



July 22, 2009

Mr. Kevin Baumann  
Rotex Energy Ltd.  
289, 4819C - 48 Avenue  
RED DEER AB T4N 3T2

Dear Mr. Baumann:

Re: Approval to Operate a Waste Processing Facility

Please find attached a copy of WPF No. 2009-02, *Approval to Construct and Operate a Waste Processing Facility*, pursuant to *The Oil and Gas Conservation Regulations, 1985*. This facility is not approved as a waste facility for purposes of *The Recovered Crude Oil Tax Regulations*.

For the purposes of Part III of *The Freehold Oil and Gas Production Tax Act*, the facility will be considered a crude oil recovery facility and any oil recovered from the facility will be considered recovered crude oil and will be subject to tax pursuant to *The Recovered Crude Oil Tax Regulations*.

If you require any further assistance regarding the waste processing facility approval, please contact Ms. Debby Westerman at (306) 787-2088. Questions related to *The Recovered Crude Oil Tax Regulations* can be directed to Mr. Bruce Lerner at (306) 787-2748. Questions related to reporting should be directed to Ms. Janice Loseth at (306) 787-2493.

Sincerely,

Ed Dancsok  
Assistant Deputy Minister

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Attachment

cc: Todd Han, Petroleum Development, Energy and Resources  
Steve Rymes, Engineering Services, Energy and Resources  
Darwin Roske, Petroleum Statistics, Energy and Resources  
Mike Ferguson, Petroleum Royalties, Energy and Resources  
Dean Pylypuk, Petroleum Development, Energy and Resources  
Debby Westerman, Petroleum Development, Energy and Resources

MINISTER'S APPROVAL

UNDER THE OIL AND GAS CONSERVATION REGULATIONS, 1985

CONSTRUCT AND OPERATE WASTE PROCESSING FACILITY

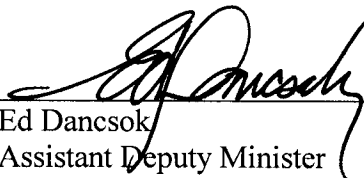
Pursuant to section 108.2 of *The Oil and Gas Conservation Regulations, 1985*, approval is granted to Rotex Energy Ltd. (the company) to construct and operate a Waste Processing Facility (the facility) located on the Legal Subdivision 11 of Section 36, Township 5, Range 4 West of the Second Meridian in the Province of Saskatchewan, subject to the following conditions:

1. The company is approved to receive, store and process materials listed in Appendix 1, at the facility.
2. The company shall comply with all of the conditions specified in Minister's Order MRO443/09 as amended from time to time.
3. This approval is not an authorization for the company to receive, store, treat or dispose of a refined chemical that is a hazardous waste and/or a waste dangerous good at the facility. Where a hazardous waste and/or waste dangerous good have the same meanings as defined in *The Environmental Management and Protection Act* and regulations thereunder.
4. The company shall incorporate appropriate security measures to prevent unauthorized access to the facility. Warning signs that contain the operating company's name, the legal land description and a 24-hour telephone number that can be used in the event of an emergency shall be posted.
5. All materials listed in Appendix 1 shall be stored in accordance with the applicable regulations, *Saskatchewan Upstream Petroleum Industry Storage Standards(S-01)*.
6. Equipment spacing shall conform to the regulations and *Saskatchewan Upstream Petroleum Industry Storage Standards, S-01 (S-01)*, except where permitted by written approval from the department.
7. The company shall incorporate handling procedures to minimize tracking of waste materials on surface of the facility.
8. Permanent groundwater monitoring wells (minimum of three – two upstream and one downstream) shall be installed around the perimeter of the facility.

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9. Any change(s) to the facility which may affect the overall process or impact the environment requires prior approval from the department and/or any other agency having jurisdiction in relation to the change(s).
10. The company shall conduct groundwater monitoring annually and test for pH, conductance, total dissolved solids, hardness, alkalinity ( $\text{HCO}_3$ ,  $\text{CO}_3$ ), Ca, Mg, Na, K, Cl,  $\text{SO}_4$ ,  $\text{NO}_3+\text{NO}_2$  and total extractable hydrocarbons.
11. The company shall carry out regular inspections of the facility, containment systems and equipment for leaks or failures and conduct required pressure testing, mechanical integrity testing and/or visual inspection of pipelines and storage devices as required in S-01.
12. The company shall submit monthly reports to the Petroleum Statistics Branch of the department, detailing upstream waste receipts, inventories, dispositions, recovered crude oil volumes and any other information as requested.
13. The company shall submit a written report to the Manager of Environment, Petroleum Development Branch annually on or before March 31, for the period from January 1 to December 31 of the preceding year, which shall include:
  - (a) description of abnormal occurrences and corrective measures;
  - (b) groundwater monitoring data as required in condition 10; and
  - (c) maintenance and inspection records as required in condition 11.
14. The company shall decommission and conduct post closure monitoring in a manner acceptable to the department at the time of closure.

Dated at Regina, Saskatchewan on July 22<sup>nd</sup>, 2009.

  
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Ed Dancsok  
Assistant Deputy Minister  
Petroleum and Natural Gas  
Ministry of Energy and Resources

## **Appendix 1**

### **Waste Acceptance List**

1. The company may receive, store, treat, recycle and process the following in-province and out-of-province non-hazardous wastes and by-products generated from and associated with the upstream petroleum industry:
  - produced water
  - completion water
  - workover fluids (frac fluids included)
  - drilling fluids (all types)
2. Any material the minister deems appropriate.

## **Appendix 2**

### **Waste Screening Procedures**

1. With the exception of materials specified in **Condition 3** and **Condition 4**, in-province upstream wastes or byproducts generated during normal (where it is reasonable to believe that the wastes or by-products were generated during what is normally accepted as oil and gas standard industry practices and which do not contain prohibited materials specified in **Condition 5** of this approval) production, processing, transmission, transportation, storage, maintenance, operation, abandonment, decommissioning, reclamation, remediation and/or restoration of a well, well site or facility do not require to be tested or archived, unless otherwise specified by the department.
2. With the exception of materials specified in **Condition 3** and **Condition 4**, out-of-province upstream wastes or byproducts generated during normal production, processing, transmission, transportation, storage, maintenance, operation, abandonment, decommissioning, reclamation, remediation and/or restoration of a well, well site or facility shall be accompanied by reasonable documentation or verification to assure that materials specified in **Condition 5** of this approval are not present in the wastes or byproducts. A representative sample shall be taken from each load and held for a minimum period of three months upon reception of the wastes or the by-products.

3. As a minimum requirement, the company shall test the below listed Upstream Wastes prior to reception at the facility for the following parameters:

Upstream Waste	Screening Parameter and Acceptance Criteria	
	PCB ≤5µg/g	Sampling Frequency
pigging wastes from natural gas pipelines*	required	each project - batch sample, with permission from SIR the company may use historical analytical data

Legend:

- PCB means polychlorinated biphenyl EPA 8080B Rev. 2 or EPA 8270B Rev. 2.
- \* prior to acceptance, the upstream waste must be included in the Waste Acceptance List (Appendix 1)

4. As a minimum requirement, the company shall test the Injectable Upstream Waste intended for injection into the disposal well for the following parameters:

Parameter	Injection Criteria	Testing Frequency	Sample Type
pH	2.0 - 12.5	monthly	weekly samples composited over one month
EOC	≤100 mg/L	monthly	weekly samples composited over one month
lead leachate	≤5.0 mg/L	monthly	weekly samples composited over one month
mercury leachate	≤0.1 mg/L	monthly	weekly samples composited over one month

Legend:

- EOC means extractable organic chlorine using appropriate solvent extraction and clean-up procedure then quantified by neutron activation analysis.

5. The company shall not receive or dispose of:

- Naturally Occurring Radioactive Materials (NORM's)
- Any liquids or solids with polychlorinated biphenyl (PCB) concentrations greater than 5 milliliter per litre or 5 milligrams per kilogram.
- Any liquids or solids with total organohalogen concentrations greater than 100 milliliter per litre or 100 milligrams per kilogram. For industrial effluent and surface water, the total organohalogen shall be measured as Adsorbable Organic Halides (AOX) quantified by Neutron Activation Analysis; for liquid solutions it shall be measured as Total Organic Halides (TOX) quantified by Neutron Activation Analysis; and for solids it shall be measured as Extractable Organic Halides (EOX) through extraction with appropriate solvent then quantified by Neutron Activation Analysis.

- Any substances that is liable to spontaneously combust on contact with water.
- Any substances that on contact with water emit flammable gases.
- Any oxidizing substances and organic peroxides.
- Any infectious substances and bio-medical waste.
- Any household or municipal refuse, garbage or sewage.
- All “leachable toxics wastes” listed in the Section 3.27 Table of *The Transportation of Dangerous Goods Regulations*. The leachate concentrations in the “leachable toxic wastes” shall be determined by using *U.S. EPA Toxicity Characteristic Leaching Procedure (TCLP)*, Test Method 1311.
- Any substances and associated matrices or containers that can liberate unsafe amounts of hydrogen sulphide (as specified in *The Occupational Health and Safety Regulations, 1996*) into the working environment under normal operating conditions at the facility, unless proper control systems and mitigating factors are incorporated at the facility.