

#### AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1636-8NPQDB Issue Date: November 28, 2011

Fielding Chemical Technologies Inc. 3575 Mavis Rd Mississauga, Ontario L5C 1T7

Site Location: 3549 Mavis Road Mississauga City, Regional Municipality of Peel

You have applied under section 20.2 of Part II.1 of the <u>Environmental Protection Act</u>, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

A facility consisting of solvent recycling and dewatering operations, refrigerant separation operations, composite material (nylon) recovery operations and associated storage vessels having the following sources of emissions to the atmosphere:

- one (1) Boiler No.1, which burns a mixture of distillate oil, process wastewater and waste solvents, with a pulse jet baghouse dust collector, having a filtering velocity of 2.45 centimetres per second, equipped with felt filtering bags, exhausting into the atmosphere at a volumetric flow rate of 4.53 cubic metres per second, through a stack having an exit diameter of 0.91 metre, extending 17.7 metres above grade;

- one (1) natural gas and number 2 fuel oil fired steam boiler, denoted as Boiler No.2, having a maximum heat input of 18,700 megajoules per hour, exhausting into the atmosphere through a stack, having an exit diameter of 0.61 metre, extending 5.49 metres above the roof and 10.67 metres above grade;

- one (1) natural gas and number 2 fuel oil fired steam boiler, denoted as Boiler No.3, having a maximum heat input of 13,300 megajoules per hour, exhausting into the atmosphere through a stack, having an exit diameter of 0.63 metre, extending 5.49 metres above the roof and 10.67 metres above grade;

- one (1) batch vacuum distillation system, with a maximum processing rate of 400 litres per hour, comprised of Kettle No.1 having a capacity of 3,400 litres and equipped with steam heating jacket, Fractionation Column No.1, and a product receiver having a capacity of 260 litres, venting through a connection to the central vacuum system during operations under vacuum conditions and through a vapors condenser and a vent, having an exit diameter of 0.025 metre, extending 1.42 metres above grade during operations under atmospheric conditions;

- one (1) batch vacuum distillation system, with a maximum processing rate of 1100 litres per hour, comprised of Holding Tank No.2 having a capacity of 18,200 liters, thin film evaporator equipped with steam heating jacket, and a product receiver having a capacity of 305 litres, venting through a connection to the central vacuum system during operations under vacuum conditions and through a vapors condenser and a vent, having an exit diameter of 0.037 metre, extending 3.5 meters above grade during operations under atmospheric conditions;

- one (1) batch vacuum distillation system, with a maximum processing rate of 800 litres per hour, comprised of Kettle No.3 having a capacity of 8,200 litres and equipped with steam heating jacket, Fractionating Column No.3, and a product receiver having a capacity of 350 litres, venting through a connection to the central vacuum system during operations under vacuum conditions and through a vapors condenser and a vent, having an exit diameter of 0.025 metre, extending 6 meters above grade during operations under atmospheric conditions;

- one (1) batch vacuum distillation system, with a maximum processing rate of 1100 litres per hour, comprised of Holding Tank No.4 having a capacity of 18,200 liters, thin film evaporator equipped with steam heating jacket, and a product receiver having a capacity of 305 litres, venting through a connection to the central vacuum system during operations

under vacuum conditions and through a vapors condenser and a vent, having an exit diameter of 0.037 metre, extending 3.5 meters above grade during operations under atmospheric conditions;

- one (1) batch vacuum distillation system, with a maximum processing rate of 800 litres per hour, comprised of Kettle No.5 having a capacity of 8,200 litres and equipped with steam heating coils, Fractionating Column No.5, and a product receiver having a capacity of 309 litres, venting through a connection to the central vacuum system during operations under vacuum conditions and through a vapors condenser and a vent, having an exit diameter of 0.025 metre, extending 5 meters above grade during operations under atmospheric conditions, and a pervaporation unit to remove water from selected organic product streams at a maximum dry product rate of 1000kg/hr;

- one (1) batch vacuum distillation system with a maximum rate of 1,640 litres per hour, comprised of Kettle No.6 having a capacity of 20,500 litres, equipped with steam heating coils, Fractionating Column No.6, and a product receiver having a capacity of 523 litres, venting through a connection to the central vacuum system during operations under vacuum conditions and through a vapors condenser and a vent, having an exit diameter of 0.025 metre, extending 3 meters above grade during operations under atmospheric conditions;

- one (1) batch vacuum distillation system with a maximum processing rate of 1,600 litres per hour, comprised of Kettle No.7 having a capacity of 15000 litres, equipped with steam heating coils, Fractionating Column No.7, and a product receiver having a capacity of 1,040 litres venting through a connection to the central vacuum system during operations under vacuum conditions and through a vent, having an exit diameter of 0.075 metre, extending 1.2 meters above grade during operations under atmospheric conditions;

- one (1) batch distillation system with a maximum processing rate of 800 litres per hour, comprised of Kettle No.8, having a capacity of 6,365 litres, equipped with steam heating coils, Fractionating Column No.8 and a product receiver having a capacity of 186 litres, venting through a connection to the central vacuum system during operations under vacuum conditions and through a vent having an exit diameter of 0.025 metre, extending 5 metres above grade;

- one (1) batch vacuum distillation system with a maximum processing rate of 1600 litres per hour, comprised of Kettle No.9 having a volumetric capacity of 17,800 litres, equipped with steam heating coils, Fractionating Column No.9, and a product receiver having a capacity of 1,040 litres venting through a connection to the central vacuum system during operations under vacuum conditions and through a vent, having an exit diameter of 0.075 metre, extending 1 meter above grade during operations under atmospheric conditions;

- one (1) batch distillation still No.10, consisting of a reboiler kettle having a volume of 6,800 liters and a packed tower;

- one (1) batch vacuum distillation system, denoted as Still No.11, with a maximum processing rate of 1,400 litres per hour, comprising Kettle No.11 having a capacity of 13,700 litres, equipped with steam heating coil, , Fractionating Column No.11, and a product receiver having a capacity of 145 litres, venting through a connection to Still #11 liquid ring vacuum system during operations under vacuum conditions and through a vent, having an exit diameter of 0.05 metres, extending 6 meter above grade during operations under atmospheric conditions;

- one (1) pilot scale pervaporation unit to remove water from selected organic product streams at a maximum dry product rate of 600 litres per hour, complete with the following main equipment:

. a reboiler;

- . a fractionation section with two towers: rectifying and stripping;
- . a solvent condenser;
- . a water product condenser;
- . a reflux condenser;
- . a vacuum pump;
- . a pervaporation vessel;
- . a cooling tower;

- one (1) refrigerant separation system consisting of evaporator with a capacity of 213 litres, a compressor, a carbon adsorption column, an air-cooled condenser, a heating coil condenser, a product storage tank and appurtenances for the recovery of refrigerants from mixtures contaminated with (by weight) approximately: 20 percent refrigeration oil, 200 ppm moisture, 7 percent rust and particulate, 200 ppm acids and 10 percent by volume non-condensable gases such as air and

#### carbon dioxide;

- one (1) composite material recovery unit, located outdoor, having a processing capacity of 33 kilograms of composite material (nylon 66) per batch and having a batch duration of 24 hours, operating in a closed system, using methanol as solvent and consisting of one (1) reactor, having a capacity of 1,140 litres, one (1) fiber filter, one (1) precipitator, having a capacity of 1,140 litres, one (1) tank, having a capacity of 1,135 litres and one (1) spent solvent tank, having a capacity of 1,040 litres. The two (2) solvent tanks vent to the atmosphere through two (2) identical activated carbon adsorption units, to control methanol emissions, each having a volume of 450 litres, each containing 180 kilograms of activated carbon, and each exhausting to the atmosphere at a maximum volumetric flow rate of 0.004 actual cubic metres per second at an approximate temperature of 30 degrees Celsius, through a stack, having an exit diameter of 0.05 metre, extending 1.7 metres above grade;

- one (1) central vacuum system comprised of two (2) screw type vacuum pumps (one duty and one standby), each having a maximum capacity of 0.111 cubic metre per second. The exhaust gases from each pumps are passed through a condenser, then discharged into a Vacuum Pump storage Tank equipped with a vent having an exit diameter of 0.05 metre, extending 10 metres above grade;

- one (1) tank farm consisting of one hundred and fourteen (114) storage tanks for the storage of crude, intermediate, product and bottoms, with tank dimensions outlined in Schedule "B";

- fugitive emissions resulting from a drumwash station and associated mixing tank located outdoors,

- one (1) exhaust system complete with an exhaust hood, serving an inductive coupled plasma (ICP) unit, exhausting into the atmosphere at a volumetric flow rate of 0.12 cubic metre per second through a rectangular outlet having exit dimensions of 0.20 metre by 0.13 metre, extending 5.3 metres above grade;

- one (1) exhaust fan serving a bench hood in the laboratory exhausting into the atmosphere at a rate of 0.95 cubic metre per second through a stack or vent having an exit diameter of 0.46 metres, extending 5.5 metres above grade;

- one (1) exhaust fan serving a walk-in hood in the laboratory exhausting into the atmosphere at a rate of 0.36 cubic metre per second through a stack or vent having an exit diameter of 0.46 metres, extending 5.6 metres above grade;

- one (1) cooling system consisting of two (2) closed loop cooling towers having a total maximum water flow rate of 59.9 litres per second including the make-up groundwater flow rate of 0.33 litres per second, exhausting into the atmosphere at a total maximum volumetric flow rate of 80.2 cubic metres per second, through two (2) independent fans identified as sources CT1 and CT2, having exit diameters of 1.8 metres and 2.1 metres, respectively, extending 12 metres above grade;

- one (1) welding area used for general maintenance welding outside applying mild and stainless steel rods at a rate of 50 kilogram per year;

- seven (7) air make-up units and one (1) water heater, having a total maximum heat input of 1,090,870 kilojoules per hour.

all in accordance with the Application for Approval (Air & Noise) submitted by Fielding Chemical Technologies Inc., dated August 2, 2011 and signed by Igor Aronov, Plant Manager, and all supporting information prepared by Fielding Chemical Technologies Inc., including the additional information provided by Leon Li, P.Eng., Plant Engineer (Fielding Chemical Technologies Inc.), dated November 2, 2011 and November 17, 2011; all in accordance with the Application for Approval (Air & Noise) submitted by Fielding Chemical Technologies Inc., dated June 19, 2009 and signed by Gillian Seagrave, Director of Regulatory Affairs, and all supporting information prepared by AECOM Canada Ltd., including the additional information provided by Douglas McLaren, P.Eng., Environmental Engineer (AECOM Canada Ltd.), dated November 24, 2009 and December 8, 2009, and the Acoustic Assessment Report dated December 2007, prepared and signed by Buddy Ledger, Frank Babic, Earth Tech (Canada) Inc.; all in accordance with the application for a Certificate of Approval (Air) signed by Craig Wickett dated October 25, 2002 and supporting information. Letter with attachments (Revised Source Summary and Emission Summary Tables) dated November 18,2004 from James Barker of Stantec Consulting Ltd. to the Ontario Ministry of the Environment. Addendum report entitled "Terms of Reference, Proposed Boiler No.1 Emission Testing", prepared and submitted by Earth Tech (Canada) Inc. dated March 2007 to the Ontario Ministry of the Environment. E-mail, fax and letter dated June 7, 2007, June 26, 2007 and June 29, 2007, respectively, from Gillian Seagrave of Fielding Chemical Technologies Inc. to the Ontario Ministry of the Environment.

For the purpose of this environmental compliance approval, the following definitions apply:

1. "Approval" means this Environmental Compliance Approval, including Schedules "A" and "B", including the application and supporting documentation listed above;

2. "Boiler No.1" means the boiler burning off-spec solvent blends and contaminated water described in the Company's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval;

3. "CEM System" means the continuous monitoring and recording systems and associated control systems used to optimize the operation of the Boiler No.1 and to minimize the emissions from the Boiler No.1 described in the Company's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval;

4. "Company" means Fielding Chemical Technologies Inc. that is responsible for the construction or operation of the Facility and includes any successors and assigns;

5. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;

6. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

7. "Equipment" means Boiler No.1 complete with one (1) baghouse dust collector, the pilot scale pervaporation unit, ten (10) batch vacuum distillation systems, one (1) batch distillation still No.10, consisting of a reboiler kettle and a packed tower, one (1) refrigerant separation system consisting of an evaporator, one (1) composite material recovery unit including two (2) activated carbon adsorption units, one (1) central vacuum system comprised of two (2) screw type vacuum pumps, one (1) exhaust system complete with an exhaust hood, serving an inductive coupled plasma (ICP) unit, two (2) laboratory fumehoods, one (1) tank farm consisting of 114 storage tanks, one (1) drum wash station and two (2) cooling towers as described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;

8. "Exhausted" means the capacity of the two (2) activated carbon units to adsorb emissions is reached and the activated carbon units are no longer able to effectively reduce emissions;

9. "Facility" means the entire operation located on the property where the Equipment is located;

10. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;

11. "Ministry" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees or other persons acting on its behalf;

12. "Publication NPC-205" means the Ministry Publication NPC-205, "Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban)", October, 1995 as amended; and

13. "Publication NPC-232" means the Ministry Publication NPC-232, "Sound Level Limits for Stationary Sources in Class 3 Areas (Rural)", October, 1995 as amended.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

# TERMS AND CONDITIONS

# PERFORMANCE REQUIREMENTS

1. The Company shall ensure that Boiler No.1 is designed and operated to comply, at all times, with the following performance requirements:

## **OPERATING PARAMETERS**

(1) the temperature in the combustion chamber, as recorded by the CEM System, shall be at least 1000 degrees Celsius;
(2) the residence time of the combustion gases in the combustion chamber shall be not less than one second at a temperature of not less than 1000 degrees Celsius;

## EMISSION CONCENTRATION LIMIT

(3) the concentration of oxygen in the undiluted flue gas leaving the combustion chamber, as recorded by the CEM System, shall not be less than 6 percent by volume on a dry basis, calculated as a ten minute average;

(4) the half-hour average concentration of carbon monoxide in the undiluted flue gases leaving the combustion chamber, as recorded by the CEM System, shall have a target level of not more than 100 parts per million by volume, on a dry basis normalized to 11 percent oxygen at a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals;

(5) the concentration of organic matter having a carbon content, expressed as equivalent methane, being an average of ten measurements taken at approximately one minute intervals, shall not be greater than 100 parts per million by volume, measured on an undiluted basis.

# **OPERATION AND MAINTENANCE**

2. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:

(1) prepare, not later than three (3) months after the date of this Approval and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including:

(a) the routine and emergency operating and maintenance procedures in accordance with good engineering practice, including annual inspection procedures as recommended by the Equipment and CEM System suppliers;

(b) emergency procedures;

(c) procedures for any record keeping activities relating to the operation and maintenance of the Equipment and the CEM System;

(d) procedures for operator training which is to be provided by an individual experienced with the Equipment;

(e) procedures for optimizing the operation of the Equipment and to minimize the emissions from the Equipment, including spill clean-up procedures;

(f) procedures for recording and responding to complaints regarding the operation of the Facility;

(2) implement the recommendations of the Manual.

## **MONITORING**

3. The Company shall conduct and maintain a program to continuously monitor:

(1) the carbon monoxide and oxygen concentration in the undiluted flue gas leaving the combustion chamber of the Boiler No.1;

(2) the temperature at the location in the combustion chamber of the Boiler No.1 where the minimum retention time of the combustion gases at a minimum temperature of 1000 degrees Celsius for at least one second is achieved.

The CEM System shall be equipped with continuous recording devices and shall comply with the requirements outlined in the attached Schedule "A".

#### RECORD RETENTION

4. The Company shall retain for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the operation of the site, and monitoring and recording activities required by this Approval. These records shall be made available to staff of the Ministry upon request. The Company shall retain:

(1) all records on maintenance, repair and inspection of the Equipment and the CEM System;

- (2) all records produced by the CEM System;
- (3) all records on operator training;
- (4) all records on the environmental complaints, including:
  - (a) a description, time and date of the incident;
  - (b) wind direction at the time of the incident; and

(c) a description of the measures taken to address the cause of the incident and to prevent a similar occurrence in the future;

(5) daily records of the materials burned in the Boiler No.1;

(6) description of any upset conditions associated with the operation of the Equipment resulting in the use of the bypass stack and remedial actions taken;

(7) records of any spills, complete with the date, name and amount of substance spilled and action taken to clean-up the spill.

#### **REPORTING**

5. The Company shall notify the District Manager, in writing, of each environmental complaint and the measures taken to address the complaint within two (2) business days of the complaint.

#### NOISE CONDITIONS

6. The Company shall ensure that the noise emissions from the Facility comply with the limits set in Publication NPC-205 or Publication NPC-232, as applicable.

7. The Company shall restrict periodic operations of vacuum trucks, drum crusher, drum dock agitator and drum washer to the daytime hours from 7:00 am to 7:00 pm.

#### MISCELLANEOUS:

8. The Company shall ensure that the activated carbon in the two (2) activated carbon adsorption units is replaced before it is Exhausted.

#### SCHEDULE "A"

#### Schedule "A" forms part of this Environmental Compliance Approval.

#### A.1 <u>PARAMETER: TEMPERATURE</u>

LOCATION:

The sample point for the Continuous Temperature Monitor shall be located where the minimum retention time of the combustion gases at a minimum temperature of 1000 degrees Celsius for at least one second is achieved.

## **PERFORMANCE:**

The Continuous Temperature Monitor shall meet the following minimum performance specifications for the following parameters:

	PARAMETERS SPECIFICATION			
1.	Type: shielded "K" type thermocouple, or equivalent			
2.	Accuracy:	$\pm$ 1.5 percent of the minimum gas temperature		

## DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitor without a significant loss of accuracy and with a time resolution of 1 minutes or better.

## **RELIABILITY:**

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time for each calendar quarter.

## A.2 PARAMETER: OXYGEN

## **INSTALLATION:**

The Continuous Oxygen Monitor shall be installed at an accessible location where the measurements are representative of the actual concentration of oxygen in the undiluted gases leaving the Boiler No.1 and shall meet the following installation specifications:

	PARAMETERS	SPECIFICATION	
1	Range (percentage):	0 - 20 or 0 - 25	
2	Calibration Gas Ports:	close to the sample point	

## **PERFORMANCE:**

The Continuous Oxygen Monitor shall meet the following minimum performance specifications for the following parameters.

	PARAMETERS	SPECIFICATION
1	Span Value (percentage):	2 times the average normal concentration at the source
2	Relative Accuracy:	< or = 10 percent of the mean value of the reference method test data
3	Calibration Error:	0.25 percent O2
4	System Bias:	< or = 4 percent of the mean value of the reference method test data
5	Procedure for Zero and Span Calibration check:	all system components checked
6	Zero Calibration Drift (24-hour):	< or = 0.5 percent O2
7	Span Calibration Drift (24-hour):	< or = 0.5 percent O2
8	Response Time (90 percent response to a step change):	< or = 90 seconds
9	Operational Test Period:	> or = 168 hours without corrective maintenance

## **CALIBRATION:**

Daily calibration drift checks on the monitor shall be performed and recorded in accordance with the requirements of Report EPS 1/PG/7.

## DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitor with an accuracy of 0.5 percent of a full scale reading or better and with a time resolution of 2 minutes or better.

#### **RELIABILITY:**

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 90 percent of the time for each calendar quarter during the first full year of operation, and 95 percent, thereafter.

## A.3 PARAMETER: CARBON MONOXIDE

#### **INSTALLATION:**

The Continuous Carbon Monoxide Monitor shall be installed at an accessible location where the measurements are representative of the actual concentration of carbon monoxide in the undiluted gases leaving the Boiler No.1 and shall meet the following installation specifications:

	PARAMETERS	SPECIFICATION
1	Range (parts per million, ppm):	0 to $\geq$ 100
2	Calibration Gas Ports:	close to the sample point

#### **PERFORMANCE:**

The Continuous Carbon Monoxide Monitor shall meet the following minimum performance specifications for the following parameters:

	PARAMETERS	SPECIFICATION
1	Span Value (nearest ppm equivalent):	2 times the average normal concentration of the source
2	Relative Accuracy:	$<$ or = 10 percent of the mean value of the reference method test data or $\pm$ 5 ppm whichever is greater
3	Calibration Error:	< or = 2 percent of actual concentration
4	System Bias:	< or = 4 percent of the mean value of the reference method test data
5	Procedure for Zero and Span Calibration Check:	all system components checked
6	Zero Calibration Drift (24-hour):	< or = 5 percent of span value
7	Span Calibration Drift (24-hour):	< or = 5 percent of span value
8	Response Time (90 percent response to a step change):	< or = 90 seconds
9	Operational Test Period:	> or = 168 hours without corrective maintenance

## CALIBRATION:

Daily calibration drift checks on the monitor shall be performed and recorded in accordance with the requirements of Report EPS 1/PG/7.

## DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitor with an accuracy of 0.5 percent of a full scale reading or better and with a time resolution of 2 minutes or better.

#### **RELIABILITY:**

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 90 percent of the time for each calendar quarter during the first full year of operation, and 95 percent, thereafter.

## SCHEDULE "B"

Sched	lule "B" for	ms part of	this Environ	nental Compli	ance Approval .

Tank No.	Tank Volume (cubic metres)	Tank Diameter (metres)	Vent Diameter (metre)	Vent Height Above Grade (metres)	Material Stored
101	35.345	3.759	0.076	5.867	waste solvent
102	35.345	3.759	0.076	5.867	waste solvent
103	35.345	3.759	0.076	5.867	waste solvent
104	35.345	3.759	0.076	5.867	waste solvent
105	35.345	3.759	0.076	5.867	waste solvent
106	35.345	3.759	0.076	5.867	waste solvent
107	35.345	3.759	0.076	5.867	waste solvent
108	35.345	3.759	0.076	5.867	waste perchloroethylene
109	69.877	3.454	0.076	7.176	waste solvent
110	69.877	3.454	0.076	7.176	waste solvent
111	68.122	3.454	0.076	7.036	fuel
112	68.608	3.429	0.076	7.036	waste solvent
113	59.853	3.454	0.076	6.121	waste solvent

114	12.397	1.905	0.051	6.655	waste solvent
115	12.397	1.905	0.051	6.655	waste solvent
116	35.345	3.759	0.076	5.867	waste solvent
117	68.608	3.429	0.076	7.036	waste glycol
118	69.877	3.429	0.076	7.036	waste glycol
119	59.266	3.454	0.076	6.109	waste solvent
120	54.402	3.353	0.076	5.613	waste solvent
121	34.641	2.718	0.076	5.791	waste solvent
122	12.397	1.905	0.051	6.655	waste solvent
123	35.345	3.759	0.076	5.867	waste solvent
124	59.853	3.454	0.076	6.198	waste solvent
125	77.905	3.645	0.076	8.725	waste solvent
126	71.827	3.645	0.076	8.573	waste solvent
127	16.166	2.210 x 2.159	0.051	5.436	waste solvent
128	16.166	2.210 x 2.159	0.051	5.436	waste solvent
129	35.345	3.759	0.076	5.867	waste solvent
130	35.345	3.759	0.076	5.867	waste solvent
131	77.905	3.645	0.076	8.725	waste solvent
132	77.905	3.645	0.076	8.725	still bottoms
133	54.552	3.531	0.076	5.639	still bottoms
134	72.281	3.023	0.076	10.084	still bottoms
135	90.850	3.556	0.076	9.144	waste solvent
201	28.185	2.921	0.025	4.478	solvent
202	5.683	1.524	0.076	3.785	solvent
203	2.978	1.372	0.038	2.642	solvent
204	15.911	1.880 x 2.159	0.089	5.410	Dibasic Ester (midcut)
205	9.092	1.473	0.051	6.198	methanol
206	21.821	2.743	0.076	4.521	solvent
207	2.978	1.372	0.038	2.642	Methylene Chloride
208	12.681	2.743	0.076	2.743	Dibasic Ester (bottoms)
209	22.730	2.337	0.076	2.845	methanol
210	6.364	1.524	0.076	4.597	black water
211	56.825	3.150	0.051	7.163	glycol
212	16.366	2.489	0.051	4.902	solvent
213	6.364	1.524	0.076	4.597	black water
214	70.463	3.454	0.076	7.010	methanol
215	28.185	3.048	0.051	4.750	solvent
216	36.368	3.048	0.076	5.098	waste water
217	90.920	3.632	0.051	9.020	Dibasic Acids Water
218	3.773	1.168	0.051	4.496	solvent
		0.01.4	0.051	3.835	solvent
219	2.455	0.914	0.031		sorrein
219 220	2.455 6.364	0.914	0.051		solvent
				4.547	·

223	34.095	3.175	0.076	4.826	solvent
224	35.800	3.109	0.051	4.953	solvent
225	13.638	1.778	0.076	7.112	solvent
226	6.364	1.524	0.051	4.572	solvent
227	13.638	1.778	0.076	7.112	solvent
228	13.638	1.778	0.076	7.112	solvent
229	2.455	0.914	0.051	3.835	solvent
230	18.170	2.438	0.076	4.267	solvent
231	4.546	1.143	0.076	5.207	solvent
232	22.503	2.743	0.076	3.835	solvent
233	22.503	2.743	0.076	3.835	solvent
234	13.638	1.778	0.076	7.112	solvent
235	36.368	3.048	0.076	4.978	solvent
236	70.463	3.505	0.076	7.163	solvent
237	53.916	3.498	0.051		solvent
238	69.554	3.632	0.051		Dibasic Ester
239	53.916	3.498	0.051	5.613	·
240	15.638	2.438	0.051		solvent
241	22.503	2.743	0.076		solvent
242	22.730	2.743	0.076		solvent
243	13.638	1.778	0.076		solvent
244	13.865	2.337	0.051		solvent
245	27.276	2.438	0.076		solvent
246	20.248	2.286	0.076		solvent
247	13.638	2.337	0.076		solvent
248	11.365	2.134	0.076		solvent
249	13.865	2.286	0.076		solvent
250	13.865	2.286	0.076		solvent
251	13.865	2.286	0.076		solvent
252	20.457	2.311	0.076		solvent
253	6.137	1.829	0.089		solvent
254	6.137	1.829	0.089		solvent
255	6.137	1.829	0.025		solvent
255	45.460	2.997	0.025		solvent
257	22.072	2.083	0.050		waste water
501	90.920	4.267	0.031		Glycol
502	45.460	2.997	0.038		Glycol
503	40.000	3.048	0.038		DBE waste water
401	13.638	2.286	0.076		waste water
401	13.038	4.267	0.076		[
			0.051		waste water
403	31.822	2.921			waste water
404	50.006	3.353	0.038		waste glycol
405	28.185	2.921	0.025		Glycol
406	45.460	3.048	0.076	6.230	waste water

407	11.365	2.134	0.038	5.359	Glycol
408	13.638	2.692	0.076	3.353	fuel
409	13.638	1.803	0.051	5.283	fuel
410	13.638	1.803	0.038	5.283	fuel oil
411	5.455	1.880	0.089	3.454	waste water
412	45.460	2.743	0.076	7.620	waste glycol
413	22.072	2.083	0.051	2.438	waste water
414	45.460	3.048	0.076	6.230	waste water
415	45.460	3.048	0.076	6.230	waste water
416	45.460	3.048	0.076	6.230	waste water
417	45.460	3.048	0.076	6.230	waste water
#7 REC	9.092	1.372	0.038	6.579	Dibasic Ester
#9 REC	16.820	2.438	no	4.978	Dibasic Ester

## The reasons for the imposition of these terms and conditions are as follows:

1. Condition Nos. 1 and 6 are included to outline the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Equipment/Facility.

2. Condition Nos. 2 and 8 are included to emphasize that the Equipment must be operated and maintained according to a procedure that will result in compliance with the EPA, the regulations and this Approval.

3. Condition No. 3 is included to require the Company to gather accurate information on a continuous basis so that compliance with the EPA, the regulations and this Approval can be verified.

4. Condition Nos. 4 and 5 are included to require the Company to retain records and provide information to the Ministry so that the environmental impact and subsequent compliance with the EPA, the regulations and this Approval can verified.

5. Condition No. 7 is included to ensure that the operations of vacuum trucks, drum crusher, drum dock agitator and drum washer are not extended beyond the stated hours. Operations of vacuum trucks, drum crusher, drum dock agitator and drum washer outside these hours, when ambient sound levels are significantly lower, may result in non-compliance with the established sound level limits.

# Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8177-7YJQ8U issued on December 24, 2009

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

1. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;

2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

3. The name of the appellant;

4. The address of the appellant;

- 5. The environmental compliance approval number;
- 6. The date of the environmental compliance approval;
- 7. The name of the Director, and;
- 8. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary\* Environmental Review Tribunal 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5

<u>AND</u>

The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment 2 St. Clair Avenue West, Floor 12A Toronto, Ontario M4V 1L5

\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 28th day of November, 2011

Ian Greason, P.Eng. Director appointed for the purposes of Part II.1 of the *Environmental Protection Act* 

RA/ c: District Manager, MOE Halton-Peel Leon Li, Fielding Chemical Technologies Inc.