

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

Monthly Engineer's Report

PLASCO TRAIL ROAD GASIFICATION PROCESS DEMONSTRATION PROJECT

Review Period: 1 September 2010 to 30 September 2010



DECOMMISSIONING CONSULTING SERVICES LIMITED

HEAD OFFICE
121 Granton Drive, Unit 11
Richmond Hill, Ontario
Canada L4B 3N4

Tel: (905) 882-5984
Fax: (905) 882-8962

Specialists in Property Assessments & Environmental Audits, Site Remediation & Decommissioning, Geotechnical Engineering, Contaminant & Physical Hydrogeology, Waste & Wastewater Treatment & Management, Risk Assessment, Ordnance Control, Infection Control, Brownfields Development Strategies & Industrial Hygiene

E-mail: engineers@dcsdtd.ca
Web Site: <http://www.dcsdtd.ca>

OTTAWA OFFICE Tel: (613) 230-2405 Fax: (613) 230-1403

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

EXECUTIVE SUMMARY

Under Condition 49.a of Provisional Certificate of Approval (Waste Disposal Site) Number 3166-6TYMDZ a Professional Engineer must visit the Plasco Trail Road Gasification Process Demonstration Project on a monthly basis to observe and report on the operations of the Site to verify compliance with the requirements of *O. Reg. 254/06* and the conditions of these Certificates. Decommissioning Consulting Services (DCS) Limited staff has been retained to provide this monthly review. This report summarizes the review covering the period 1 September 2010 to 30 September 2010.

Key observations noted and conclusions resulting from the monthly visit are summarized below:

Based on available information and observations made during the site visit, we believe that operations are in substantial compliance with O.Reg. 254/06 (Plasco Demonstration Project), Provisional Certificate of Approval (Waste Disposal Site) Number 3166-6TYMDZ and Certificate of Approval (Air) Number 6925-6REN9E; including any recent amendments. Minor items of interest are discussed more fully in the attached report.

No MSW waste was imported or processed during this period as the plant was shut down for maintenance and process modifications. A total of 11.4 tonnes of carbon feed waste (in the form of plastic) was received at the MSW building intended for purposes of eventual process commissioning. After almost three years of extensive and rigorous engineering testing, Plasco is optimizing certain components within the process for commercial scale design. Plasco therefore had purchased and is installing this replacement equipment for commissioning at Plasco Trail Road in the fall. This work is being undertaken to ensure that the commercial design is more robust and reliable.

No engine runtime was conducted in September 2010.

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

TABLE OF CONTENTS

1.0 PURPOSE OF MONTHLY ENGINEER'S REPORT	1
2.0 SUMMARY DATA – WASTE QUANTITIES	2
3.0 SUMMARY DATA – EMISSIONS MONITORING.....	3
3.1 CEMS Monitoring Data	3
3.2 Source Testing Data	4
4.0 DOCUMENT AND RECORDS REVIEW.....	5
5.0 SITE INSPECTION.....	15
6.0 EQUIPMENT PERFORMANCE	18
6.1 Planned Maintenance	18
6.2 Equipment Failures	18
7.0 CERTIFICATION	19

List of Appendices

Appendix 1: CEM Summary Data	Applicable:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>
Appendix 2: Source Test Data	Applicable:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>
Appendix 3: Planned Maintenance	Applicable:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

1.0 PURPOSE OF MONTHLY ENGINEER'S REPORT

Under Condition 49.a of Provisional Certificate of Approval (Waste Disposal Site) Number 3166-6TYMDZ a Professional Engineer must visit the Plasco Site (the Site) on a monthly basis to observe and report on the operations of the Site to verify compliance with the requirements of *O. Reg. 254/06* and the conditions of these Certificates. The inspections are to include a detailed walkthrough of the entire Site and a thorough review of the daily Site inspection records and the daily log book records required by Conditions 48 and 49, respectively, of the Provisional Certificate of Approval (Waste Disposal Site).

Condition 49.b of the Provisional Certificate of Approval (Waste Disposal Site) requires a report, signed by the Professional Engineer (the Monthly Engineer's Report), that summarizes the results of each inspection and certifies whether the Site has operated in substantial compliance with this Certificate since the previous report, to be provided to the District Manager.

Condition 9(1) of Certificate of Approval (Air) Number 6925-6REN9E also requires preparation of the Monthly Engineer's Report, including additional information to be included in the Report:

- An Executive Summary;
- Average and maximum daily quantity and the total quantity of municipal waste and high carbon waste received and processed by the Facility in that month;
- Results of the CEM System, complete with a summary of the maximum concentration monitored and recorded for each contaminant in that month;
- Dates and times and the results of any Source Testing, if conducted that month;
- Details of planned maintenance or failure of equipment in the facility (related to air emission releases).

This document serves as a means of formal monthly reporting on the status of the Plasco Trail Rd. operations to key project stakeholders, including the Ministry of Environment.

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

2.0 SUMMARY DATA – WASTE QUANTITIES

Parameter	Monthly Value	Approved Limit	Units	Within Approved Limit
Average Daily Quantity of Municipal Waste Received	0		Tonnes/day	
Average Daily Quantity of Municipal Waste Processed	0		Tonnes/day	
Maximum Daily Quantity of Municipal Waste Processed	0	75	Tonnes/day	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Maximum Daily Quantity of Municipal Waste Received	0		Tonnes/day	
Total Quantity of Municipal Waste Received in Month	0		Tonnes	
Total Quantity of Municipal Waste Processed in Month	0		Tonnes	
Average Daily Quantity of High Carbon Feed Received	11.4		Tonnes/day	
Average Daily Quantity of High Carbon Feed Processed	0		Tonnes/day	
Maximum Daily Quantity of High Carbon Feed Processed	0	10	Tonnes/day	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Maximum Daily Quantity of High Carbon Feed Received	0		Tonnes/day	
Total Quantity of High Carbon Feed Received/Mnth	11.4		Tonnes	
Total Quantity of High Carbon Feed Processed/ Month.	0		Tonnes	

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

3.0 SUMMARY DATA – EMISSIONS MONITORING

3.1 CEMS MONITORING DATA

Contaminant	Maximum Rolling Average^(1,2)	Limit⁽¹⁾	Averaging Period	Within Approved Limit
Nitrogen Oxides	97.23 -Flare n/a -Engines	110 Maximum	ppmv- arithmetic average of 24 hrs of data	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> - Flare Yes <input type="checkbox"/> No <input type="checkbox"/> -Engine
Hydrogen Chloride	0.56 -Flare 9.06 -Engines	18 Maximum 13 Operational	ppmv – arithmetic average of 24 hrs of data	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> - Flare Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> -Engine
Sulphur Dioxide	9.80 -Flare n/a -Engines	21 Maximum 14 Operational	ppmv – geometric average of 24 hrs of data	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> - Flare Yes <input type="checkbox"/> No <input type="checkbox"/> -Engine
Organic Matter	58.25 -Flare 156.85 -Engines	100 Maximum 75 Operational	ppmv – 10-min. average expressed as equiv. methane (legislated)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> - Flare Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> -Engine

(1) Units are parts per million by volume.

(2) Rolling Average (24-hr) maximum values recorded during review month. Organic matter is legislated on a 10-minute average calculation.

Additional Data provided in Appendix 1: Yes - No -

Comment 1: The rolling averages listed above for the engines are a carry-over from the previous month. There was no flare or engine run time with emissions to the atmosphere during the September 2010 reporting period and therefore, no change in the flare or engine data from the previous month. An amendment to the CofA (Air), issued 27 October 2009, allowed for re-routing of engine exhaust to the flare. An amendment to the Program Approval, also issued 27 October 2009, permitted a maximum limit of 225 ppmv and an operational limit of 200 ppmv for organic matter from the engines; expiring 24 January 2010. This modification was required to allow for continued tuning of the gas engines. The engine emission value of 156.85 ppmv listed for organic matter had occurred during the period that the amendment was applicable and, as such, fell within the approved limit which then was set at 200 ppmv.

Comment 2: No CEMS data are available for NOx and SO2 on the engines as 24 hrs of engine operation had not been achieved since the previous Cessation of Discharge declarations.

Comment 3:

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

4.0 DOCUMENT AND RECORDS REVIEW

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
28	The <i>Owner</i> may only accept the following categories of <i>Municipal Waste</i> at the <i>Site</i> : a. <i>Domestic Waste</i> originating from curbside collection within the City of Ottawa that would otherwise have been disposed of at the <i>Trail Road Landfill</i> ; b. <i>High carbon waste</i> originating within the City of Ottawa that is not suitable for recycling and that would otherwise have been disposed of at the <i>Trail Road Landfill</i> ; and c. <i>High carbon waste</i> resulting from waste processing activities at Lafcorp Inc. under Provisional Certificate of Approval Number 4130-5ZKII3W that is not suitable for recycling and that would otherwise have been disposed of at an approved waste disposal site.	1. Review daily log book. 2. Verify wastes sources and truck logs.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- no concerns identified.
29	A maximum of twenty-five (25) truckloads of waste may be received at the Site per day (March 2009 C of A Amendment).	1. Review truck log. 2. Verify maximum limit not exceeded.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
30a	The Site is approved to utilize Domestic Waste referred to in Condition 28a. at a rate not to exceed seventy-five (75) tonnes per day;	See Section 2.0, above.		
30b	The Site is approved to utilize High carbon waste referred to in Conditions 28b. and 28c. at a combined maximum rate not to exceed ten (10) tonnes per day.	See Section 2.0, above.		

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
	The maximum amount of waste that may be present at the Site at any one time shall not exceed the following:	See Section 2.0, above.		
31a	Incoming waste: i. three hundred (300) tonnes of Domestic Waste stored within the material handling building; ii. one hundred (100) tonnes of High carbon waste stored within the plastics storage building;	1. Review daily logs. 2. Verify maximum limits not exceeded	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- maximum limits not exceeded.
31b	Solid Residual waste : i. one hundred (100) tonnes of slag waste stored within two lugger boxes; ii. twenty-five (25) tonnes of wet sulphur waste from the H2S Removal System collected within storage vessel TK-2265; iii. eight hundred (800) kilograms of flyash waste from the slag baghouse collected within storage vessel TK-2264 iv. thirty (30) tonnes of converter bottom ash waste in storage vessels TK2146-TK2147 v. eight (8) tonnes of ash from bag house in vessels TK2276 –TK2277 or 8 ash bins; vi. twenty-two (22) m3 of non-processable waste in vessel TK1250; and vii. a maximum of 3 drums of hazardous waste segregated from incoming waste stream and stored in the MSW building.	1. Review daily logs. 2. Verify maximum limits not exceeded	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- maximum limits not exceeded

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
31c	Liquid Residual waste : i. 159,000 litres of Liquid Industrial Waste collected within above ground storage tank TK-6102; ii. 15,000 litres of Liquid Industrial Waste collected within underground storage tank TK-6112; and iii. 780 litres of Liquid Industrial Waste collected within sewage sump pit TK-610	1. Review daily logs. 2. Verify maximum limits not exceeded	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- maximum limits not exceeded - four double wall, transport trailer Baker tanks are used for collection of Wastewater Treatment Plant water, as listed in the DOM issued to the MOE on 31 August 2009.
35.	All waste arriving at the Site shall be inspected by a Trained person prior to being received at the Site to ensure wastes are being managed and disposed of in accordance with this Certificate, the EPA and Reg. 347.	1. Determine - are there any new employees? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 2. If yes, verify new employee has received required training in accordance with training matrix	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- one new employee
36.	In the event that a load of waste is rejected, a record shall be maintained identifying the reason the waste was refused, the type of waste that was refused and the generator and/or the origin of the waste, if known	1. Review daily records. 2. For rejected loads, verify specified records are maintained.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- no MSW waste loads were received this month.
40.	The waste management functions that shall be carried out at the Site as approved by this Certificate are limited to the operations as described in the Site's Design and Operations Report .	1. Spot check random elements of the DOR relevant to waste management. Review for changes in process.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
41.	Standard Procedures Manual (SOP) specific to the Site shall be prepared a minimum of thirty (30) days prior to the acceptance of any waste at the Site . The Procedures Manual shall contain detailed standard operating procedures relating to all aspects of the handling and processing of waste at the Site and shall be maintained current at all times and kept at the Site in central location that is accessible to Site personnel.	1. Review operations for changes (physical or procedural). 2. Verify Standard Procedures Manual is updated to reflect any operational changes. 3. Verify Standard Procedures Manual readily available to staff.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- no new SOPs were issued.
42b	In the event of a persistent odour issue at the Site that results in an off Site adverse impact the Owner shall implement additional odour control measures in accordance with the odour contingency plan.	1. Review complaint log for odour complaints. 2. Any odour complaints Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 3. If persistent odour issue identified, verify odour contingency measures implemented	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- no odour complaints were made to Plasco for the Plasco Trail Road facility.
43a	Domestic Waste received at the Site shall be utilized within ninety-six (96) hours (March 2009 C of A Amendment).	1. Review records to verify wastes utilized within 96 hours	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
43b	Domestic Waste shall be removed from the loading/unloading area for disposal at an approved waste disposal site within seventy-two (72) hours during emergency situations, mechanical failure or process upsets. (March 2009 C of A Amendment)	1. Review operational records to determine if emergency situations, mechanical failure or process upsets. 2. If yes, review records to verify removal of waste within prescribed time.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
44.	The tipping floor shall be cleaned following each day's operation and shall be disinfected as necessary.	1. Review records to verify cleaning (or disinfections if necessary) completed	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- tipping floor is cleaned and checked on daily basis.
45a	All waste generated at the Site shall be disposed of in accordance with Reg. 347	1. Review waste disposal records and ash leachate testing results. 2. If any new wastes or disposal sites listed, verify wastes registered (as required) and carrier and receiver approved for these wastes.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- HWIN registration is active. No concerns identified following a review of waste manifests. No new TCLP results available.
45b	Only haulers approved by the Ministry shall be used to transport waste from the Site	1. Review waste manifest records. 2. If new haulers used, verify hauler has a valid (Provisional) Certificate of Approval for a Waste Management System for the waste being transported from site.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
46.	The Owner shall ensure that landfill gas monitoring is carried out at the Site in accordance with the landfill gas monitoring plan for the Nepean Landfill Site (Closed) as it is amended from time to time.	1. Verify monthly monitoring by City of Ottawa Trail Rd. staff completed.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- staff from City of Ottawa Trail Rd. were permitted access to the Plasco site in September 2010.

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
47	A Trained Person shall inspect the entire Site each day the Site is in operation to ensure that: the Site is secure; that the operation of the Site is not causing any nuisances; that the operation of the Site is not causing any adverse effects on the environment and that the Site is being operated in compliance with this Certificate . Any deficiencies discovered as a result of the inspection shall be remedied immediately, including temporarily ceasing operations at the Site if needed. On each operating day, a visual inspection of the specified areas shall be carried out.	See Term and Condition 48		
48	A record of the inspections shall be kept in the daily log book that includes the specified information.	<ol style="list-style-type: none"> 1. Review Daily Shift Checklist and Rounds Checklist for previous month. 2. Verify inspections completed at least daily 3. Verify specified information is recorded 4. Review identified deficiencies and verify actions taken in a timely manner (This assessment may span more than one monthly report) 	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- Daily Shift and Operations Rounds checklists were reviewed.

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
53b	A record showing that all persons directly involved with activities relating to the Site have been trained in accordance with the requirements described in Condition 53.a) shall be maintained at the Site at all times.	1. Determine - any new employees or contractors have worked on site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 2. Review training records to verify training in accordance with training plan	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
54	A Trained Person (see definition in CofA) shall be available at all times during the hours of operation of this Site to carry out any activity required under this Certificate.	1. Review operating shift schedules to confirm at least one Trained Person present during operating hours	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
55a	If at any time a complaint is received regarding the operation of the Site , the complaint shall be responded to according to the procedures outlined below (items 55 a) through 55 d)): The District Manager shall be notified in writing forthwith upon receipt of any complaint.	1. Review complaint records file. 2. Any complaints Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 3. Confirm evidence of notification to District Manager for each complaint	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
55b	Each complaint shall be recorded and numbered, either electronically or in a separate logbook, and shall include the following information: i. the nature of the complaint, ii. if complaint is odour or nuisance related, the weather conditions and wind direction at the time of the complaint; iii. the address of the complainant (if provided); and iv. the time and date of the complaint	<ol style="list-style-type: none"> 1. Review complaint records file. 2. Verify specified information is recorded for each complaint 	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
55c	Appropriate steps shall be taken forthwith to determine all possible causes of the complaint and to eliminate the cause of the complaint. A written reply shall be provided to the complainant within three (3) days of the complaint; and	<ol style="list-style-type: none"> 1. Review complaint records file. 2. Verify investigation and corrective actions implemented. 3. For each complaint, verify evidence of written reply provided within three days 	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
55d	A report written shall be completed and retained at the Site within one (1) week of the complaint date outlining the information required by subconditions a, b, and c above that details as appropriate, the actions taken to investigate the cause of and to resolve the complaint including any recommendations for remedial measures, and managerial or operational changes proposed and taken to reasonably avoid the recurrence of similar incidents.	<ol style="list-style-type: none"> 1. Verify report prepared and retained for each complaint 	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
57.	The Owner shall ensure that the Spill Contingency and Emergency Response Plan for the Site is reviewed annually and maintained current at all times.	1. Verify Plan revision date within one year.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- Emergency Response Plan 141-SOP-1029 (revision C) updated as of 10 November 2009
58	The Spill Contingency and Emergency Response Plan shall be retained in a central location on the Site and shall be accessible to all staff at all times. The Owner shall ensure that the District Manager, the local Municipality and the Fire Department are notified of any changes to the Spill Contingency and Emergency Response Plan.	1. Check revision of Spill Contingency and Emergency Response Plan. 2. If revised, obtain evidence that copies provided as required.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
60.	All staff that operate the Site shall be fully trained in the use of the Spill Contingency and Emergency Response Plan and in the procedures to be employed in the event of an emergency.	1. Determine if new staff on site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 2. If yes, verify records of training for new staff.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
61.	The Owner shall immediately take all measures necessary to contain and clean up any spill or leak which may result from the operation of this Site and immediately implement the Spill Contingency and Emergency Response Plan if required.	1. Determine if any spills occurred Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 2. If yes, review spill response 3. If yes, review affected area for evidence of impact.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
62	The Design and Operating Manual (DOM) shall be retained at the Site; kept up to date; and be available for inspection by Ministry staff. The Design and Operating Manual shall contain at a minimum the information specified for a waste processing site per the Ministry publication "Guide For Applying For Approval Of Waste Disposal Sites".	1. Verify DOM available. 2. Any changes in operations? <p style="text-align: center;">Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> 3. If yes, verify DOM revised as required.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- a DOM was issued to the MOE on 31 August 2009; - New wastewater plant is operational although optimization/ testing is ongoing. Four wastewater holding tanks are located at northwest corner of site. A new building is under construction for purposes of Wastewater Polishing; - the DOM is being updated to reflect these modifications.
63.	Changes to the Design and Operating Manual shall be submitted to the Director for approval.	1. Any changes in operations? <p style="text-align: center;">Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> 2. If yes, verify record of MOE approval on file.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- Wastewater treatment plant optimization is ongoing. - Any revisions to the DOM will be issued to the MOE.
64.	A daily log book or electronic file shall be maintained at the Site for a minimum of five years and shall include daily records of the pertinent information as listed in the C of A. All amounts must be recorded in metric.	1. Review daily logs book entries for completeness of records	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- Daily Shift and Rounds checklists were reviewed.

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

5.0 SITE INSPECTION

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
11.	Steps shall be taken to minimize and ameliorate any adverse effect on the natural environment or impairment of water quality that results from their operations at the Site , including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.	<p>1. Inspect following areas for evidence of spills / leaks / releases or other adverse conditions:</p> <p>Litter (general site, especially around fence lines)</p> <p>Loading / unloading areas (MSW Bldg; HCF Storage)</p> <p>Storage Area (Exterior Solid Waste)</p> <p>Circulation/ Access Roads</p> <p>Raw/ Waste Liquids Storage</p> <p>Propane/Fuelling Areas</p> <p>Delivery System Area (GQCS)</p> <p>USB Building</p> <p>Processing (Engines/Flares)</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>-maintenance to plant systems underway</p> <p>-maintenance to plant systems underway</p>

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
33.	The Site shall be operated and maintained in a secure manner, such that unauthorized persons cannot enter the Site.	1. Visually verify condition of gates, property line and security fences	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
34.	A sign shall be posted and maintained at the main entrance/exit to the Site displaying in a manner that is clear and legible from the public roadway bordering the Site . The sign shall contain specified information	1. Visually verify sign is present	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
37.	All waste storage containers at the Site shall have a label or sign identifying the waste type and if applicable the waste class(es), the waste characteristic, WHMIS and TDGA classification of the contents contained within. The label or sign shall be clearly visible.	1. Inspect waste storage containers for presence of labels during site tour.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
38.	All waste received at the Site shall be unloaded, processed and stored at the locations shown in the General Arrangement Drawing (Drawing Number 141-DL-0260).	1. Verify wastes stored in designated locations during site tour.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
39.	The Owner shall ensure that all waste and process chemicals shall be stored in accordance with Ministry publication "Guidelines for Environmental Protection Measures at Chemical Storage Facilities", dated October 1978 or as amended.	1. Verify wastes and process chemicals stored in designated locations and manner specified in DOM during site tour.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
42a	The Owner shall ensure that the doors of the material handling building shall be kept closed at all times and shall only be opened for entry or departure of vehicles.	1. Verify doors closed during site inspection.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	East MSW doors have been replaced

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

No.	Provisional Certificate of Approval (Waste Disposal Site) NUMBER 3166-6TYMDZ Term and Condition	Validation Method	Concerns Identified	Comments (for identified concerns)
58	Spill Contingency and Emergency Response Plan – Site Inspection – to be retained in a central location on the Site and accessible to all staff at all times.	1. Check that Spill Contingency and Emergency Response Plan in central location and available.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
59.	The equipment, materials and personnel requirements outlined in the Spill Contingency and Emergency Response Plan shall be immediately available on the Site at all times. The equipment shall be kept in a good state of repair and in a fully operational condition.	1. Verify specified spill response equipment and materials are available and in good condition.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

**MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT**

6.0 EQUIPMENT PERFORMANCE

6.1 PLANNED MAINTENANCE

Planned maintenance (other than routine upkeep) performed in Month on:

Equipment in the GQCS: Yes No

Reciprocating Engines: Yes No

Enclosed (or Alternate) Flare: Yes No

If yes to any of the above, see comments below or Appendix 3 for summary:

Comments: Planned maintenance was conducted for equipment in the GQCS as well as for the feed system, engines and conversion system. Typical preventative maintenance (routine upkeep) was conducted on the CEMS, and flare during this reporting period.

6.2 EQUIPMENT FAILURES

Any failure of:

Equipment in the GQCS: Yes No

Reciprocating Engines: Yes No

Enclosed (or Alternate) Flare: Yes No

If yes to any of the above, see comments below or check Appendix 3 for summary:

Comments:

MONTHLY ENGINEER'S REPORT:
PLASCO TRAIL ROAD- GASIFICATION PROCESS DEMONSTRATION PROJECT

7.0 CERTIFICATION

This report reflects DCS Limited's best judgement in light of the information available to it at the time of preparation. Specifically, it is based on information supplied by site representatives, a sampling of facility files and a visual inspection of the property. DCS Limited has prepared this report using information understood to be factual and correct. Staff from DCS Limited are not employees of the Plasco Demonstration Project. This report is an overall review of the process and, as DCS staff are not intimate with plant operations on a day to day basis, it shall not be responsible for conditions arising from information or facts which were not fully disclosed to DCS staff by site representatives, or for conditions which can only be confirmed through sampling or monitoring.


This report was prepared by DCS Limited on behalf of Plasco Trail Road Inc. and the Ontario Ministry of the Environment. Any use of, or reliance or decision based on this report by any third party is the sole and exclusive responsibility of such third party. DCS accepts no responsibility for damages, if any, suffered by any third party as a result of the use of or reliance or decision based on this report.

We certify, based on the review of the items above, that Plasco Trail Road Inc. is in substantial compliance with O.Reg. 254/06 (Plasco Demonstration Project), Provisional Certificate of Approval (Waste Disposal Site) Number 3166-6TYMDZ and Certificate of Approval (Air) Number 6925-6REN9E.

Yours very truly,

DECOMMISSIONING CONSULTING SERVICES LIMITED

Prepared By: 
Troy Austrins, P.Eng.
Regional Engineer

Reviewed by: 
John Hilton, M.A.Sc., P.Eng.
President

Date: 12 October 2010

