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**APPROVAL**

**PROVINCE OF ALBERTA**

**ENVIRONMENTAL PROTECTION AND ENHANCEMENT ACT  
S.A. 1992, c.E-13.3, as amended.**

APPROVAL NO. .... 134-03-00

APPLICATION NO. .... 005-134

EFFECTIVE DATE: .... August , 1999

EXPIRY DATE: .... July 31, 2009

APPROVAL HOLDER ..... Custom Environmental Services Ltd.  
..... 7722 – 9<sup>th</sup> Street  
.....  
..... Edmonton, Alberta  
.....  
..... T6P 1L6  
.....

Pursuant to Division 2, of Part 2, of the Environmental Protection and Enhancement Act, S.A. 1992, c.E-13.3, as amended, approval is granted to the approval holder subject to the attached terms and conditions for the following activity:

Construction, Operation and Reclamation of a hazardous waste storage and hazardous recyclable storage and processing facility.

Designated Director under the Act .....

Date Signed ..... August , 1999

## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

### **PART 1: DEFINITIONS**

#### **SECTION 1.1: DEFINITIONS**

- 1.1.1 All definitions from the Act and the regulations apply except where expressly defined in this approval.
- 1.1.2 In all PARTS of this approval:
- (a) "Act" means the *Environmental Protection and Enhancement Act*, S.A. 1992, c.E-13.3, as amended;
  - (b) "air contaminant" means any solid, liquid or gas or combination of any of them in the atmosphere resulting directly or indirectly from the activities of man;
  - (c) "alternate fuel" means the hazardous recyclable material that meets the specifications of Table 4.3-A;
  - (d) "application" means the written submissions to the Director in respect of application number 005-134 and any subsequent applications for amendments of approval number 134-01-00;
  - (e) "container" means any portable device in which a substance is kept, including but not limited to drums, barrels and pails which have a capacity greater than 18 litres but less than 210 litres;
  - (f) "decommissioning" means the dismantling and decontamination of a plant undertaken subsequent to the termination or abandonment of any activity or any part of any activity regulated under the Act;
  - (g) "decontamination" means the treatment or removal of substances from the plant and affected lands;
  - (h) "Director" means the Director responsible for this approval unless otherwise specified;
  - (i) "dismantling" means the removal of buildings, structures, process and pollution control and abatement equipment, vessels, storage facilities, material handling facilities, railways, roadways, pipelines and any other installations that are being or have been used or held for or in connection with the plant;
  - (j) "effluent stream" means any substance in a gaseous medium released by or from a plant;

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- (k) "fugitive emissions" means air contaminant emissions to the atmosphere other than ozone depleting substances, originating from a plant source other than a flue, vent, or stack but does not include sources which may occur due to breaks or ruptures in process equipment;
- (l) "incompatible substances" means substances which when mixed can produce effects which are harmful to human health or the environment such as heat, pressure, fire, explosion, violent reaction, toxic dusts, mists, fumes or gases, or flammable fumes or gases, and include those substances listed in Appendix 5 of the *Guidelines for Industrial Landfills*, June 1987, Alberta Environmental Protection, as amended;
- (m) "intermediate bulk unit" means a portable storage device for holding liquids with a nominal capacity greater than 205 litres;
- (n) "land reclamation" means the stabilization, contouring, maintenance, conditioning, and reconstruction of the surface of the land to a state that permanently returns the land to a land use capability equivalent to its pre-disturbed state;
- (o) "local environmental authority" means the Department of Environment, in the Province of Alberta, or the agency that has the equivalent responsibilities for any jurisdiction outside the Province;
- (p) "PCB" means polychlorinated biphenyl;
- (q) "plant" means all buildings, structures, process and pollution abatement equipment, vessels, storage facilities, material handling facilities, roadways, pipelines and other installations, and includes the land, located on Plan 782-0150, Block 3, Lot 7 that is being used in connection with the Edmonton plant;
- (r) "plant developed area" means the areas of the plant used for the storage, treatment, processing, transport, or handling of raw material, intermediate product, by-product, finished product, process chemicals, or waste material;
- (s) "regulations" means the regulations issued pursuant to the Act, as amended;
- (t) "soil" means mineral or organic earthen materials that can, have, or are being altered by weathering, biological processes, or human activity;
- (u) "tank" means a stationary device, designed to contain an accumulation of a substance, which is constructed primarily of non-earthen materials that provide structural support, and without precluding the generality of the foregoing, may include substances such as wood, concrete, steel, and plastic;

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- (v) "waste storage areas" means the areas designated for waste container storage and waste tank storage as described in the application; and
- (w) "year" means calendar year, unless otherwise specified.

### **PART 2: GENERAL**

#### **SECTION 2.1: GENERAL**

- 2.1.1 The approval holder shall immediately report by telephone any contravention of the terms and conditions of this approval to the Environmental Service Response Centre at 1-780-422-4505.
- 2.1.2 The approval holder shall submit an application for renewal of this approval to the Director a minimum of six months prior to the approval expiry date or otherwise as specified in writing by the Director.
- 2.1.3 Any conflict between the application or any document and the terms and conditions of this approval shall be resolved in favour of the approval.
- 2.1.4 The terms and conditions of this approval do not affect any rights or obligations created under any other approval issued by Alberta Environment.
- 2.1.5 The mention of trade names, commercial products or named technologies in this approval does not constitute an endorsement or recommendation by Her Majesty the Queen in Right of Alberta, her employees, agents and the Director for general use.
- 2.1.6 The terms and conditions of this approval are severable. If any term or condition of this approval or the application of any term or condition is held invalid, the application of such term or condition to other circumstances and the remainder of this approval shall not be affected thereby.
- 2.1.7 The approval holder shall notify the Director in writing within 30 days of all changes in the corporate status of the approval holder.
- 2.1.8 If the approval holder monitors for any substances or parameters which are the subject of operational limits as set out in this approval more frequently than is required and using procedures authorized in this approval, then the approval holder shall provide the results of such monitoring as an addendum to the reports required by this approval.
- 2.1.9 All abbreviations used in this approval follow those given in *Standard Methods for the Examination of Water and Wastewater* published jointly by the American Public Health Association, the American Water Works Association, and the Water Environment Federation, as amended, or as otherwise specified in the approval.

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- 2.1.10 The approval holder shall notify the Director in writing within 30 days of operations ceasing permanently.
- 2.1.11 Environmental Protection and Enhancement Act Approval No. 95-IND-085 is cancelled.

### **SECTION 2.2: RECORD KEEPING**

- 2.2.1 The approval holder shall record and retain all the following information for a minimum of ten years:
  - (a) the names and addresses of all persons who discover any contravention of the Act, the regulations or this approval;
  - (b) the names and addresses of all persons who take any remedial action arising from the contravention of the Act, the regulations or this approval; and
  - (c) a detailed description of the remedial measures taken in respect of a contravention of the Act, the regulations or this approval.
- 2.2.2 The approval holder shall record and retain all the following information in respect of any sampling conducted or analyses performed for a minimum of ten years, or otherwise as specified in writing by the Director:
  - (a) the place, date and time of sampling;
  - (b) the dates the analyses were performed;
  - (c) the analytical techniques, methods or procedures used in the analyses;
  - (d) the names of the persons who collected and analyzed each sample; and
  - (e) the results of the analyses.
- 2.2.3 All records referred to in this part shall be made available at any time upon the request of an inspector or investigator.

## TERMS AND CONDITIONS ATTACHED TO APPROVAL

### SECTION 2.3: ANALYTICAL REQUIREMENTS

- 2.3.1 Collection, analysis of samples and reporting shall be conducted in accordance with the following or otherwise as specified in writing by the Director:
- (a) for industrial wastewater, industrial runoff, groundwater, waterworks and domestic wastewater parameters:
    - (i) the *Standard Methods for the Examination of Water and Wastewater*, American Public Health Association, American Water Works Association, and the Water Environment Federation, as amended;
  - (b) for soil samples:
    - (i) the *Manual on Soil Sampling and Methods of Analysis*, Lewis Publishers, 1993, as amended;
    - (ii) the *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, USEPA, SW-846; September 1986, as amended;
  - (c) for waste analysis:
    - (i) the *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, USEPA, SW-846, September 1986, as amended; or
    - (ii) the *Methods Manual for Chemical Analysis of Water and Wastes*, Alberta Environmental Centre, Vegreville, Alberta, October 1987, AECV87-M1, as amended; or
    - (iii) the *Toxicity Characteristic Leaching Procedure (TCLP)* USEPA Regulation 40 CFR261, Appendix II, Method No. 1311, as amended; or
    - (iv) the *Standard Methods for the Examination of Water and Wastewater*, American Public Health Association, American Water Works Association, and the Water Environment Federation, as amended; and
  - (d) for metal recovered from ballast recycling as described in Appendix VIII of the application and using the "*Sampling Protocol for Scrap Ballast Components*", Environment Canada, as amended.

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- 2.3.2 The preservation, storage, and handling of all samples collected at the sampling locations identified in this approval shall be in such a manner that the validity of the samples is not compromised. The analysis of samples shall be in a laboratory with documented quality assurance and quality control programs, including participation in interlaboratory studies.

### **PART 3: CONSTRUCTION**

#### **SECTION 3.1: GENERAL**

Not used at this time.

#### **SECTION 3.2: AIR**

Not used at this time.

#### **SECTION 3.3: INDUSTRIAL WASTEWATER**

Not used at this time.

#### **SECTION 3.4: WASTE MANAGEMENT**

- 3.4.1 The waste storage areas as described in the application shall include, at a minimum, all of the following:
- (a) a 15-cm high, continuous, impervious curb on the perimeter of the floor sealed in a manner that liquid will not escape between the floor and curb;
  - (b) an impermeable liner compatible with wastes being stored to be installed by September 30, 2000; and
  - (c) separate storage areas for incompatible wastes.
- 3.4.2 Tanks within the waste storage areas shall be equipped with all of the following:
- (a) sensors for detecting the level in each tank;
  - (b) high level alarms that activate when a tank overflow is imminent;
  - (c) automatic shut-off devices or sufficient freeboard space above the high level sensor to allow operators time to prevent overflow from occurring; and
  - (d) earthen dikes or equivalent secondary containment structures capable of containing 110% of the volume of the largest tank within the bermed area plus 10% of the aggregate capacity of all other tanks in the bermed area.

## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

### **PART 4: OPERATIONS, LIMITS, MONITORING AND REPORTING**

#### **SECTION 4.1: GENERAL**

- 4.1.1 All storage tanks shall meet the requirements in the *Secondary Containment for Above Ground Storage Tanks*, Alberta Environmental Protection, November 1, 1997, as amended, unless otherwise authorized in writing by the Director.

#### **SECTION 4.2: AIR**

##### **OPERATIONS**

- 4.2.1 The approval holder shall not emit any effluent streams to the atmosphere except as provided in this approval.
- 4.2.2 The approval holder shall only emit effluent streams to the atmosphere from any natural gas-fired or alternate fuel using heaters and boilers.
- 4.2.3 Except as provided for by the Director in writing, the approval holder shall not emit fugitive emissions or an air contaminant from any source not specified in 4.2.2, that causes or may cause any of the following:
- (a) the impairment, degradation or alteration of the quality of natural resources; or
  - (b) material discomfort, harm or adversely affect the well being or health of a person; or
  - (c) harm to property or to plant or animal life.
- 4.2.4 All aboveground storage tanks designed to contain hydrocarbons shall conform to the *Environmental Guidelines for Controlling Emissions of Volatile Organic Compounds from Aboveground Storage Tanks*, CCME-EPC-87-E, as amended.

#### **SECTION 4.3: WASTE MANAGEMENT**

##### **OPERATIONS**

- 4.3.1 The following wastes are prohibited from receipt at the plant:
- (a) explosive wastes; and
  - (b) radioactive wastes regulated under the Atomic Energy Control Act (Canada).
- 4.3.2 An emergency response plan shall be implemented and maintained with local authorities.



## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

- 4.3.3 Treatment of hazardous waste at the plant is prohibited.
- 4.3.4 For the purposes of 4.3.3, treatment does not include:
- (a) commingling of materials to make maximum use of available container or tank capacity provided the resultant mixture has the same hazard class as any one of the individual components;
  - (b) phase separation of materials by gravity settling without the addition of any chemicals designed to accelerate settling;
  - (c) dispersion of solids into liquids by natural or mechanical means provided the resultant mixture has the same hazard class as the original liquid;
  - (d) physical segregation of hazardous from non-hazardous articles or components from the same container by non-mechanical means; and
  - (e) crushing of filters solely for volume reduction and liquid recovery.
- 4.3.5 Hazardous waste and hazardous recyclables shall only be stored in containers, tanks, tote bags or intermediate bulk units.
- 4.3.6 Notwithstanding the requirements of 4.3.5, the use of overpacks with a nominal capacity greater than 205 litres which are used to ensure containment integrity when the inner container is damaged or leaking is authorized.
- 4.3.7 All hazardous waste and hazardous recyclables shall be stored solely within the existing building, cold storage unit, or within intermodal storage containers as described in the application.
- 4.3.8 All liquid hazardous waste and hazardous recyclables shall be stored on pallets that have secondary containment.
- 4.3.9 Hazardous waste or hazardous recyclables stored in containers or tanks shall be stored in accordance with the *Hazardous Waste Storage Guidelines*, June 1988, Alberta Environmental Protection, as amended.
- 4.3.10 All containers which held waste or any empty un-rinsed containers which held waste shall be stored in the waste storage areas.
- 4.3.11 All waste that is unloaded shall be immediately transferred to the waste storage areas.
- 4.3.12 Wastes shall be transferred only at designated transfer areas designed to contain spills and leaks.

## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

- 4.3.13 The approval holder shall provide and maintain a minimum of 1.0 meter aisle space to allow inspection, unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of the waste storage area(s). Inspection aisles shall be arranged such that each drum is exposed to view from at least one side.
- 4.3.14 The approval holder shall dispose of waste generated at the plant only to facilities holding a current Approval or Registration under the Act or to facilities approved by a local environmental authority outside of Alberta.
- 4.3.15 Incompatible substances shall be prevented from mixing by a dyke, berm, wall or other device.
- 4.3.16 A sign saying "WASTE STORAGE AREA" shall be posted at the entrance to the waste storage areas.

### **LIMITS**

- 4.3.17 Not more than 1204 drum equivalents containing hazardous waste and hazardous recyclables shall be stored at the plant in containers. For the purpose of this subsection:
- (a) all containers at the plant that are not empty shall be assumed to be full regardless of the actual volume of materials in the container;
  - (b) intermediate bulk units (IBU) shall be prorated by dividing their nominal volume in litres by 205 litres. IBUs shall be assumed to be full if there is no provision for at the plant for measuring the actual volume in the IBU and the IBU contains any material; and
  - (c) tote bags shall be assumed to be full if they contain any waste and shall be prorated by dividing their nominal volume in litres by 205 litres.
- 4.3.18 Only the tanks listed below shall be used at the plant. The tank volumes are not included in the inventory limit specified in 4.3.17.

## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

### **TANKS**

<b>Designation</b>	<b>Nominal Capacity (litres)</b>
T3	36,000
T4	36,000
T6	12,000
T7	12,000
T8	12,000
Total Bulk Capacity	108,000

4.3.19 Tanks located on the plant shall not be filled in excess of 80% of nominal capacity. Tank high level alarms shall be set at 80% of nominal capacity.

### **RECYCLING**

4.3.20 Processing of hazardous recyclables, except as described below, is prohibited:

- (a) commingling of materials to make maximum use of available container or tank capacity provided the resultant mixture has the same hazard class as any one of the individual components;
- (b) phase separation of materials by gravity settling;
- (c) dispersion of solids into liquids by natural or mechanical means provided the resultant mixture has the same hazard class as the original liquid;
- (d) physical separation of hazardous from non-hazardous articles or components from the same container by non-mechanical means;
- (e) crushing of filters for volume reduction and liquid recovery;
- (f) washing of drums and other objects with the purpose of removing hazardous residue; and
- (g) any other process authorized, in writing, by the Director.

## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

- 4.3.21 All PCB containing light ballasts shall only be recycled using the exact process and mobile ballast processing facility described in Appendix VIII of the application.
- 4.3.22 All tar, capacitors and debris (such as protective equipment) generated from PCB ballast recycling referred to in 4.3.21 shall be managed as the PCB waste.

### **MONITORING**

- 4.3.23 The following information shall be recorded:
- (a) the number of containers and hazard class of each container received and shipped during each day;
  - (b) volumetric amount and hazard class of all hazardous waste and hazardous recyclables received and shipped during each day;
  - (c) the weight of all PCB containing ballasts received at and recycled at the plant and the weight of the PCB waste and reusable metal generated by ballast recycling operations; and
  - (d) an end of day total of all containers stored at the plant.
- 4.3.24 The following containers shall be weighed at the plant:
- (a) PCB containing light ballasts upon receipt at the plant;
  - (b) all metal recovered from ballast recycling; and
  - (c) tar, capacitors and debris referred to in 4.3.22.
- 4.3.25 The metal recovered from PCB ballast recycling shall be sampled and analyzed every 500 ballasts as described in Appendix VIII of the application.
- 4.3.26 The approval holder shall identify all waste generated at the plant, not including industrial wastewater effluent or gaseous emissions.
- 4.3.27 The approval holder shall measure the quantity of each waste generated each year.
- 4.3.28 The approval holder shall not exceed the alternate fuel limits specified in TABLE 4.3-A.
- 4.3.29 The approval holder shall monitor all tanks containing alternate fuel as required in TABLE 4.3-A.

**TERMS AND CONDITIONS ATTACHED TO APPROVAL**

**TABLE 4.3-A: LIMITS AND MONITORING**

<b>PARAMETERS</b>	<b>LIMITS</b>	<b>SAMPLE TYPE</b>	<b>FREQUENCY</b>
Total Organic Halogens (as Cl)	1000 mg/L maximum	Grab	Prior to shipment or use on site as fuel and upon addition of any new substance into the tank
Total Polychlorinated biphenyls	3 mg/L maximum		
Ash residue	0.6% (w/w) maximum		
Flash point	61°C minimum		
Arsenic	5 mg/L maximum		
Cadmium	2 mg/L maximum		
Chromium	10 mg/L maximum		
Lead	50 mg/L maximum		
Sulphur	7500 mg/L maximum		

**FINANCIAL SECURITY**

- 4.3.30 The approval holder shall annually review the cost estimate for reclamation of the facility including decommissioning and land reclamation.
- 4.3.31 Should the financial security for the facility require an adjustment, the revised estimate of financial security shall be submitted to the Director for review by March 31 of each year.
- 4.3.32 The approval holder shall provide additional financial security as prescribed in writing by the Director.

**REPORTING**

- 4.3.33 The approval holder shall submit a monthly report and a ballast recycling report in the format set forth in the attachments to this approval, to the Director.
- 4.3.34 The monthly report referred to in 4.3.33 must be submitted to the Director within 30 days following the month in which the information was collected.

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- 4.3.35 The monthly report referred to in 4.3.33 shall contain the following information:
- (a) an opening waste inventory balance in kilograms or litres by waste class or material type;
  - (b) the amount of waste received from within the province and from outside the province;
  - (c) the amount of waste shipped, recycled and disposed off-site;
  - (d) any adjustments including consolidation and processing adjustments;
  - (e) closing balance in kilograms or litres;
  - (f) the approval storage limits for bulk storage and containers;
  - (g) the identification of the waste generators;
  - (h) the sources of the waste; and
  - (i) other information as requested in writing by the Director.
- 4.3.36 The approval holder shall compile all the information required by 4.3.26 and 4.3.27 in an Annual Waste Management Summary report as indicated in TABLE 4.3-B and pursuant to or in compliance with *Industrial Waste Identification and Management Options*, May 1996 as amended, and the *Alberta User Guide for Waste Managers*, May 1995, as amended.

**TABLE 4.3-B: ANNUAL WASTE MANAGEMENT SUMMARY**

Waste Name	Uniform Waste Code				Quantity (kg or L)		Disposal or Recycling Location	
	WC	PIN	Class	Mgmt	Hazardous	Non-haz.	Plant	Other
TOTAL								

- 4.3.37 The Annual Waste Management Summary report shall be submitted to the Director by March 31 of each year.

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**TERMS AND CONDITIONS ATTACHED TO APPROVAL**

4.3.38 The approval holder shall submit the results of the analysis performed under 4.3.29 with the monthly report for the month after the results have been received by the approval holder.

**SECTION 4.4: GROUNDWATER**

4.4.1 The approval holder shall collect and analyze a representative groundwater sample from each of the groundwater monitor wells at the plant for the parameters specified and according to the schedule prescribed in TABLE 4.4-A unless otherwise authorized in writing by the Director.

**TABLE 4.4-A GROUNDWATER MONITORING PROGRAM**

GROUNDWATER MONITOR WELL	PARAMETER(S)	FREQUENCY
89-1, 89-2, 89-3, 89-4 and 91-5	pH, electrical conductivity, chloride, sulphate, total dissolved solids and total purgeable and total extractable hydrocarbons	Bi-annually (once in the spring and once in the fall of each year)
	Cadmium, Chromium and Lead	Annually (once in the fall of each year)

4.4.2 The samples extracted from the groundwater monitor wells shall be collected using scientifically acceptable purging, sampling and preservation procedures so that a representative groundwater sample is obtained.

4.4.3 All groundwater monitor wells shall be:

- (a) protected from damage; and
- (b) locked except when being sampled, unless otherwise authorized in writing by the Director.

4.4.4 If a representative groundwater sample cannot be collected because the groundwater monitor well is damaged or is no longer capable of producing a representative groundwater sample:

- (a) the groundwater monitor well shall be cleaned, repaired or replaced; and
- (b) a representative groundwater sample shall be collected and analyzed prior to the next scheduled sampling event; unless otherwise authorized in writing by the Director.

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4.4.5 In addition to the sampling information recorded in 2.2.2, the approval holder shall record the following sampling information for all groundwater samples collected:

- (a) a description of purging and sampling procedures;
- (b) the static elevations, above sea level, of fluid phases in the groundwater monitor well prior to purging;
- (c) the temperature of each sample at the time of sampling;
- (d) the pH of each sample at the time of sampling; and
- (e) the specific conductance of each sample at the time of sampling.

4.4.6 The approval holder shall compile an Annual Groundwater Monitoring Program Summary Report which shall include the following information:

- (a) a legal description of the plant and a map illustrating the plant boundaries;
- (b) a topographic map of the plant;
- (c) a description of the industrial activity and processes;
- (d) a map showing the location of surface and groundwater users within a five kilometre radius of the plant;
- (e) a general hydrogeological characterization of the region within a five kilometre radius of the plant;
- (f) a detailed hydrogeological characterization of the plant;
- (g) a geological cross-section(s) of the plant;
- (h) a map of surface drainage patterns located within the plant;
- (i) a map of groundwater monitor well locations and a description of the existing groundwater monitoring program for the plant;
- (j) a summary of any changes to the groundwater monitoring program made since the last groundwater monitoring report;
- (k) analytical data recorded as required in 4.4.1 and 4.4.5;
- (l) a summary of fluid elevations recorded as required in 4.4.5(b) and an interpretation of changes in fluid elevations;



## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

- (m) an interpretation of groundwater flow patterns;
- (n) an interpretation of the analytical results including the following:
  - (i) diagrams indicating the location of any contamination identified;
  - (ii) probable sources of contamination; and
  - (iii) the extent of contamination identified;
- (o) a summary and interpretation of the data collected since the groundwater monitoring program began including:
  - (i) control charts which indicate trends in contaminant concentrations, and
  - (ii) the migration of contaminants;
- (p) a description of the following:
  - (i) contaminated groundwater remediation techniques employed;
  - (ii) source elimination measures employed;
  - (iii) risk assessment studies undertaken; and
  - (iv) risk management studies undertaken;
- (q) a sampling schedule for the following year;
- (r) recommendations, as follows:
  - (i) for changes to the groundwater monitoring program to make it more effective; and
  - (ii) for remediation, risk assessment or risk management of contamination identified.

4.4.7 The approval holder shall submit two copies of the Annual Groundwater Monitoring Summary Report to the Director on or before May 31 of the year following the year in which the information on which the report is based was collected.

## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

### **SECTION 4.5: SOIL**

#### **MONITORING**

- 4.5.1 The approval holder shall develop and document proposals for the Soil Monitoring Program in accordance with the *Soil Monitoring Directive*, Chemicals Assessment and Management Division, May 1996, as amended.
- 4.5.2 The approval holder shall submit the Soil Monitoring Program proposals to the Director for authorization in writing according to the following schedule:
- (a) for the first soil monitoring proposal, no later than March 31, 2002; and
  - (b) for the second soil monitoring proposal, no later than March 31, 2007.
- 4.5.3 If the Soil Monitoring Program proposals are found deficient by the Director, the approval holder shall correct all the deficiencies as outlined by the Director within 120 days of the deficiency letter.
- 4.5.4 The approval holder shall implement the Soil Monitoring Program proposals as authorized in writing by the Director.
- 4.5.5 The approval holder shall implement QA/QC provisions in accordance with the *CCME Guidance Manual on Sampling, Analysis and Data Management for Contaminated Sites, Volume I*, Report CCME EPC-NCS62E, Winnipeg, Manitoba, December 1993, as amended.

#### **STANDARDS**

- 4.5.6 For sampling locations which meet the conditions in C.1 of the *Soil Monitoring Directive*, May 1996, as amended, the concentration of substances in soil shall be compared to values in the following:
- (a) for a substance release on or after the effective date of the approval, the *Alberta Tier I Criteria for Contaminated Soil Assessment and Remediation*, March 1994, as amended, Chemicals Assessment and Management Division; and
  - (b) for a substance release prior to the effective date of the approval, the *Interim Canadian Environmental Quality Criteria for Contaminated Sites*, Report CCME EPC-CS34, Winnipeg, Manitoba, September, 1991, as amended.

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- 4.5.7 For sampling locations which do not meet the conditions in C.1 of the *Soil Monitoring Directive*, May 1996, as amended, or if substances are present that are not listed in the standards referred to in 4.5.6(a) or 4.5.6(b), the concentrations of substances in soil shall be compared to values derived using methods in C.2 of the *Soil Monitoring Directive*.

### **REPORTING**

- 4.5.8 The approval holder shall submit two copies of each Soil Monitoring Program report to the Director summarizing the data obtained from the soil monitoring referred to in 4.5.4 according to the following schedule:
- (a) for the first soil monitoring report, no later than August 31, 2002; and,
  - (b) for the second soil monitoring report, no later than August 31, 2007, unless otherwise authorized by the Director.
- 4.5.9 The Soil Monitoring Program reports shall be as prescribed in the reporting requirements of the *Soil Monitoring Directive*, May 1996, as amended.

### **SOIL MANAGEMENT PROGRAM**

- 4.5.10 If the Soil Monitoring Program, or any other soil monitoring, reveals that there are substances present in the soil at concentrations greater than the applicable concentrations in 4.5.6 or 4.5.7, the approval holder shall develop and document a Soil Management Program proposal in accordance with the *Guideline for Monitoring and Management of Soil Contamination Under EPEA Approvals*, Chemicals Assessment and Management Division, May 1996, as amended, or as otherwise authorized in writing by the Director.
- 4.5.11 If required pursuant to 4.5.10, the approval holder shall submit a Soil Management Program proposal to the Director within six months after the date that the Soil Monitoring Report referred to in 4.5.8 is due.
- 4.5.12 The Soil Management Program proposal shall include, at a minimum:
- (a) steps to be taken to control sources of contamination; and
  - (b) remediation objectives for substances identified by soil monitoring as exceeding the applicable maximum standards in 4.5.6 or 4.5.7; and
  - (c) proposed steps for management of soil contamination; and
  - (d) a schedule for implementing the Soil Management Program.

## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

- 4.5.13 If the Soil Management Program proposal is found deficient by the Director, the approval holder shall correct all the deficiencies as outlined by the Director by the date specified in the deficiency letter.
- 4.5.14 The approval holder shall implement the Soil Management Program as authorized in writing by the Director.
- 4.5.15 If the approval holder must implement a Soil Management Program pursuant to 4.5.14, the approval holder shall submit a written Soil Management Program report to the Director on or before March 31 of each year, unless otherwise authorized in writing by the Director.
- 4.5.16 The Soil Management Program report shall contain, at a minimum, all the following information:
- (a) a summary of actions taken under the Soil Management Program during the previous year;
  - (b) a description and interpretation of results obtained, including any soil testing, from the Soil Management Program; and
  - (c) events planned for the current year including any deviations from the program authorized in writing by the Director.

### **PART 5: RECLAMATION**

#### **SECTION 5.1: GENERAL**

- 5.1.1 Within six months of the plant ceasing operation, except for repairs and maintenance, the approval holder shall apply for an amendment to this approval to reclaim the plant by submitting a Decommissioning and Land Reclamation plan to the Director.

#### **SECTION 5.2: DECOMMISSIONING**

- 5.2.1 The approval holder shall develop and submit a plan for the Decommissioning phase to the Director which shall include, at a minimum, all of the following:
- (a) a plan for dismantling the plant;
  - (b) a comprehensive study to determine the nature, degree and extent of contamination at the plant and affected lands;
  - (c) a plan to manage all wastes produced at the plant during operation and decommissioning;

## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

- (d) evaluation of remediation technologies proposed to be used at the plant and affected lands;
  - (e) plan for decontamination of the plant and affected lands in accordance with the following;
    - (i) for soil which will be remediated for agricultural or residential use, *Alberta Tier 1 Criteria for Contaminated Soil Assessment and Remediation*, March 1994, as amended;
    - (ii) for soil which will be remediated for commercial or industrial use, *Interim Canadian Environmental Quality Criteria for Contaminated Sites*, CCME EPC-CS34, September 1991, as amended;
    - (iii) for water, *Canadian Water Quality Guidelines*, CCRME, 1987, as amended;
    - (iv) for soil or water to contaminant levels in accordance with a risk assessment procedure accepted by the Director;
  - (f) confirmatory testing to indicate compliance with the remediation objectives; and
  - (g) plan for maintaining and operating contaminant monitoring systems.
- 5.2.2 The approval holder shall implement the Decommissioning plan as authorized in writing by the Director.
- 5.2.3 All sampling procedures and analytical protocols shall be pursuant to *Guidance Manual on Sampling, Analysis and Data Management for Contaminated Sites - Volume 1: Main Report*, CCME EPC-NCS62E, and *Guidance Manual on Sampling, Analysis and Data Management for Contaminated Sites - Volume II: Analytical Method Summaries*, CCME EPC-NCS66E, as amended.
- 5.2.4 The approval holder shall submit an Annual Report to the Director by December 30 of each year until decommissioning is complete which shall include, at a minimum, all of the following:
- (a) summary of decommissioning activities conducted during the reporting period;
  - (b) status of decommissioning;
  - (c) decommissioning activities planned for the following reporting period;

## **TERMS AND CONDITIONS ATTACHED TO APPROVAL**

- (d) summary and interpretation of monitoring data collected for the reporting period;
- (e) interpretation of monitoring data collected historically.

### **SECTION 5.3: LAND RECLAMATION**

5.3.1 The approval holder shall develop and submit a plan for the Land Reclamation phase to the Director which shall include, at a minimum, all of the following:

- (a) the final use of the reclaimed area and how equivalent land capability will be achieved;
- (b) removal of infrastructure;
- (c) restoration of drainage;
- (d) soil replacement;
- (e) erosion control;
- (f) revegetation and conditioning of the plant including:
  - (i) species list, seed source and quality, seeding rates and methods;
  - (ii) fertilization rates and methods;
  - (iii) wildlife habitat plans where applicable; and
- (g) reclamation sequence and schedule.

5.3.2 The approval holder shall implement the Land Reclamation plan as authorized in writing by the Director.

DATED August, 1999

\_\_\_\_\_  
DESIGNATED DIRECTOR UNDER THE ACT

# MONTHLY WASTE INVENTORY REPORT

**COMPANY NAME:** Custom Environmental Services Ltd.    **APPROVAL NO:** 134-01-00

**REPORT PERIOD: MONTH:** \_\_\_\_\_    **YEAR:** \_\_\_\_\_

CLASS	UNIT (KG OR L)	OPENING BALANCE	+ RECEIVED IN PROVINCE	+ RECEIVED OUT OF PROVINCE	- SHIPPED*		- ON-SITE DISPOSAL	+ OR - ADJUSTMENT**	CLOSING BALANCE	APPROVAL LIMIT
					RECYCLING/ PRODUCT	OFF-SITE DISPOSAL				
2										
3										
4										
5										
6.1										
8										
9.1										
9.2										
9.3										
PCB										
NR										
TOTAL										
							No. of Containers On site			1204
							Total Litres in Bulk Tanks			71680

\* Provide a list of the recycling and disposal locations

\*\* Identify the amount and reason for each adjustment.  
Adjustments include consolidation/reclassification, losses to processing, spills, volume miscalculations, or any other circumstances which would affect the mass balance of the monthly inventory report.

## Ballast Recycling Report

Material Type	Starting Inventory	Received	Produced	Shipped	Recycled	Ending Inventory	Limit
Whole Ballasts – D*			N/A	N/A			N/A
Whole Ballasts – I**			N/A	N/A			N/A
Waste <sup>+</sup> - D*		N/A			N/A		N/A
Waste <sup>+</sup> - I**		N/A			N/A		N/A
Recovered Metal		N/A			N/A		N/A
Total							200 drums

\* D is generated outside Alberta

\*\* I is generated within Alberta

+ Waste means tar, capacitors and processing waste generated solely during the recycling process.

All units in kilograms, unless specified otherwise.