Ministry of the Environment Environmental Assessment and Approvals Branch Floor 12A

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Direction des évaluations et des autorisations environnementales Étage 12A 2 av St Clair O Toronto ON M4V 1L5

Télécopieur : (416)314-8452 Téléphone : (416)314-8001



July 7, 2006

Alan G. Seech, President and Director of Technology EnviroMetal Technologies Inc. 1345 Fewster Drive Mississauga, Ontario L4W 2A5

Dear Sir:

Re: Application for Approval of Air

Amendment to CofA for In-Situ Remediation Process Mississauga City, Regional Municipality of Peel, Ontario MOE Reference Number 1011-6PPSUL

Please find enclosed the Amended Certificate of Approval (Air) for the above referenced application.

Based on our technical evaluation and the information submitted with your application, the proposed soil/groundwater remediation process is capable of operating within this Ministry's requirement. It is, however, possible that the operation may generate air emissions or worsen the conditions of the soil/groundwater which may result in an adverse effect, which is a violation of Section 14 of the Environmental Protection Act, R.S.O. 1990 (Act). Therefore, you should exercise all reasonable care to prevent such occurrences. You are advised that you are required to notify this Ministry in the event that a contaminant is discharged from the site that causes or is likely to cause an adverse effect. You are also advised to notify the Ministry of Labour or other responsible agencies with regard to possible build up of vinyl chloride at site.

The technical evaluation did not consider situations where contamination has migrated off-site prior to the application of the process. If the process is considered at such sites, a site specific application must be submitted to this Ministry for approval.

Furthermore, the issuance of this certificate is not intended to address the effect of the existing site conditions on the environment or the quality of the existing site conditions with respect to the land use or the effectiveness of the process. We emphasize that if, at any time, conditions that already exist at the site or emissions resulting from the process contravene any part of the Act or any conditions included in the certificate, such contravention may become the subject of

enforcement in accordance with Section 186 of the Act. In addition, the Director may issue an Order or amend or revoke the certificate in accordance with his powers under the Act.

If you have any questions regarding the above, please contact Rudolf Wan, P.Eng., Senior Air Engineer, at (416) 314-7784 or the undersigned at the above phone number.

Yours truly,

Victor Low, P.Eng.

Director, Section 9, Environmental Protection Act

c: District Manager, MOE Halton-Peel District Office



Ministry of the

Ministère Environment l'Environnement AMENDED CERTIFICATE OF APPROVAL NUMBER 9195-6R7K79 Issue Date: July 6, 2006

EnviroMetal Technologies Inc. 1345 Fewster Drive Mississauga, Ontario L4W 2A5

Site Location:

Mobile Facility

You have applied in accordance with Section 9 of the Environmental Protection Act for approval of:

one (1) in-situ remediation process to treat soil, sediment, rock and/or groundwater contaminated with metals, petroleum hydrocarbons, chlorinated organics, chlorinated solvents, organochlorine pesticides and herbicides, chlorophenols, dilute organic explosive compounds at non-explosive concentrations, phthalates, inorganic anions and/or polycyclic aromatic hydrocarbons by the addition of non-hazardous Biostimulation Compound(s) to the contaminated media;

all in accordance with the Application for Approval (Air & Noise), dated May 5, 2006 and signed by Alan G. Seech, EnviroMetal Technologies Inc., and all supporting information and documentation associated with the application including additional information provided by EnviroMetal Technologies Inc., dated June 28, 2006 and signed by David Hill.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

- "Act" means the Environmental Protection Act. (1)
- "Biostimulation Compound" means any chemical amendment, nutrient amendment or pH adjustment (2) chemical used in the Process to enhance remediation. In this Certificate, it means the remediation products ("Adventus products") as described in the Company's application, this Certificate and in the supporting documentation submitted with the application, to the extent approved by this Certificate.
- "Certificate" means this Amended Certificate of Approval (Air), including Schedule "A", issued in (3) accordance with Section 9 of the Act.
- (4) "Company" means EnviroMetal Technologies Inc.
- "District Manager" means the District Manager of the District Office of the Ministry, responsible for the (5) geographic area in which the Process is to be operated.

- (6) "Guideline" means the Ministry publication "Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" dated March 9, 2004, as amended.
- (7) "Ministry" means Ontario Ministry of the Environment.
- (8) "Process" means the remediation process as described in the Company's application, this Certificate and in the supporting documentation submitted with the application, to the extent approved by this Certificate.
- (9) "Remedial Work Plan" means the overall plan, developed for each site, that contains as a minimum the remedial objectives, an overview of the extent of contamination at the site and closure conditions to remove the Process from the site.
- (10) "Site" means the property on which the Process is operated.
- "Supporting Documents" means the Ministry publications that accompany the Guideline including "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario dated May 1996", as amended.
- "Target Compounds" means the metals, petroleum hydrocarbons, chlorinated organics, dilute organic explosive compounds at non-explosive concentrations, phthalates, inorganic anions and/or polycyclic aromatic hydrocarbons that the Process is designed to treat as part of the Remedial Work Plan.

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

#### **TERMS AND CONDITIONS**

# Performance Requirements

- 1. The Company shall, at all times, design and operate the Process with the intent to reduce the soil, sediment, rock and/or groundwater concentrations of the Target Compounds and/or their decomposition compounds to comply with the appropriate criteria provided in the Guideline, appropriate worker health and safety criteria or site specific criteria developed in accordance with the Supporting Documents.
- 2. The Company shall, before commencement of operation of the Process at the Site, prepare a Remedial Work Plan for the Site.

# Operating Procedures and Maintenance Manual

- The Company shall, before commencement of operation of the Process at the Site, prepare and implement an operating procedures and maintenance manual for the Process. The manual shall specify, as a minimum:
  - (a) frequency of inspections and scheduled preventative maintenance;

- (b) procedures to prevent upset conditions and contingency measures to address any off-site migration;
- (c) procedures to minimize all fugitive emissions;
- (d) procedures to prevent and/or minimize odorous emissions;
- (e) procedures to prevent and/or minimize the build up of vinyl chloride;
- (f) procedures to record the amount of Biostimulation Compound(s) each time material is used in the Process;
- (g) procedures to record and respond to environmental complaints.

#### Monitoring Plan

- 4. The Company shall, before commencement of operation of the Process at the Site, design and implement a Monitoring Plan, in accordance with the Supporting Documents, for the soil, soil vapour and groundwater at the Site to document that contamination is not migrating off site, the Performance Requirements outlined above are not exceeded and that the Remedial Work Plan objectives are met. The Monitoring Plan shall specify, as a minimum:
  - (a) Monitoring Plan objectives;
  - (b) list of analytical parameters;
  - (c) monitoring locations and frequency;
  - (d) sampling methodology and QA/QC procedures;
  - (e) a soil vapour monitoring program to assess the levels of vinyl chloride at the Site in comparison to the appropriate worker health and safety criteria for the Site;
  - (f) Remedial Work Plan objectives for discontinuation of the Process.

## Notification Requirements

- 5. The Company shall notify the District Manager in writing, if the Process is not operated in accordance with the Performance Requirements or the Operating Procedures and Maintenance Manual or the Monitoring Plan outlined above.
- 6. The Company shall notify the District Manager at least ten (10) working days before commencement of operation of the Process at a new Site by submitting a completed Form 1, set out in Schedule "A" of this Certificate, with attachments, to the District Manager.

### **Record Keeping Requirements**

- 7. The Company shall, for each Site, retain for a minimum of two (2) years from the date of their creation, all reports, records and information described in this Certificate, related to or resulting from the operation of the Process and shall include, but not be limited to:
  - (a) the Remedial Work Plan;
  - (b) records on the type, frequency and quantity of Biostimulation Compound(s) used in the Process;
  - (c) records on the inspection, maintenance and repair of the equipment related to the Process;
  - (d) all monitoring results including the verification sampling to demonstrate that the Remedial Work Plan objectives are met;
  - (e) records on the environmental complaints; including:
    - (1) a description, time and date of the incident,
    - (2) wind direction at the time of the incident,
    - (3) a description of the measure(s) taken to address the cause of the incident.

These records shall be made available, upon request, to Ministry personnel, or Ministry authorized representative(s), upon presentation of credentials.

### SCHEDULE "A"

#### Form 1

# SOIL/GROUNDWATER REMEDIATION PROCESS NOTICE OF INTENDED LOCATION

vner/Operator:
ntact person and telephone number:
rtificate of Approval (Air) Number and Date of Issuance:
posed location of the remediation process: eet address and municipality or lot and concession number)
d use in the immediate vicinity:
rating Schedule:
e of commencement: mated duration:
se attach the following:  A copy of the Certificate of Approval (Air).  A site plan of the intended location.  A copy of the material safety data sheet (MSDS) of the Biostimulation Compound(s) provided material supplier.  A copy of the Remedial Work Plan.

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

- 1. Conditions No. 1 and 2 are included to outline the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Process.
- 2. Condition No. 3 is included to emphasize that the Process must be operated according to a procedure that will result in compliance with the Act, the regulations and this Certificate.
- 3. Condition No. 4 is included to require the Company to gather accurate information so that the environmental impact and subsequent compliance with the Act, the regulations and this Certificate can be verified.
- 4. Conditions No. 5 and 6 are included to require the Company to notify the Ministry so that the environmental impact and subsequent compliance with the Act, the regulations and this Certificate can be verified.
- 5. Condition No. 7 is included to require the Company to retain records and provide information to the Ministry so that the environmental impact and subsequent compliance with the Act, the regulations and this Certificate can be verified.

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 2394-6ALSXY issued on March 21, 2005.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, S.O. 1993, Chapter 28, the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

- 1. The portions of the approval or each term or condition in the 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.

The Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the works are located;

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

#### This Notice must be served upon:

The Secretary\*
Environmental Review Tribunal
2300 Yonge St., Suite 1700
P.O. Box 2382
Toronto, Ontario
M4P 1E4

<u>AND</u>

The Environmental Commissioner
1075 Bay Street, 6th Floor
Suite 605
Toronto, Ontario
M5S 2B1

AND

The Director Section 9, 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) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the <u>Environmental Bill of Rights</u>, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at www.ene.gov.on.ca, you can determine when the leave to appeal period ends.

The above noted works are approved under Section 9 of the Environmental Protection Act.

DATED AT TORONTO this 6th day of July, 2006

Victor Low, P.Eng.

Director

Section 9, Environmental Protection Act

RW/

District Manager, MOE Halton-Peel District Office