ATTACHMENT 13

CORRECTIVE ACTION

US ECOLOGY MICHIGAN
MID 074 259 565

GLOSSARY

Effective April 22, 2019, the Michigan Department of Environmental Quality (DEQ), Waste Management and Radiological Protection Division (WMRPD), became the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Materials Management Division (MMD).

40 CFR	Title 40 of the Code of Federal Regulations
ABR	Adopted by reference
Act 207	Michigan Fire Protection Act, PA 207, as amended
Act 451	Natural Resources and Environmental Protection Act, 1994 PA 451, as amended
Dynecol	former name of facility, now known as US Ecology Detroit North, Inc US Ecology Michigan?
EPA	United States Environmental Protection Agency
HWSA	Hazardous and Solid Waste Amendments of 1984
Part 111	Part 111, Hazardous Waste Management, of Act 451
Part 111 Rules	Administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Act 451
R	Rule (example: R 299.9504)

FORM EQP5111 ATTACHMENT TEMPLATE MODULE B2

SUPPLEMENTAL INFORMATION: CORRECTIVE ACTION INFORMATION

The Administrative Rules for Part 111, Hazardous Waste Management, of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451) Rule 299.9504(1)(c) (R 299.9504(1)(c)), R 299.9508(1)(b), R 299.9525, R 299.9629, R 299.9635, and R 299.9636; Sections 324.11115a and 324.11115b of Act 451; and Title 40 of the Code of Federal Regulations (40 CFR) §§ 270.14(d) and 264 Subpart F, which are adopted by reference (ABR) in R 299.11003, establish requirements for submitting corrective action information and implementing a corrective action program for hazardous waste management facilities.

This license application module addresses requirements for corrective action information for the waste management units at the ***Dynecol, Inc.*** facility in ***Detroit,*** Michigan. This module includes facility background information and release assessment requirements for construction permit and operating license applications. This module supplies information to support the corrective action program specified in R 299.9629. In this module, applicants must include appropriate justification for the proposed elimination of any waste management unit from the corrective action program under Part 111 of Act 451.

(Check as appropriate)

Operating License Applicant:

☒ R 299.9629 Corrective Action

☐ Elimination from corrective action requirements proposed for one or more units

Construction Permit Applicant:

☐ R 299.9629 Corrective Action

☐ Elimination from corrective action requirements proposed for one or more units

This module is organized as follows:

B2.A Facility Background

- B2.A(1) History and Description of Ownership and Operation
- B2.A(2) Environmental Setting
  - B2.A(2)(a) Climate
  - B2.A(2)(b) Topography
  - B2.A(2)(c) Hydrogeology
  - B2.A(2)(d) Soil
  - B2.A(2)(e) Surface water
  - B2.A(2)(f) Surrounding land uses
  - B2.A(2)(g) Critical habitats and endangered species
- B2.A(3) Characterization of Potential or Actual Sources of Contamination

B2.A(3)(a) Unit 1
B2.A(3)(a)(1) Unit characteristics
B2.A(3)(a)(2) Waste characteristics and management
B2.A(3)(a)(3) History of releases or potential to release

B2.B Facility's Assessment of Known Nature and Extent of Contamination

B2.C Facility's Exposure Assessment

B2.D Interim/Stabilization Measures or Corrective Measures

B2.D(1) Measure 1
B2.D(1)(a) Objective of the measure
B2.D(1)(b) Design and construction
B2.D(1)(c) Operation, monitoring, and maintenance
B2.D(1)(d) Evaluation of measure effectiveness
B2.D(1)(e) Proposed or required schedules for continued operation or future changes in the measure

B2.E Environmental Indicators

B2.F Facility's Assessment of Known or Proposed Constituents of Concern

B2.G Established or Proposed Cleanup Criteria

B2.H Established or Proposed Compliance Points and Periods

B2.I Off-site Access

B2.J Public Involvement Plan

B2.K Health and Safety Plan

B2.L Notice Requirements

B2.M Justification for Proposed Elimination of any Waste Management Unit from the Corrective Action Program

ATTACHMENT : ENVIRONMENTAL INDICATOR CHECKLISTS

MODULE B2: CORRECTIVE ACTION INFORMATION
{Act 451, Sections 324.11115a and 324.11115b, R 299.9504(1)(c), R 299.9508(1)(b), R 299.9525, R 299.9629, R 299.9635, and R 299.9636; and 40 CFR 270.14(d) and 264 Subpart F, which are ABR in R 299.11003}

The following information for ***Dynecol*** describes background information, current conditions, and status of corrective action for releases or potential releases of hazardous waste or hazardous constituents at this facility. It provides the basis for establishing the appropriate corrective action program at this facility.

B2.A Facility Background

B2.A(1) History and Description of Ownership and Operation

Facility operations and regulatory history are discussed in Module A1, Section A1.A; and previous investigations are discussed in Module B3, Section B3.B(1).

B2.A(2) Environmental Setting

B2.A(2)(a) Climate

See Module B4, Section B4.A(2)(a).

B2.A(2)(b) Topography

See Module B4, Section B4.A(2)(b) and Module A13, Section A13.A.

B2.A(2)(c) Hydrogeology

See Module B3, Section B3.B.

B2.A(2)(d) Soil

See Module B4, Sections B4.A(2)(c) & B4.A(2)(d).

B2.A(2)(e) Surface water

See Module B4, Section B4.A(2)(e).

B2.A(2)(f) Surrounding land uses

See Module B4, Section B4.A(2)(f).

B2.A(2)(g) Critical habitats and endangered species

See Module B4, Sections B4.A(2)(m) & B4.A(2)(n).

B2.A(3) Characterization of Potential or Actual Sources of Contamination
{R 299.9504(c) and 40 CFR 270.14(d) which is ABR in R 299.11003}

This section describes actual or potential sources of contamination at the Dynecol facility that are subject to the corrective action requirements of Part 111 of Act 451. These sources include waste management units, which are discernible units at which contaminants have been placed at any time, or at which contaminants have been released, or at which there is a threat of release regardless of the intended use of such unit. These sources also include areas of concern, which are those units which do not meet the definition of waste management unit, but which may have released contaminants to the environment on a non-routine basis, or which may present an unacceptable risk to public health, safety, welfare, or the environment.

Based on the analytical data from the 1988 and 1993 field investigations, a contaminant plume is not present at the facility.

B2.A(3)(a) CMF, Tank System and Loading/Unloading Areas

B2.A(3)(a)(1) Unit characteristics

See Module A2, Section A2.A for waste description at the above mentioned units; Module A3 for the waste analysis plan and Module A11 for the closure activities of each of the above mentioned units. See Figure A1-4 for the location of each of the above mentioned units at the facility.

B2.A(3)(a)(2) Waste characteristics and management

See Tables A2-1 and A2-2 for a list of all hazardous wastes generated and/or accepted at the facility and see Module A2, Section A2.A for the description of wastes generated and accepted at the facility.

B2.A(3)(a)(3) History of releases or potential to release

See Module B9 for a summary of historical releases at the facility.

B2.B Facility's Assessment of Known Nature and Extent of Contamination

Not applicable for the facility, since there is no on-site contamination, however, previous site assessment summaries are provided in Module B3, Section B3.B(1).

B2.C Facility's Exposure Assessment

There are no environmental impacts on the facility pursuant to Part 201. Therefore no information is available and this section is not applicable.

B2.D Interim/Stabilization Measures or Corrective Measures

No information is available.

B2.D(1) CMF, Tanks Systems, Loading/Unloading Areas

B2.D(1)(a) Objective of the measure

No information is available.

B2.D(1)(b) Design and construction

No information is available.

B2.D(1)(c) Operation, monitoring, and maintenance

No information is available.

B2.D(1)(d) Evaluation of measure effectiveness

No information is available.

B2.D(1)(e) Proposed or Required Schedules for continued operation or future changes in the measure

No information is available.

B2.E Environmental Indicators

See attached Environmental Indicator Forms.

B2.F Facility's Assessment of Known or Proposed Constituents of Concern
{R299.9629(3)(a)(i) and R299.9629(3)(b)(i)}

Not applicable, since no on site contamination currently exists at the facility.

B2.G Established or Proposed Cleanup Criteria
{R299.9629(3)(a)(ii) and (iii), and R299.9629(3)(b)(ii) and (iii)}

Not applicable, since no on site contamination currently exists at the facility.

B2.H Established or Proposed Compliance Points and Periods
{R299.9629(3)(a)(iv) and (v), and R299.9629(3)(b)(iv) and (v)}

Not applicable, since no on site contamination currently exists at the facility.

B2.I Off-site Access

Not applicable, since no on site contamination currently exists at the facility.

B2.J Public Involvement Plan

Not applicable, since no on site contamination currently exists at the facility.

B2.K Health and Safety Plan

Not applicable, since no on site contamination currently exists at the facility.

B2.L Notice Requirements
{R299.9525}

A notice was filed with the office of the register of deeds in Wayne County in August 1980, as required by R299.9525.

B2.M Justification for Proposed Elimination of any Waste Management Unit from the Corrective Action Program

This section is not applicable to the facility because no waste management units are being eliminated from the corrective action program.

CORRECTIVE ACTION INFORMATION MODULE
ATTACHMENT
ENVIRONMENTAL INDICATOR CHECKLISTS

Documentation of Environmental Indicator Determination
in accordance with EPA Interim Final Guidance 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRA Info code (CA725)

Current Human Exposures Under Control

Facility Name: Dynecol, Inc.
Facility Address: 6520 Georgia Street, Detroit, Michigan 48211
Facility EPA ID #: MI D 07429565

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

   _____ If yes - check here and continue with #2 below.

   _____ If no - re-evaluate existing data, or

   __X__ If data is not available skip to #6 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EIs developed to date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EIs are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI is for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission

to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in the RCRA Info national database ONLY as long as they remain true (i.e., RCRA Info status codes must be changed when the regulatory authorities become aware of contrary information).

2. Are groundwater, soil, surface water, sediments or air **media** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	Yes	No	?	Rationale / Key Contaminants
Groundwater	___	___	___	_____
Air (indoors)[2]	___	___	___	_____
Surface Soil (e.g., <2 ft)	___	___	___	_____
Surface Water	___	___	___	_____
Sediment	___	___	___	_____
Subsurf. Soil (e.g., >2 ft)	___	___	___	_____
Air (outdoors)	___	___	___	_____

_____ If no (for all media) - skip to #6, and enter "YE," status code after providing or citing appropriate "levels," and referencing sufficient supporting documentation demonstrating that these "levels" are not exceeded.

_____ If yes (for any media) - continue after identifying key contaminants in each "contaminated" medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

_____ If unknown (for any media) - skip to #6 and enter "IN" status code.

Rationale and Reference(s):_____
_____
_____
_____
_____

Footnotes:

[1] "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

[2] Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggests that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

3. Are there **complete pathways** between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential **Human Receptors** (Under Current Conditions)

"Contaminated" Media	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food[3]
Groundwater	___	___	___	___		___	
Air (indoors)	___	___	___				
Soil (surface, e.g., <2 ft)	___	___	___	___	___	___	___
Surface Water	___	___			___	___	___
Sediment	___	___			___	___	___
Soil (subsurface e.g., >2 ft)				___		___	
Air (outdoors)	___	___	___	___	___	___	

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors' spaces for Media which are not "contaminated") as identified in #2 above.

2. Enter "yes" or "no" for potential "completeness" under each "Contaminated" Media - Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential "Contaminated" Media - Human Receptor combinations (pathways) do not have check spaces ("___"). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

_____ If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter "YE" status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).

_____ If yes (pathways are complete for any "Contaminated" Media - Human Receptor combination) - continue after providing supporting explanation.

_____ If unknown (for any "Contaminated" Media - Human Receptor combination) - skip to #6 and enter "IN" status code

Rationale and Reference(s):_____
_____
_____
_____
_____
_____
_____

[3] Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **"significant"**[4] (i.e., potentially "unacceptable" because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable "levels" (used to identify the "contamination"); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable "levels") could result in greater than acceptable risks)?

   _____ If no (exposures cannot be reasonably expected to be significant (i.e., potentially "unacceptable") for any complete exposure pathway) - skip to #6 and enter "YE" status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

   _____ If yes (exposures could be reasonably expected to be "significant" (i.e., potentially "unacceptable") for any complete exposure pathway) - continue after providing a description (of each potentially "unacceptable" exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

   _____ If unknown (for any complete pathway) - skip to #6 and enter "IN" status code

   Rationale and Reference(s):_____
   _____
   _____
   _____
   _____

[4] If there is any question on whether the identified exposures are "significant" (i.e., potentially "unacceptable") consult a human health Risk Assessment specialist with appropriate education, training and experience.

5. Can the "significant" **exposures** (identified in #4) be shown to be within **acceptable** limits?

   _____ If yes (all "significant" exposures have been shown to be within acceptable limits) - continue and enter "YE" after summarizing and referencing documentation justifying why all "significant" exposures to "contamination" are within acceptable

limits (e.g., a site-specific Human Health Risk Assessment).

_____ If no (there are current exposures that can be reasonably expected to be "unacceptable") - continue and enter "NO" status code after providing a description of each potentially "unacceptable" exposure.

_____ If unknown (for any potentially "unacceptable" exposure) - continue and enter "IN" status code

Rationale and Reference(s):_____
_____
_____
_____
_____
_____
_____
_____

6. Check the appropriate RCRA Info status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

____ YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the __ _____ facility, EPA ID #_____, located at _____ under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

____ NO - "Current Human Exposures" are NOT "Under Control."

_X_ IN - More information is needed to make a determination.

Completed by: (Signature) _____ Date 9/7/07
(Print) John Cannon
(Title) President

Supervisor: (Signature) _____ Date _____
(Print)
(Title)
(EPA Region or State)

Locations where References may be found:

_____
_____
_____

Contact telephone and e-mail numbers

(Name) John Cannon
(Phone #) (313) 571-7141
(E-mail) jcannon@pvschemicals.com

Final Note: The Human Exposures EI is a Qualitative Screening of exposures and the determinations within this document should not be used as the sole basis for restricting the scope of more detailed (e.g., site-specific) assessments of risk.

ref: ca725epa.doc

Documentation of Environmental Indicator Determination
in accordance with EPA Interim Final Guidance 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRA Info Code (CA750)

Migration of Contaminated Groundwater Under Control

Facility Name: Dynecol, Inc.
Facility Address: 6520 Georgia Street, Detroit, Michigan 48211
Facility EPA ID #: MI D 07429565

1. Has **all** available relevant/significant information on known and reasonably suspected releases to the groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

   _____ If yes - check here and continue with #2 below.

   _____ If no - re-evaluate existing data, or

   __X__ If data is not available, skip to #8 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EIs developed to date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EIs are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated groundwater and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final

remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

Duration / Applicability of EI Determinations

EI Determination status codes should remain in RCRA Info national database ONLY as long as they remain true (i.e., RCRA Info status codes must be changed when the regulatory authorities become aware of contrary information).

2. Is **groundwater** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

   _____ If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.

   _____ If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."

   _____ If unknown - skip to #8 and enter "IN" status code.

   Rationale and Reference(s):_____
   _____
   _____
   _____
   _____

Footnotes:

[1] "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater"[2] as defined by the monitoring locations designated at the time of this determination)?

   _____ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination" [2]).

_____ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"[2]) - skip to #8 and enter "NO" status code, after providing an explanation.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):_____
_____
_____
_____

[2] "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4. Does "contaminated" groundwater **discharge** into **surface water** bodies?

_____ If yes - continue after identifying potentially affected surface water bodies.

_____ If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):_____
_____
_____
_____
_____

5. Is the **discharge** of "contaminated" groundwater into surface water likely to be **"insignificant"** (i.e., the maximum concentration[3] of each contaminant discharging into surface water is less than 10 times the appropriate groundwater "level," and there are no other conditions (e.g., the nature or number of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments or eco-systems at these concentrations)?

_____ If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration[3] of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are

increasing; and 2) provide a statement of professional judgement/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments or eco-system.

_____ If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration [3] of <u>each</u> contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations[3] greater than 100 times the appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

_____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):_____
_____
_____
_____
_____

[3] As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be "**currently acceptable**" (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented[4])?

_____ If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR 2) providing or referencing an interim-assessment,[5] appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialist(s), including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk

Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.

_____ If no - (the discharge of "contaminated" groundwater cannot be shown to be "**currently acceptable**") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments and/or eco-systems.

_____ If unknown - skip to 8 and enter "IN" status code.

Rationale and Reference(s):_____
_____
_____
_____

[4] Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

[5] The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

7. Will groundwater **monitoring**/measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"

_____ If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."

_____ If no - enter "NO" status code in #8.

_____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):_____
_____
_____
_____
_____

8. Check the appropriate RCRA Info status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

_____ YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the _____facility, EPA ID # _____ , located at _____. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater." This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

_____ NO - Unacceptable migration of contaminated groundwater is observed or expected.

__X__ IN - More information is needed to make a determination.

Completed by: (Signature)_____ Date _9/7/07_____
(Print) John Cannon
(Title) President

Supervisor: (Signature)_____ Date _____
(Print)
(Title)
(EPA Region or State)

Locations where References may be found:

_____
_____
_____
_____

Contact telephone and e-mail numbers

(Name)_____John Cannon_____
(Phone #)____(313) 571-7141_____
(E-mail)_____jcannon@pvschemicals.com__

ref: ***ca750epa.doc***

MODULE B9

SOLID WASTE MANAGEMENT UNIT INFORMATION

As required by the Hazardous and Solid Waste Amendments of 1984 (HSWA), Section 3004 (a), this section contains a certification regarding potential releases from solid waste management units at the Dynecol facility.

CERTIFICATION REGARDING POTENTIAL RELEASES FROM SOLID WASTE MANAGEMENT UNITS

FACILITY NAME: DYNECOL, INC.
EPA I.D. NUMBER: MID 074 259 565
LOCATION CITY: DETROIT
STATE: MICHIGAN

1. Are there any of the following solid waste management units (existing or closed) at your facility? NOTE – DO NOT INCLUDE HAZARDOUS WASTE UNITS CURRENTLY SHOWIN IN YOUR PART B APPLICATION.

	Yes	No
▪ Landfill	___	x
▪ Surface Impoundment	___	x
▪ Land Farm	___	x
▪ Waste Pile	___	x
▪ Incinerator	___	x
▪ Storage Tank (Above Ground)	___	x
▪ Storage Tank (Underground)	___	x
▪ Container Storage Area	___	x
▪ Injection Wells	___	x
▪ Wastewater Treatment Units	___	x
▪ Transfer Stations	___	x
▪ Waste Recycling Operations	___	x
▪ Waste Treatment Detoxification	___	x
▪ Other _____		

2. If there are “Yes” answers to any of the items in Number 1 above, please provide a description of the wastes that were stored, treated, or disposed of in each unit. In particular, please focus on whether or not the wastes would e considered as hazardous wastes or hazardous constituents under RCRA. Also include any available data on quantities or volume of wastes disposed of and the dates of disposal. Please also provide a description of each unit and include capacity, dimensions, location at facility, and a site plan if available.

   Not applicable.

   NOTE: Hazardous wastes are those identified in 40 CFR 26l. Hazardous constituents are those listed in Appendix VIII of 40 CFR 261.

3. For the units noted in Number 1 above and also those hazardous waste units in your Part B application, please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the past or still be occurring.

Please provide the following information:

- Date of release
- Type of waste released
- Quantity or volume of waste released
- Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.)

Incident No.1

- Date of release: July 6, 1991.
- Type of waste released : NO2
- Estimated quantity released: Maximum of 2,925 pounds
- Nature of release: Caused by iron reduction of a trace amount (1-4%) of nitric acid contained in 33% sulfuric acid stored at the facility. Emission thru 66 food scrubber stack.

Incident No.2

- Date of release: September 22, 1999.
- Type of waste released: Nitrate Gas
- Nature of release: Water was used to wash nitrates from a contained bulking tanker which was left unattended partially through the bulking process while the officer attended a safety meeting. An exothermic reaction ensued within the contained tanker and produced nitrate gas which was released into the atmosphere.

4. In regard to the prior releases described in Number 3 above, please provide (for each unit any analytical data that may be available which would describe the nature and extend of environmental contamination that exists as a result of such releases. Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.

   No analytical data is available. In addition, no known soil or groundwater contamination was associated with either of these incidents.

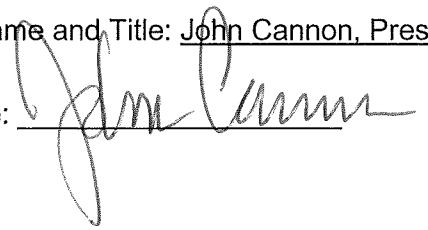
Solid Waste Management Units Removal Project Summary

In May 1991, Dynecol excavated 20 8,000-gallon underground storage tanks (USTs) that were permanently closed in the late 1970s and early 1980s. These tanks were used by Waste Services (former name of Dynecol) to neutralize sulfuric acid based pickle liquor solutions. During the removal of the 20 tanks, four 3,500-gallon USTs were identified. The tanks were completely disconnected, sealed, and closed with water (common practice for closure in the early 1970s) at the time they were located. Three tanks were completely filled with cement grout and one tank was partially removed and filled with DOT Class II material in order to allow room for the foundation of the new building. See Appendix B9-1 for documentation of the removal and closure activities.

CERTIFICATION

I certify under penalty of law that this document all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the submittal is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and 40 CFR 270.11 (d))

Typed Name and Title: John Cannon, President

Signature:  Date: 9·14·07