 Temporary facilities consist of essential temporary buildings, structures, utilities and services required at the site during cleanup of the site.

.2 Refer to Section 01591 for Construction Camp requirements.

2 Scope

.1 Provide all temporary facilities consisting of the design, supply, construction, maintenance, operation and removal of the facilities and services required to support the cleanup of the site. Provide temporary facilities as specified at the work site, and any other location where temporary facilities are essential to the Work. Temporary facilities shall meet requirements of Land Use Permit issued for the Work, satisfy requirements of Federal, Territorial and local authorities having jurisdiction, and comply with the requirements of Section 01560 - Environmental Protection.

3 Access and Dust Control

.1 Provide and maintain adequate access, including snow removal, to all working areas of the site, camp, utilities and offices during all periods of work by Contractor, subcontractors and other contractors performing work for the Owner.

.2 If authorized to use existing roads for access to the project site, including granular borrow areas, maintain such roads for the duration of the Contract, and make good damage resulting from Contractor's use of such roads.

.3 Access includes removal of snow, as may be required, to gain initial access to site and for reopening of camp and project site as required to meet the project schedule.

.4 **Control cleanup operations to eliminate all excessive dust-creating activities, or as directed by the Engineer.** This includes maintenance and watering of the haul roads and all other roads required for the operations to carry out the scope of work for this contract. The use of oil for dust control is prohibited. Use only water.

.5 When using roads commonly used by NWSO personnel, ensure that adequate signage and safety precautions have been implemented.

4 Engineer's Field Laboratory

.1 Refer to Section 01410 - Testing Laboratory Services for Engineer's field laboratory requirements.

5 Light and Power Supply

.1 Provide, operate, and maintain an electrical power supply system, in accordance with governing regulations, to service the Contractor's site power requirements.

.2 Install temporary facilities as necessary for power distribution, such as power cable and pole lines, subject to Engineer's approval.

.3 Provide lighting and power at site for use during work by Contractor, subcontractors, and Engineer's support personnel.

.4 Provide power surge protection on power supply for all equipment/facilities operated by Engineer and Engineer's support personnel. Replace, at no cost to the Owner, any such equipment damaged by power surges.

6 Heating and Ventilation

.1 Provide heat and ventilation in enclosed areas as required to:

.1 Facilitate progress of work.
.2 Protect work and products against dampness and cold.
.3 Prevent moisture condensation on surfaces.
.4 Provide ambient temperatures and humidity levels for storage and installation of materials.
.5 Provide adequate ventilation to meet health regulations for safe working environment.

.2 Provide ventilation for temporary facilities as follows:

.1 Prevent accumulations of dust, fumes, mists, vapours or gases in areas occupied during work.
.2 Provide local exhaust ventilation to prevent harmful accumulation of hazardous substances into atmosphere of occupied areas.
.3 Dispose of exhaust materials in manner that will not result in harmful exposure to persons.
.4 Ventilate storage spaces containing hazardous or volatile materials.
.5 Ventilate temporary sanitary facilities.
.6 Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful elements.

.3 Maintain strict supervision of operation of heating and ventilating equipment to:

.1 Conform with applicable codes and standards.
.2 Enforce safe practices.
.3 Prevent abuse of services.
.4 Prevent damage to finishes.
.5 Vent direct-fired combustion units to outside.

7 Drainage

.1 Refer to Section 01560 - Environmental Protection and to specific sections in Division 2 of these Specifications for site drainage and pumping requirements.

8 Signs and Notices

.1 Safety and Instruction Signs and Notices:

.1 Signs and notices for safety and instruction shall be in English, and the local dialect. Graphic symbols shall conform to CAN3-Z321-77, or latest edition thereof.

.2 Maintenance and Disposal of Site Signs:

.1 Maintain approved signs and notices in good condition for duration of project, and dispose of off site on completion of project, or earlier if directed by Engineer.

9 Scaffolding

.1 Construct and maintain scaffolding in a rigid, secure and safe manner.

.2 Erect scaffolding independent of walls. Remove promptly when no longer required.

.3 Conform to safety requirements of Section 01545 - Safety, Medical, Security Requirements.

10 Removal or Shut-Down of Facilities

.1 Schedule and obtain approval from the Engineer to remove temporary facilities from site.

.2 When project is closed down at end of construction season, keep facilities operational until close down is approved by Engineer. Ensure adequate protection of facilities over shut down period and re-open as the work schedule requires.

11 Survey Equipment

.1 Maintain at site, for duration of the construction period, a complete set of survey equipment for use by the Engineer. Shared use of the Contractor's survey equipment is acceptable.

.2 Equipment shall include:

.1 Surveying Total Station (NICON 705), Leica 703 Series or equivalent) with data recording capability, tripod, battery, spare battery, battery charger, downloading software, laptop computer and all associated ancillary items (cables, hardlock, etc.).
.2 Automatic Level - LEICA (Wild) T2 or equivalent with tripod.
.3 Single prism with 5 metre collapsible range pole.
.4 Triple prism with tripod.
.5 50 metre cloth tape (steel reinforced).
.6 5 metre collapsible level rod.

.3 Calibrate all equipment prior to each construction season. Provide to the Engineer, documentation certifying the calibration of the equipment.

.4 The survey equipment will remain the property of the Contractor.

12 Digital Camera

.1 Maintain at site, for the duration of the construction period, a digital camera for use by the Engineer. Shared use of the Contractor's digital camera is acceptable.

.2 Equipment shall include:

.1 Digital camera with a minimum 1,280 x 1,024 pixel resolution, a zoom lens capability, flash capability, spare batteries and battery charger, and data card memory ability and spare data card.
.2 All necessary computer software and hardware, including a CD burner, for the downloading of information to a computer and storage of information.

.3 This camera remains the property of the Contractor at the conclusion of the work.

13 Measurement for Payment

.1 Work under this section will not be measured. Include all costs for Items 1 to 12 in Schedule D - Balance of Project Complete in the Tender Form. Indicate the cost of this work as a separate line item in the cost breakdown specified in Section 01005 - General Instructions.

1 General

.1 Personnel safety, medical facilities and reliable communications are of paramount concern due to the remoteness of the site.

.2 The Contractor shall be responsible for the safety of all persons and property on or about the project and for ensuring that the work is performed in accordance with all applicable safety regulations and site specific requirements.

.3 Implement, maintain and supervise a comprehensive safety and health program that meets the standards and requirements of applicable regulatory agencies and to the satisfaction of the Engineer. Make program known to all personnel at the site and include specific instructions on safe performance of duties including working in a harsh environment, monitoring for compliance, safety communications and instruction, and actions to be taken in the event of safety violations, accidents, emergencies, personnel injury and sickness. Include in the program an effective reporting system to the Engineer on safety and health matters.

.4 Designate a Safety Officer acceptable to the Engineer, who shall be qualified and authorized to supervise and enforce compliance with the safety program.

.5 Arrange regular safety meetings, to be held no less frequently than once per week. Record the minutes of such meetings and maintain a complete file for review by the appropriate authorities. Submit a copy of these meeting minutes to the Engineer within three days of the meeting. All costs for such meetings shall be borne by the Contractor.

.6 Supply and maintain, at known places on-site, safety equipment necessary to protect the workers, the Engineer and Engineer's support staff against accident or injury as prescribed by the governing authorities, the Engineer, and site specific requirements.

.7 Personnel shall be medically fit for work in the Arctic at an isolated location with limited medical facilities.

.8 Provide wildlife monitors, acceptable to the Engineer, equipped with firearms to protect the safety of all workers including the Engineer, and Engineer's support staff during site operations. Assign a wildlife monitor to accompany the Engineer and Engineer's support staff during all inspection and soil/material sampling activities that take place away from the construction camp area.

.9 Include in the Work Methodology Plan and Worker Orientation Procedures for the safe handling and storage of firearms and related hardware.

2 Health and Safety Plan

.1 Prepare a Health and Safety Plan that incorporates the requirements of this section, Section 01546 - Fire Safety Requirements, and Division 2, as appropriate.

.2 The plan shall include, at a minimum, the following sections:

.1 A Statement of the Contractor's Safety Policy.
.2 Safety Responsibilities of all on-site personnel.
.3 Safe Work Practices and/or Job Procedures.
.4 Rules and their enforcement.
.5 PPE and its maintenance.
.6 Incident Reporting and Investigation.
.7 Emergency Response Procedures.
.8 Record keeping.

.3 Communicate the Health and Safety Plan to all personnel onsite, and make copies available in each Contractor maintained facility.

.4 Provide two copies of the Health and Safety Plan to the Engineer prior to the commencement of work.

3 Construction Safety Measures

.1 Observe and enforce construction safety measures required by the latest revisions of: Canada Labour Code, National Building Code of Canada, National Fire Code of Canada, Workers' Compensation Board, the applicable Occupational Health and Safety Regulations, and Territorial and local statutes and authorities.

.2 In the event of discrepancies between any requirements of the above listed authorities, the more stringent requirements shall govern.

.3 Maintain at the site, ten safety hats with liners, ten pairs of safety goggles, and ten pairs of CSA approved steel toed rubber boots for use by the Engineer and visitors.

.4 The Contractor will comply with all applicable health and safety policies and procedures of the Site Owner.

.5 The Engineer or his representative has the authority to stop work on the contract if, in his/her opinion, the work is being performed in an unsafe manner as required by the applicable safety legislation.

.6 Government owned equipment, devices, tools and machinery not stipulated in the contract will not be provided to the Contractor.

4 Medical

.1 Provide and maintain first aid and medical care and facilities for all camp occupants as required by the Statutes of the Nunavut Safety Act.

.2 Maintain first aid supplies and sick quarters separately from general living quarters when camp population normally ranges between 26 and 50 occupants.

.3 Provide the appropriate Nunavut first aid kit, based on the number of occupants, in accordance with the Nunavut Safety Act.

.4 Establish an emergency response plan acceptable to the Engineer, for the removal of any injured person to medical facilities or a doctor's care in accordance with applicable legislative and regulatory requirements.

.5 Provide proof of First Aid credentials to the Engineer prior to the start of each construction season. Provide the appropriate number of first aid attendants on site in accordance with the Nunavut Safety Act.

5 Accidents and Accident Reports

.1 Immediately report, verbally, followed by a written report within 24 hours, to the Owner and the Engineer, all accidents of any sort arising out of or in connection with the performance of the work, giving full details and statements of witnesses. If death or serious injuries or damages are caused, report the accident promptly to the Owner and the Engineer by telephone or facsimile in addition to any report required under federal and territorial laws and regulations.

.2 If a claim is made by anyone against the Contractor or the subcontractor on account of any accident, promptly report the facts in writing to the Owner and the Engineer, giving full details of the claim.

6 Security

.1 Enforce the Camp Rules as provided under Section 01591 - Construction Camp.

.2 Limit site access only to persons employed on the project. Unauthorized persons will be permitted on site only with the approval of the Engineer.

7 Scaffolding

.1 Design and construct scaffolding in accordance with CSA S269.2-M87. Provide details and procedures for ensuring all scaffolding equipment, materials, and construction practices meet all applicable regulations and site specific requirements.

8 Minimum Work Practice: Asbestos-Containing Products

.1 Comply with the practices described in Section 02081 - Asbestos Abatement when working with asbestos-containing materials.

9 WHMIS

.1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding employee training, use, handling, storage, and disposal of hazardous materials, and regarding labelling and provision of Material Safety Data Sheets as required by WHMIS legislation.

.2 Submit copies of WHMIS data sheets to Engineer on delivery of materials.

10 Handling and Transportation of Dangerous Goods

.1 Observe and enforce all construction measures required by the regulatory agencies including but not limited to Environment Canada, Department of Environment, and Transport Canada.

.2 Most current regulatory Guidelines and Acts will apply to the work.

.3 In the case of any discrepancies, the more stringent requirements will apply.

11 Potentially Hazardous Materials

.1 The work of this contract involves the handling of potentially hazardous materials including materials coated with paint containing lead and polychlorinated biphenyls (PCBs).

.2 PCBs at concentrations in excess of 50 parts per million (ppm) are considered to be hazardous substances. Storage and handling of PCBs are regulated under the Canadian Environmental Protection Act, and federal, territorial and provincial Transportation of Dangerous Goods Act. Comply with all applicable regulations.

.3 The results of field and laboratory analyses carried out at the site indicate that some of the components of facilities to be demolished are coated with PCB-amended paint. The concentration of PCBs within the paint of some of the components exceed 50 ppm. Comply with the practices described in Section 02060 - Demolition when working with PCB-containing materials.

.4 Fluorescent lamp ballasts are to be handled, and general safety precautions followed, as stated below:

.1 Some ballasts in the buildings to be demolished may contain PCB-filled capacitors.

.2 Wear gloves while handling ballasts and dispose of gloves with ballasts. Avoid breaking or damaging ballasts cases.

.3 Refer to Environment Canada publication, "Identification of Fluorescent Lamp Ballasts Containing PCBs" (ISBN 0-662-19091-2).

12 Measurement for Payment

.1 Work under this section, except as noted in Clause 12.2, will not be measured. Include all costs for the work of this section in Schedule D - Balance of Project Complete in the Tender Form.

.2 All direct costs for the preparation and completion of the site specific Health and Safety Plan, are to be included in the lump sum price for Health and Safety Plan, Item B.01545-1, as indicated in Schedule B, Schedule of Lump Sum Items in the Tender Form. The lump sum price tendered for the Health and Safety Plan will be paid after a satisfactory Health and Safety Plan has been submitted to the Engineer.

1 General

.1 Provide all fire prevention, fire protection and fire fighting services at the project site.

.2 Implement a fire safety program that includes fire prevention, fire protection and fire fighting requirements. Submit details of the fire safety program in writing to the Engineer for review prior to start of construction. Such review does not relieve the Contractor from any obligations or responsibilities required by the Contract.

.3 Ensure that any subcontractors and other contractor personnel on-site are briefed on fire safety requirements and are familiar with the fire prevention, fire protection and fire fighting program.

.4 The fire safety program shall meet or exceed the most recent editions of the following codes and standards:

.1 Nunavut Safety Act.
.2 National Fire Code of Canada.
.3 Canada Labour Code.

.5 Personnel designated for fire fighting services must be provided with training for any special hazards that may be present. These personnel must also be provided with protective equipment as required by the Canada Labour Code.

2 Reporting Fires

.1 A person discovering a fire and all fire related incidents shall report immediately, by fastest available means, to Engineer and site superintendent.

.2 A person discovering a fire shall, if possible, remain in the vicinity to direct fire fighting personnel.

3 Interior and Exterior Fire Protection and Alarm Systems

.1 Install and maintain smoke alarm systems within the Construction Camp in accordance with the National Building and Fire Codes and as required in the Nunavut Safety Act.

.2 Fire protection and alarm systems shall not be:

.1 Obstructed.
.2 Shut-off.
.3 Left inactive at the end of working day or shift without notification and authorization of Engineer.

.3 Do NOT use fire protection equipment for other than fire fighting purposes.

4 Fire Extinguishers

.1 Provide and maintain fire extinguishers in sufficient quantity to protect, in an emergency, the work in progress and the physical plant on site.

5 Smoking Precautions

.1 Do NOT permit smoking in hazardous areas. Exercise care in the use of smoking materials in non-restricted areas.

.2 Provide and place signs prohibiting smoking in areas where smoking is not permitted.

.3 Signs prohibiting smoking shall have black lettering not less than 50 mm high, with a 12 mm wide stroke on a yellow background. Lettering to be in English and the local dialect. In lieu of lettering, symbols of not less than 150 mm by 150 mm may be used.

.4 Smoking is prohibited within 7.5 metres of fuel storage and dispensing facilities.

.5 Provide and place signs indicating that smoking within 7.5 metres of fuel storage and dispensing facilities is not permitted, and that the vehicle ignition must be turned off while the vehicle is being refuelled. Provide at least one weather-resistant sign at each fuel dispensing location. The signs shall be in English and the local dialect and have a minimum dimension of 200 mm and letters not less than 25 mm high. In lieu of lettering, signs may have international "No Smoking - Ignition Off" symbols not less than 100 mm in diameter. Install signs in a location visible to all drivers approaching the dispensing location, and at the dispensing unit.

6 Rubbish and Waste Materials

.1 Rubbish and waste materials are to be kept to a minimum.

.2 Storage:

.1 Extreme care is required where it is necessary to store oily waste in work areas to ensure maximum possible cleanliness and safety.

.2 Greasy or oily rags or materials subject to spontaneous combustion shall be disposed of as hazardous material in accordance with Section 02090 - Hazardous Waste Material.

7 Flammable Liquids

.1 The handling, storage and use of flammable liquids shall be governed by the current National Fire Code of Canada.

.2 Flammable liquids such as gasoline, kerosene and naphtha may be kept for ready use in quantities not exceeding 45 litres provided they are stored in approved safety cans bearing the Underwriter's Laboratory of Canada or Factory Mutual seal of approval. Storage of quantities of flammable liquids exceeding 45 litres for work purposes, requires the permission of the permitting authority.

.3 Transfer of flammable liquids is prohibited within buildings.

.4 Do not transfer flammable liquids in the vicinity of open flames or any type of heat-producing devices.

.5 Do not use flammable liquids having a flash point below 38°C such as naphtha or gasoline as solvents or cleaning agents.

.6 Store flammable waste liquids, for disposal, in approved containers located in a safe ventilated area. Quantities are to be kept to a minimum and the Engineer is to be notified when disposal is required.

.7 Dispose of all flammable liquids in accordance with all applicable environmental regulations and with the requirements of Section 02090 - Hazardous Waste Material.

8 Hazardous Substances

.1 If the work entails the use of any toxic or hazardous materials or chemicals, or otherwise creates a hazard to life, safety or health, work shall be in accordance with the National Fire Code of Canada, Occupational Health and Safety Legislation, and WHMIS.

.2 The Engineer is to be advised, and a "Hot Work" permit issued by the Contractor's designated representative in all cases involving welding, burning or the use of blow torches and salamanders, in buildings or facilities. Special precautions are necessary to safeguard life and property from damage by fire or explosives.

.3 Wherever work is being carried out in dangerous or hazardous areas involving the use of heat, provide fire watchers, equipped with sufficient fire extinguishers. The determination of dangerous or hazardous areas along with the level of precaution necessary for Fire Watch shall be at the discretion of the Contractor. Notify the Engineer prior to that determination.

.4 Provide proper ventilation and eliminate all sources of ignition where flammable liquids, such as lacquers or urethanes are used.

.5 Do not store flammable substances within 30 m of the Temporary PCB Materials Storage Area.

9 Questions and/or Clarifications

.1 Direct any questions or clarification on Fire Safety in addition to the above requirements to the Engineer.

10 Measurement for Payment

.1 Work under this section will not be measured. Include all costs in Schedule D - Balance of Project Complete in the Tender Form.

1 Environmental Protection Plan (EPP)

.1 The EPP forms part of the Contract. Carry out cleanup activities in conformance with the EPP.

.2 The EPP is a consolidation of the cleanup related environmental requirements from the various environmental protection and land use regulations of all relevant jurisdictions.

.3 A draft oil and hazardous material contingency plan is provided in Appendix H based on the Northwest Territories Water Board's Guidelines for Contingency Planning, January 1987 as stipulated by the Nunavut Water Board. Provide update to complete this report prior to starting work.

.4 If there are any conflicts or discrepancies between the above requirements, the more stringent requirements shall take precedence. Advise the Engineer of any discrepancies in the above requirements applicable to the work.

2 References

.1 Comply with all applicable environmental laws, regulations and requirements of Federal, Territorial, and other regional authorities, and acquire and comply with such permits, approvals and authorizations as may be required.

.2 Ensure that all applicable legislation, regulations and guidelines are followed in carrying out the work. The following lists some of the key regulatory references:

.1 The Canadian Environmental Protection Act (CEPA).
.2 The Transportation of Dangerous Goods Act and Regulations.
.3 The Fisheries Act.
.4 The Arctic Waters Pollution Prevention Act and Regulations.
.5 The Migratory Birds Convention Act.
.6 The Canada Wildlife Act.
.7 The Canada Shipping Act.
.8 The Navigable Waters Protection Act.
.9 The Territorial Lands Act.
.10 The Territorial Land Use Regulations.
.11 The Territorial Quarrying Regulations.
.12 The Nunavut Waters Act and Regulations.
.13 Canada Labour Act and Regulations.
.14 Atomic Energy Control Act and Regulations.
.15 Explosives Act and Regulations.
.16 National Fire Code.
.17 The Explosives Use Act and Regulations (Nunavut).
.18 The Nunavut Wildlife Act.
.19 The Environmental Protection Act (Nunavut).
.20 Guidelines for the Management of Waste Antifreeze (NWT).
.21 Guidelines for the Management of Waste Asbestos (NWT).

.22 Guidelines for the Management of Waste Batteries (NWT).
.23 Guidelines for the Management of Waste Solvents (NWT).
.24 Guidelines for the Management of Waste Paint (NWT).
.25 Guidelines for the Management of Hazardous Wastes in the NWT.
.26 The Spill Contingency Planning and Reporting Regulations (Nunavut).
.27 The Northwest Territories Archaeological Sites Regulations (The NWT Act).
.28 The Fire Prevention Act (Nunavut).
.29 Safety Act: Occupational Health Regulations (Nunavut).
.30 Guidelines for Removal of Materials Containing Friable Asbestos.
.31 Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments.
.32 National Guidelines for the Landfilling of Hazardous Waste.
.33 Guidelines for Preparation of Hazardous Material Spill Contingency Plans.
.34 Code of Good Practice on Dump Closing or Conversion to Sanitary Landfills at Federal Establishments.
.35 Code of Practice for Used Oil Management in Canada.
.36 Canadian Environmental Quality Criteria for Contaminated Sites - Canadian Council of Ministers of the Environment.
.37 Guidelines for Municipal Type Wastewater Discharges (NWT).
.38 Guidelines for Discharge of Treated Municipal Wastewater (NWT).
.39 Canada Labour Act and Regulations.
.40 Canadian Drinking Water Guidelines.
.41 Public Health Act (Nunavut) - General Sanitation Regulations and Camp Sanitation Regulations.
.42 Guidelines for Contingency Planning (NWT).

.3 Comply with any operational and reporting requirements outlined in the Nunavut Final Agreement.

.4 Comply with the requirements of the Site Use Restrictions included in the Appendix.

3 Submittals

.1 Submit all required Contractor submittals to satisfy environmental requirements directly to the responsible agency.

.2 Submit one complete copy of all submittals and agency approvals to the Engineer.

4 Wastewater Discharge Criteria

.1 Wash water, meltwater collection, rinse water resulting from the cleaning of fuel tanks and pipelines, and/or any other liquid effluent stream shall be released onto the ground at a location that is a minimum of 30 metres from natural drainage courses, and shall conform to the following guidelines:

Parameter	Maximum Allowable Concentration
pH	6 to 9
Oil and Grease	None Visible
Arsenic (total)	100 µg/L
Cadmium (dissolved)	10 µg/L
Chromium (total)	100 µg/L
Cobalt (dissolved)	50 µg/L
Copper (dissolved)	200 µg/L
Lead (dissolved)	50 µg/L
Mercury (total)	0.6 µg/L
Nickel (dissolved)	200 µg/L
PCB: discharge to barren area	50 µg/L
PCB: discharge to vegetated area	5 µg/L
Phenols	20 µg/L
Zinc (total)	1,000 µg/L

.2 Dispose of any liquid effluent not conforming to these guidelines as hazardous material in accordance with Section 02090 - Hazardous Waste Material.

5 Sewage Disposal Requirements

.1 Comply with the requirements of the Land Use Permit, the Water License and the Public Health Act (Nunavut).

.2 Discharge sewage to a temporary lagoon area within the DND reserve.

.3 Size the lagoon to provide capacity for 90 days of wastewater storage or the duration of the construction season, whichever is less. The maximum fluid height shall not exceed one metre.

.4 Locate the temporary lagoon area:

.1 A minimum of 100 m from the construction camp, Engineer's Office, and/or other temporary facilities.
.2 A minimum of 100 m from drainage paths.
.3 A minimum of 450 metres from water bodies supporting aquatic life.
.4 Downwind of the construction camp based on the prevailing wind direction
.5 Within the DND reserve.

.5 Treat all sewage to meet the following Minimum Sewage Discharge Criteria:

Parameter	Maximum Average Concentration
Oil and Grease	5.0 mg/L
pH	6 to 9
BODs	30.0 mg/L
Total Suspended Solids	35.0 mg/L
Faecal Coliforms	250 CFU/dL