



State of Ohio Environmental Protection Agency
Northeast District Office

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DIV. OF HAZARDOUS
WASTE MGT.

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

October 22, 2008

John Wharton
Degussa Initiators, Inc.
555 Garden Street
Elyria, Ohio 44035

RE: HAZARDOUS WASTE PERMIT MODIFICATION, CLASS 1A APPROVAL AND CLASS 1 ACKNOWLEDGEMENT, DEGUSSA INITIATORS, INC., OHD 046-202-602 / OHIO PERMIT # 02-47-0580

Dear Mr. Wharton:

On August 25, 2008, Ohio EPA received a request for a Class 1A (Class 1 requiring prior approval) hazardous waste permit modification (tracking number – 080825-1A-1) and for a Class 1 hazardous waste permit modification (tracking number – 080825-1-1) from Degussa Initiators, Inc. With this letter, Ohio EPA approves the above referenced Class 1A and acknowledges the Class 1 modifications submitted pursuant to Ohio Administrative Code (OAC) Rule 3745-50-51.

The following modifications have been made to your March 1, 2002, Ohio Hazardous Waste Facility Installation and Operation Permit. Also, the records of Ohio EPA have been changed accordingly:

Class 1A Removal of closed hazardous waste container storage, S01 units
 Removal of closed hazardous waste incinerator, T03 units

Class 1 Facility typographical error name change

Attached is a copy of the permit application revisions. This has been included to ensure that all involved parties have written confirmation of the changes. Also, in accordance with Ohio Administrative Code Rule 3745-50-51(D)(1)(a)(ii), the Permittee must send a notice within 90 days of an approved Class 1A Modification to all persons on the Agency mailing list. An updated mailing list can be obtained by contacting Dave Sholtis at (614) 644-2917, or by e-mail at dave.sholtis@epa.state.oh.us.

If you have any questions concerning this action, please contact Kim Gallagher at the Ohio EPA's Northeast District Office.

Sincerely,


William T. Skowronski, District Chief
Northeast District Office

WTS/KG:ddw

cc: Dave Sholtis, Assistant Chief, DHWM, CO
Mike Allen, Supervisor, Engineering Unit, DHWM, CO
Kim Gallagher, DHWM, NEDO
Frank Popotnik, DHWM, NEDO

OHIO ENVIRONMENTAL PROTECTION AGENCY
OHIO HAZARDOUS WASTE FACILITY
INSTALLATION AND OPERATION PERMIT RENEWAL

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OHIO EPA
DEC - 2 2008
DIV. OF HAZARDOUS
WASTE MGT.

Permittee: Degussa Initiators, Inc.

Mailing
Address: Degussa Initiators, Inc.
555 Garden Street
Elyria, OH 44035-4403

Owner: Degussa Initiators, Inc.
555 Garden Street
Elyria, OH 44035-4403

Operator: Degussa Initiators, Inc.
555 Garden Street
Elyria, OH 44035-4403

Location: Degussa Initiators, Inc.
555 Garden Street
Elyria, OH 44035-4403

US EPA ID: OHD 046-202-602

Issue Date: 03/01/2002

Effective Date: 03/01/2002

Expiration Date: 03/01/2012

AUTHORIZED ACTIVITIES

In reference to the application of Degussa Initiators, Inc., for an Ohio Hazardous Waste Facility Installation and Operation Renewal Permit under Ohio Revised Code (ORC) Chapter 3734 and the record in this matter, you are authorized to conduct at the above-named facility the following hazardous waste management activities:

- ◆ **Corrective Action**

MODULE A - GENERAL PERMIT CONDITIONS

A.1. Effect of Permit

ORC Sections 3734.02 (E) and (F) and 3734.05
OAC Rule 3745-50-58(G)

- (a) The Permittee is authorized to proceed with Corrective Action activities in accordance with the terms and conditions of this permit, ORC Chapter 3734, all applicable Ohio hazardous waste rules, and all applicable regulations promulgated under the Resource Conservation and Recovery Act (RCRA), as amended, and the approved Part B permit application as submitted to Ohio EPA on September 9, 1998 and any subsequent amendment thereto, and last updated on January 19, 2000 is hereby incorporated into this permit. In the instance of inconsistent language or discrepancies between the above, the language of the more stringent provision shall govern.
- (b) Any management of hazardous waste not authorized by this permit is prohibited, unless otherwise expressly authorized or specifically exempted by law. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, or invasion of other private rights. Compliance with the terms and conditions of this permit does not obviate Permittee's obligation to comply with other applicable provisions of law governing protection of public health or the environment including but not limited to the Community Right to Know law under ORC Chapter 3750.

A.2. Permit Actions

OAC Rule 3745-50-58(F)

This permit may be modified, revoked, suspended, or renewed as specified by Ohio law. The filing of a request for a permit modification, revocation, suspension, or renewal or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit term or condition.

A.3. Permit Effective/Expiration Date

OAC Rule 3745-50-54

The effective date of this permit is the date the permit is entered into the Director's Journal. The permit expiration date is ten years after the date of journalization of this permit (March 1, 2012).

A.4. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

A.5. Duty to Comply
OAC Rule 3745-50-58(A)

The Permittee shall comply with all applicable provisions of ORC Chapter 3734, all applicable Ohio hazardous waste rules, and all terms and conditions of this permit, except to the extent and for the duration such noncompliance is authorized by the laws of the State of Ohio. Any permit noncompliance, other than noncompliance authorized by the laws of the State of Ohio, constitutes a violation of ORC Chapter 3734 and the rules adopted thereunder and is grounds for enforcement action, suspension, revocation, modification, denial of a permit renewal application or other appropriate action.

A.6. Duty to Reapply and Permit Expiration
OAC Rules 3745-50-40(E); 3745-50-58(B); 3745-50-56 and ORC Section 3734.05(H)

- (a) If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must submit a completed application for a hazardous waste facility installation and operation permit renewal and any necessary accompanying general plans, detailed plans, specifications, and such information as the Director may require, to the Director no later than one hundred eighty (180) days before to the expiration date of this permit or upon approval of the director a later date prior to the expiration date if the Permittee can demonstrate good cause for late submittal.
- (b) The Permittee may continue to operate in accordance with the terms and condition of the expired permit until a renewal permit is issued or denied if:
 - (i) the Permittee has submitted a timely and complete application for a renewal permit under OAC Rule 3745-50-40; and
 - (ii) through no fault of the Permittee, a new permit has not been issued pursuant to OAC Rule 3745-50-40 on or before the expiration date of

this permit.

- (c) The corrective action obligations contained in this permit will continue regardless of whether the facility continues to operate or ceases operation and closes. The Permittee is obligated to complete facility-wide corrective action under the conditions of this permit regardless of the operational status of the facility. The Permittee must submit an application for permit reissuance at least 180 days before the expiration date of this permit pursuant to OAC 3745-50-40(D) unless a) the permit has been modified to terminate the corrective action schedule of compliance and the Permittee has been released from the requirements for financial assurance for corrective action; or b) permission for a later date has been granted by the. The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

A.7. Need to Halt or Reduce Activity Not a Defense
OAC Rule 3745-50-58(C)

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce a permitted activity in order to maintain compliance with the conditions of this permit.

A.8. Duty to Mitigate
OAC Rule 3745-50-58(D)

The Permittee shall expeditiously take all reasonable steps necessary to minimize or correct any adverse impact on the environment or the public health resulting from noncompliance with this permit.

A.9. Proper Operation and Maintenance
OAC Rule 3745-50-58(E)

The Permittee shall at all times properly operate and maintain the facility (and related appurtenances) to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective management practices, adequate funding, adequate operator staffing and training, and where appropriate, adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the terms and conditions of this permit.

A.10. Duty to Provide Information

OAC Rule 3745-50-58(H)

The Permittee shall furnish the Director, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revoking or suspending this permit or to determine compliance with this permit. The Permittee shall also furnish the Director, upon request, copies of records required to be kept by this permit.

A.11. Inspection and Entry

OAC Rules 3745-50-58(I), 3745-50-30 and ORC Section 3734.07

- (a) The Permittee shall allow the Director, or an authorized representative, upon stating the purpose and necessity of the inspection and upon proper identification to:
 - (i) enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the terms and conditions of this permit;
 - (ii) have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;
 - (iii) inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the terms and condition of this permit; and
 - (iv) sample, document, or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by ORC Chapter 3734 and the rules adopted thereunder, any substances or parameter at any location.

- (b) Any record, report or other information obtained under the hazardous waste rules or Chapter 3734 of the Revised Code shall not be available to the public upon the Permittee's satisfactory showing to Ohio EPA that all or part of the information would divulge methods or processes entitled to protection as trade secrets pursuant to Ohio Trade Secret Law and OAC Rule 3745-50-30.

A.12. Monitoring and Records
OAC Rule 3745-50-58(J)

- (a) Any sample and measurement taken for the purpose of monitoring shall be a representative sample or measurement, as such term is defined and used in the Ohio hazardous waste rules. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of OAC Rule 3745-51-20, Laboratory Methods. Laboratory methods must be those specified in Test Methods for the Evaluation of Solid Waste: Physical /Chemical Methods; SW-846:Third Edition, November 1992; and additional supplements or editions thereof; Standard Methods for the Examination of Water and Wastewater: Seventeenth Edition, 1989; or an equivalent method as specified in the approved waste analysis plan, or as such term is defined and used in the Ohio hazardous waste rules.
- (b) Records of monitoring information shall specify the:
 - (i) date(s), exact place(s), and time(s) of sampling or measurements;
 - (ii) individual(s) who performed the sampling or measurements;
 - (iii) date(s) analyses were performed;
 - (iv) individual(s) who performed the analyses;
 - (v) analytical technique(s) or method(s) used; and
 - (vi) results of such analyses.

A.13. Signatory Requirement and Certification of Records
OAC Rules 3745-50-58(K) and 3745-50-42

All applications, reports or information shall be properly signed and certified in accordance with OAC Rule 3745-50-58(K).

A.14. Retention of Records
OAC Rules 3745-50-58(J) and 3745-50-58(M)

- (a) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records

required by this permit, the certification required by paragraph B(9) of rule 3745-54-73 of the Administrative Code, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report, certification, or application.

- (b) The record retention period may be extended by request of the Director at any time and are automatically extended during the course of any unresolved enforcement action regarding the facility.
- (c) The Permittee shall maintain, in accordance with the Ohio hazardous waste rules, records of all data used to complete the Part B permit application and any amendments, supplements, or modifications of such application and shall retain a complete copy of the application for the life of the facility.
- (d) The Permittee shall maintain records from all ground water monitoring wells and associated ground water surface elevations for the active life of the facility, and for disposal facilities for the post-closure care period as well.
- (e) Corrective Action records must be maintained at least 3 years after all Corrective Action activities have been completed.

A.15. Planned Changes

OAC Rules 3745-50-51 and 3745-50-58(L)(1)

The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. All such changes must be made in accordance with OAC Rule 3745-50-51.

A.16. Waste Shipments

OAC Rule 3745-52-12, ORC 3734.15(C)

The Permittee shall only use properly registered transporters of hazardous waste to remove hazardous waste from the facility, in accordance with all applicable laws and rules.

A.17. Anticipated Noncompliance
OAC Rule 3745-50-58(L)(2)

The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or operations which may result in noncompliance with the terms and conditions of this permit. Such notification does not waive the Permittee's duty to comply with this permit pursuant to Condition A.5.

A.18. Transfer of Permits
OAC Rules 3745-50-52; 3745-50-58(L)(3) and 3745-54-12

- (a) This permit is not transferable to any person except after notice of the director.
- (b) The permit may be transferred to a new owner or operator only if such transfer is conducted in accordance with ORC Chapter 3734 and the rules adopted thereunder. This permit may be transferred by the Permittee to a new owner or operator only if the permit has been modified under OAC Rule 3745-50-51. Before transferring ownership or operation of the facility the Permittee shall notify the new owner or operator in writing of the requirements of ORC Chapter 3734 and the rules adopted thereunder (including all applicable corrective action requirements).
- (c) The Permittee's failure to notify the new owner or operator of the requirements of the applicable Ohio law or hazardous waste rules does not relieve the new owner or operator of its obligation to comply with all applicable requirements.

A.19. Compliance Schedules
OAC Rule 3745-50-58(L)(5) and 3745-50-50

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule (developed in accordance with OAC Rule 3745-50-50) of this permit shall be submitted Director no later than fourteen (14) days following each scheduled date.

A.20. Immediate Reporting of Noncompliance
OAC Rule 3745-50-58(L)(6)

- (a) The Permittee shall report orally to the Ohio Environmental Protection Agency's Division of Emergency and Remedial Response within two hours from the time the Permittee becomes aware of any noncompliance with this

permit, ORC Chapter 3734 or the rules adopted thereunder, which endangers human health or the environment, including:

- (i) information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies; and
 - (ii) any information of a release or discharge of hazardous waste or a fire or explosion from the hazardous waste facility, which could threaten the environment or human health outside the facility.
- (b) The report shall consist of the following information (if such information is available at the time of the oral report):
- (i) name, address, and telephone number of the owner or operator;
 - (ii) name, address, and telephone number of the facility;
 - (iii) name and quantity of material(s) involved;
 - (iv) the extent of injuries, if any;
 - (v) an assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
 - (vi) estimated quantity and disposition of recovered material that resulted from the incident.

A.21. Follow-Up Written Report of Noncompliance
OAC Rule 3745-50-58(L)(6)(c)

- (a) A written report shall also be provided to the Ohio Environmental Protection Agency's Division of Emergency and Remedial Response and the Division of Hazardous Waste Management, Northeast District Office within five (5) days of the time the Permittee becomes aware of the circumstances reported in Condition A.20.
- (b) The written report shall address the items in A.20 and shall contain a description of such noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and, if not, the anticipated time it is expected to continue; and steps taken or planned to minimize the impact on human health and the environment and to reduce, eliminate, and prevent recurrence of the noncompliance.

- (c) The Permittee need not comply with the five (5) day written report requirement if the Director, upon good cause shown by the Permittee, waives that requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

A.22. Other Noncompliance

OAC Rules 3745-50-58(L)(10) and 3745-50-58(L)(4)

The Permittee shall report to the Director, all other instances of noncompliance not provided for in Condition A.20. These reports shall be submitted within a month of the time at which the Permittee is aware of such noncompliance. Such reports shall contain all information set forth within Condition A.20 of this permit.

A.23. Other Information

OAC Rule 3745-50-58(L)(11)

If at any time the Permittee becomes aware that it failed to submit any relevant facts, or submitted incorrect, misleading, or incomplete information to the Director, the Permittee shall promptly submit such facts, information or corrected information to the appropriate entity.

A.24. Confidential Information

OAC Rule 3745-50-30

In accordance with ORC Chapter 3734 and the rules adopted thereunder, the Permittee may request confidentiality of any information required to be submitted by the terms and conditions of this permit. Including any information obtained by the Director, or an authorized representative, pursuant to the authority provided under condition A.11 of this permit.

A.25. Reserved

A.26. Information to be Maintained at the Facility

OAC Rule 3745-54-74

- (a) Corrective Action reports and records as required by this permit must be maintained for at least 3 years after all Corrective Action Activities have been completed.

A.27. Reserved

A.28. Compliance Schedule-Documents

- (iv) As required by OAC Rule 3745-55-011, Section J of Part B of the permit application shall be modified to provide financial assurance in the amount determined by the Director as necessary to implement the selected remedy described in condition E.8 of this permit, including remedy construction costs and current and future operation and maintenance costs.
- (v) The permittee shall modify Section J of Part B of the permit application to include a record of implementation of land use restrictions. The restriction shall be placed on the property as described in the selected remedy, and restrict future land use to industrial use only and prohibit all groundwater use at the facility during implementation of the selected remedy.

MODULE B - GENERAL FACILITY CONDITIONS

B.1. Design, Maintenance and Operation of Facility
OAC Rule 3745-54-31

The Permittee shall design, construct, maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, and ground or surface waters which could threaten human health or the environment.

B.2. through B.22. Reserved

B.23. Manifest System
OAC Rules 3745-54-70, 3745-54-71, 3745-54-72 and 3745-54-76

In the management of waste at the facility the Permittee shall comply with the provisions of OAC Chapter 3745-52 and OAC Rules 3745-54-71, 3745-54-72 and 3745-54-76 with regard to the manifest system.

B.24. through B.25. Reserved

B.36. Incapacity of Owners or Operators, Guarantors, or Financial Institutions
OAC Rule 3745-55-48

The Permittee shall comply with requirements set forth in OAC Rule 3745-55-48 regarding the incapacity of owners, operators, guarantors or financial institutions.

B.37. General Requirements for Land Disposal Restrictions
OAC Chapter 3745-59

(a) The Permittee shall comply with all applicable regulations regarding land disposal prohibitions and restrictions as required by OAC Chapter 3745-59.

MODULE C - Reserved

MODULE D - Reserved

MODULE E - CORRECTIVE ACTION REQUIREMENTS

Corrective Action Summary

In August 1986, the United States Environmental Protection Agency (U. S. EPA) requested a Groundwater Quality Investigation (GQI) to be conducted at Degussa Initiators, Inc., as a condition of the facility's Resource Conservation and Recovery Act (RCRA) Permit. As a result of the GQI, a RCRA Facility Investigation (RFI) was initiated in 1988. The tasks of the RFI were: source characterization; hazardous constituent characterization; analytical program establishment; exposure assessment; and RFI report preparation. In 1992, prior to completion of the RFI, a Voluntary Corrective Measures (VCM) project that removed the source of contamination was completed. Activities included excavation and off-site disposal of contaminated soils and waste from seven waste management units (WMUs).

The RFI report was conditionally approved in September 1995. As a result of the RFI approval, a Corrective Measures Study (CMS) was initiated to address contaminated groundwater at the facility. The CMS report evaluated several options to remediate the contaminated groundwater. From these options, the U.S. EPA selected an appropriate remedial alternative for implementation. The remedy selected for implementation consists of the following:

- (i) Collect contaminated groundwater using extraction wells to contain the

contaminant plume on site.

- (ii) Treat extracted groundwater to meet the target cleanup levels of the organic contaminants using air stripping and activated carbon units.
- (iii) Implement groundwater use restrictions to limit use of the groundwater during implementation of the remedy and land use restrictions to limit the facility property use to industrial or commercial use only.
- (iv) Perform quarterly groundwater monitoring to evaluate the remedy's effectiveness and to monitor potential migration of contaminated groundwater from the facility. After two consecutive years of quarterly monitoring, Degussa may request, in writing, that the Director allow a decrease in the frequency in monitoring, providing the baseline information is sufficient to determine the effectiveness of the remedy.
- (v) Conduct laboratory analysis on the groundwater samples. The constituents will, at a minimum, include those identified during the RFI and other investigations, as well as any potential daughter products of those constituents.
- (vi) The RFI identified the groundwater medium as being contaminated. The Permittee shall treat the groundwater to meet the following cleanup levels: Benzene 5 parts per billion (ppb); Ethyl benzene 700 ppb; 4-Methylphenol 78 ppb; Benzoic acid 61,600 ppb; Di-n-butylphthalate 1,571 ppb; Lead 15 ppb; Nickel 100 ppb; Zinc 4,665 ppb.

On September 30, 1997, the U.S. EPA modified the Degussa Initiators, Inc. (formerly known as Aztec Peroxides, Inc.) federal RCRA permit to require implementation of the above described remedy. On January 25, 2000 the U.S. EPA gave final approval of the Final Design Summary and Construction Workplan, and instructed Degussa to begin remedy implementation in accordance with those plans. In this renewal permit, Ohio EPA is requiring corrective measures implementation consistent with the remedy selected by the U.S. EPA. The selected remedy and compliance schedule have been incorporated into the terms and conditions of this renewal permit as conditions E.8 and E.10, respectively.

E.1. CORRECTIVE ACTION AT THE FACILITY
OAC Rules 3745-50-10 & 3745-55-011

In accordance with OAC Rule 3745-50-10 "waste management unit" means any discernible unit at which wastes have been placed at any time, irrespective of

whether the unit was intended for the management of waste or hazardous waste. Such units include any area at a Facility at which wastes have been routinely and systematically released. As used in this permit the term "waste management unit" shall be consistent with and equivalent to the term "solid waste management unit" as that term is defined in Section 3004(u) of RCRA. For the purpose of corrective action, "facility" is defined as all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA. The terms Interim Measure (IM), RCRA Facility Investigation (RFI), Corrective Measures Study (CMS) and Corrective Measure Implementation (CMI) are defined in Attachment 1, U.S. EPA's Corrective Action Plan (CAP).

The Permittee must institute Corrective Action as necessary to protect human health and the environment for all releases of hazardous waste(s) or hazardous constituent(s) from any waste management units (WMUs) at the Facility, regardless of the time at which waste was placed in such units.

E.2. CORRECTIVE ACTION BEYOND THE FACILITY BOUNDARY
OAC Rules 3745-55-011

The Permittee must implement Corrective Action(s) beyond the Facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of Ohio EPA that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the Facility boundary where off-site access is denied. On-site measures to address such releases will be addressed under the RFI, CMS, and CMI phases, as determined to be necessary on a case-by-case basis.

E.3 IDENTIFICATION OF WMUs
OAC Rules 3745-50-44(d) & 3745-55-011

The following WMUs and Areas of Concern (OAC) were investigated under U.S. EPA authority during the RCRA Facility Investigation (RFI) and the voluntary waste removal project:

Waste Management Units Investigated	
1	Area 1
2	Area 2
3	Area 3
4	Area 4
5	Area 5
6	Area 6
7	Area 7
8	Eastern Parcel OAC
9	Former Lagoon Area
10	Western Parcel OAC
11	Container Storage Area
12	Incinerator

E.4 RCRA Facility Investigation (RFI)
 OAC Rule 3745-55-011

The Permittee has completed a RFI for the WMUs identified in permit condition E.3. In the event of a newly identified unit(s), the Permittee shall conduct an RFI to thoroughly evaluate the nature and extent of the release of hazardous waste(s) and hazardous constituent(s) from all applicable WMUs. The major tasks and required submittal dates are shown below. The scope of work for each of the tasks is found in Attachment 1 (U.S. EPA's CAP).

(a) RFI Workplan

In case of a newly discovered waste management unit, the Permittee shall submit a written RFI Workplan on a timeframe established by Ohio EPA.

- (1) If necessary, Ohio EPA shall provide written comments on the RFI Workplan to the Permittee.
- (2) Within 45 days of receipt of Ohio EPA's comments, the Permittee shall

submit either an amended or new RFI Workplan that incorporates Ohio EPA's comments.

- (3) Ohio EPA shall approve or modify and approve, in writing, the amended or new RFI Workplan. The RFI Workplan, as approved or as modified and approved, shall be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approved RFI Workplan must be authorized by Ohio EPA.

(b) RFI Implementation

The Permittee shall implement the RFI Workplan according to the terms and schedule in the approved RFI Workplan.

(c) RFI Final Report

Within 60 days after the completion of the RFI, the Permittee shall submit an RFI Final Report to Ohio EPA. The RFI Final Report shall describe the procedures, methods, and results of the RFI. The Final Report must contain adequate information to support further decisions concerning corrective action at the Facility.

- (1) If necessary, Ohio EPA shall provide written comments on the RFI Report to the Permittee.
- (2) Within 45 days of receipt of Ohio EPA's comments, the Permittee shall submit either an amended or new RFI Report that incorporates Ohio EPA's comments.
- (3) Ohio EPA shall approve or modify and approve, in writing, the amended or new RFI Report. The RFI Report, as approved or as modified and approved, shall be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approved RFI Report must be authorized by Ohio EPA.

E.5 Interim Measures

No interim measures have been identified at this time.

Based on the RFI Final Report or other information documenting a release of hazardous waste or constituents to the environment, Ohio EPA may require the development and implementation of an interim measure (this may include an IM Workplan) at any time during the life of the permit to mitigate or eliminate a threat to

human health or the environment. The Permittee shall begin implementation of such action on a timeframe established by Ohio EPA.

E.6 DETERMINATION OF NO FURTHER ACTION

(a) SWMUs identified as No Further Action

Based on the results of the completed RFI and other relevant information, the U.S. EPA has determined that the soils in WMU Area 1, WMU Area 2, WMU Area 3, WMU Area 4, WMU Area 5, WMU Area 6, WMU Area 7, Container Storage Area WMU, Incinerator WMU, Former Lagoon Area, Eastern Parcel OAC, and Western Parcel OAC, which were investigated do not pose a threat to human health and the environment as long as the property is limited to industrial use. Therefore, these WMUs do not require further action.

(b) Permit Modification

Based on the results of the completed RFI and other relevant information, the Permittee may submit an application to Ohio EPA for a Class 3 permit modification under OAC Rule 3745-50-51 to terminate the Corrective Action tasks of the Schedule of Compliance. Other tasks identified in the Schedule of Compliance shall remain in effect. This permit modification application must conclusively demonstrate that there are no releases of hazardous waste or constituents from WMUs at the Facility that pose a threat to human health and the environment.

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(b) Permit Modification

Based on the results of the completed RFI and other relevant information, the Permittee may submit an application to Ohio EPA for a Class 3 permit modification under OAC Rule 3745-50-51 to terminate the Corrective Action tasks of the Schedule of Compliance. Other tasks identified in the Schedule of Compliance shall remain in effect. This permit modification application must conclusively demonstrate that there are no releases of hazardous waste or constituents from WMUs at the Facility that pose a threat to human health and the environment.

If, based upon review of the Permittee's request for a permit modification, the results of the completed RFI, and other information, including comments received during the initial (60-day) public comment period required for Class 3 permit modifications, Ohio EPA determines that releases or suspected releases which were investigated either are nonexistent or do not pose a threat to human health and the environment, Ohio EPA will approve the requested modification.

(c) Periodic Monitoring

A determination of no further action shall not preclude Ohio EPA from requiring continued or periodic monitoring of air, soil, ground water, or surface water, if necessary to protect human health and the environment, when site-specific circumstances indicate that potential or actual releases of hazardous waste or constituents are likely to occur.

(d) Further Investigations

A determination of no further action shall not preclude Ohio EPA from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates that a release or likelihood of a release from a WMU at the Facility is likely to pose a threat to human health or the environment. In such a case, Ohio EPA shall initiate a modification to the terms of the permit to rescind the determination made in accordance with Permit Condition E.5.a. Additionally, in the event Ohio EPA determines that there is insufficient information on which to base a determination, the Permittee, upon notification, is required to perform additional investigations as needed.

E.7 CORRECTIVE MEASURES STUDY (CMS)

If Ohio EPA determines, based on the results of the RFI and any other relevant information, that corrective measures are necessary, Ohio EPA will notify the Permittee in writing that the Permittee shall conduct a CMS either as described below or as described in Ohio EPA's notification to the Permittee. The purpose of the CMS will be to develop and evaluate the corrective action alternative(s) and to outline one or more alternative corrective measure(s) that will satisfy the performance objectives specified by Ohio EPA.

(a) CMS Workplan

The Permittee shall submit a written CMS Workplan to Ohio EPA within 90 days from the notification by Ohio EPA of the requirement to conduct a CMS.

- (i) If necessary, Ohio EPA shall provide written comments on the CMS Workplan to the Permittee.
- (ii) Within 45 days of receipt of Ohio EPA's comments, the Permittee shall submit either an amended or new CMS Workplan that incorporates Ohio EPA's comments.
- (iii) Ohio EPA shall approve or modify and approve, in writing, the amended or new CMS Workplan. The CMS Workplan, as approved or as modified and approved, shall be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approve CMS Workplan must be authorized by Ohio EPA.

(b) CMS Workplan Implementation

The Permittee shall implement the CMS Workplan according to the terms and schedule in the approved CMS Workplan.

(c) CMS Final Report

Within 60 days after the completion of the CMS, the Permittee shall submit a CMS Final Report to Ohio EPA. The CMS Final Report shall summarize the results of the investigations for each remedy studied and must include and evaluation of each remedial alternative.

- (i) If necessary, Ohio EPA shall provide written comments on the CMS Report to the Permittee.
- (ii) Within 45 days of receipt of Ohio EPA's comments, the Permittee shall submit either an amended or new CMS Report that incorporates Ohio EPA's comments.
- (iii) Ohio EPA shall approve or modify and approve, in writing, the amended or new CMS Report. The CMS Report, as approved or as modified and approved, shall be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approve CMS Report must be authorized by Ohio EPA.

E.8 Corrective Measures Implementation (CMI)

Based on the results of the CMS, the Permittee shall implement one or more of the

Corrective Measures authorized by Ohio EPA. Ohio EPA shall authorize one or more of the Corrective Measures in the CMS, and shall notify the Permittee in writing of the decision. Ohio EPA will select a Corrective Measure for implementation based on the following factors: The Corrective Measure selected for implementation must: (1) be protective of human health and the environment; (2) attain media cleanup standards; (3) control the source(s) of releases so as to reduce or eliminate further releases of hazardous waste(s) (including hazardous constituent(s)); and (4) comply with all applicable standards for management of wastes.

If two or more of the Corrective Measures studied meet the threshold criteria set out above, Ohio EPA will authorize the Corrective Measures Implementation by considering remedy selection factors including: (1) long-term reliability and effectiveness; (2) the degree to which the Corrective Measure will reduce the toxicity, mobility or volume of contamination (3) the Corrective Measure's short-term effectiveness; (4) the Corrective Measure's implementability; and (5) the relative cost associated with the alternative.

In authorizing the proposed Corrective Measure(s), Ohio EPA may also consider such other factors as may be presented by site-specific conditions.

Based on the selection criteria above, the Director has selected the following remedy for implementation according to the schedule in condition E.9 of this permit.

The Permittee shall use the CMI scope of work from the most recent version of the U.S. EPA RCRA Corrective Action Plan, which is included as attachment 1 to this permit, for undertaking the CMI activities. All final documents or reports, as approved or as modified and approved, become an enforceable condition of this permit.

(i) Selected Remedy

Contaminated soil and other wastes were removed from WMU Area 1, WMU Area 2, WMU Area 3, WMU Area 4, WMU Area 5, WMU Area 6, and WMU Area 7 of the Degussa facility during the voluntary corrective measures implemented by Degussa and approved by the U.S. EPA. The contaminated groundwater was not addressed in the voluntary corrective measures and, therefore, the remedy shall address the contaminated groundwater. The Permittee shall:

- (a) Collect contaminated groundwater using extraction wells to contain the contaminant plume on site.

- (b) Treat extracted groundwater to meet the target cleanup levels of the organic contaminants identified below in this subsection of this permit, using air stripping and activated carbon units.
- (c) Implement groundwater use restrictions to limit use of the groundwater during implementation of the remedy and land use restrictions to limit the facility property use to industrial or commercial use only. Ground water and land use restrictions must be approved by the Director prior to implementation by the Permittee.
- (d) Perform quarterly groundwater monitoring to evaluate the remedy's effectiveness and to monitor potential migration of contaminated groundwater from the facility. After two consecutive years of quarterly monitoring, Degussa may request, in writing, that the Director allow a decrease in the frequency in monitoring, providing the baseline information is sufficient to determine the effectiveness of the remedy.
- (e) Conduct laboratory analysis on the groundwater samples. The constituents will, at a minimum, include those identified during the RFI and other investigations, as well as any potential daughter products of those constituents.
- (f) The RFI identified the groundwater medium as being contaminated. The groundwater is contaminated with the following organic and inorganic constituents of concern. The Permittee shall treat the groundwater to meet the following cleanup levels:

Constituents of Concern	Target Cleanup Level
Benzene	5 parts per billion (ppb)
Ethyl benzene	700 ppb
4-Methylphenol	78 ppb
Benzoic Acid	61,600 ppb
Di-n-butylphthalate	1,571 ppb
Lead	15 ppb
Nickel	100 ppb
Zinc	4,665 ppb

(ii) Permit Modification

Ohio EPA will initiate a permit modification, as provided by OAC Rule 3745-50-51, to require implementation of any additional corrective measure(s) required in the future.

The Permittee shall not implement the additional corrective measure until the permit is modified pursuant to OAC Rule 3745-50-51.

(iii) Financial Assurance

The Permittee shall provide financial assurance in the amount specified by the Director as necessary to implement the selected remedy described in condition E.8(i) of this permit, including remedy construction and current and future operation and maintenance costs.

As part of any future modification of this permit to incorporate additional corrective measures, the Permittee shall provide financial assurance in the amount determined by the Director as necessary to implement the additional corrective measure(s) as required by OAC Rule 3745-55-011 (b) and (c).

E.9 CORRECTIVE ACTION PROGRESS REPORTING

The Permittee shall submit a monthly progress report describing the status and effectiveness of the corrective measures. The progress report shall be submitted by the 12th day of each month and describe the previous month's activities.

E.10 SCHEDULE OF COMPLIANCE

The Permittee shall follow the construction schedule provided in the approved Construction Work plan. The Permittee will provide the Director with the following items according to the schedule below. Any required changes to the schedule must be requested as a permit modification in accordance with OAC Rule 3745-50-51.

Facility Submission

Due Date

Initiate Construction

In accordance with the approved Construction Work plan.

Final Operation and Maintenance Plan

45 days after completion of construction and any operational

	tests.
Construction Completion Report	45 days after completion of construction and any operational tests.
Corrective Measure Completion Report	45 days after corrective measures completion criteria have been satisfied.
Groundwater monitoring results	45 days after receipt from the laboratory.
Progress Reports	Monthly, by the 12th of each month.

E.11 NEWLY IDENTIFIED WMUs OR RELEASES
OAC Rule 3745-55-011

(a) General Information

The Permittee shall submit to Ohio EPA, within 30 days of discovery, the following information regarding any new WMU identified at the Facility:

- (i) The location of the unit on the site topographic map;
- (ii) Designation of the type of unit;
- (iii) General dimensions and structural description (supply any available drawings);
- (iv) When the unit was operated; and
- (v) Specifications of all waste(s) that have been managed at the unit.

(b) Release Information

The Permittee shall submit to Ohio EPA, within 30 days of discovery, all available information pertaining to any release of hazardous waste(s) or hazardous constituent(s) from any new or existing WMU.