Subject: Hazardous Waste Permit Modification - Class 1 Acknowledgment

Dear Mr. Roberts:

On November 7, 2016, Ohio EPA received notification for a Class 1 hazardous waste permit modification from Envirosafe Services of Ohio, Inc. dated November 2, 2016. The modification implemented the following change to the permit:

The purpose of this modification is to correct typographical errors, make administrative changes, and update the renewal permit and application with all modifications acknowledged and approved between renewal application submittal and approval.

- The following modifications were made:
  3. Permit Modification 099 submitted on 1/18/2016 and acknowledged on 4/7/2016.
  8. Section C updates transmitted on 9/16/2015 for removal of the WPR process and approved through the permit renewal.
  9. Section D.12 updates to provide special tank provisions for ignitable and reactive wastes as required by Permit Condition D.10 and the compliance schedule in Permit Condition D.12.
  10. Administrative and typographical errors in the renewal permit Terms and Conditions.
      a) Permit Condition B.3(j) typo on page 20.
      b) Permit Condition B.2(k)(iii) typo on page 22.
      c) Permit Condition D.5(b) to restore this condition to the expired permit that was inadvertently omitted from the renewal permit on page 65.
      d) Permit Condition D.12 to reserve the compliance schedule which ESOI has completed.
e) Permit Condition F.2(d)(v)(a) typo page 88.
f) Permit Condition H.5(g) typo page 106.
g) Permit condition K.9 to reserve the compliance schedule which ESOI has completed on page 130.
h) Permit Condition M.2(o) typo on page 139.
i) Permit Condition M.13 typo on page 145.

With this letter, Ohio EPA acknowledges the above referenced Class 1 modification submitted pursuant to Ohio Administrative Code (OAC) Rule 3745-50-51, and accordingly has updated the facility's permit application and/or permit. The updated application/permit can be retrieved from the Agency's eDocument Search website: http://edocpub.epa.ohio.gov/publicportal/edochome.aspx. Using the search function, search under the document type of "Permit" and then refine the search using the facility's RCRA ID number (Secondary ID) which is noted in the Re: block above.

If you have any questions concerning this letter, please contact Robin Wiley of my staff at (419) 698-3130.

Sincerely,

Colleen Weaver
Manager, Northwest District Office
Division of Environmental Response & Revitalization

Please note: If the modification application included a claim for confidentiality, Ohio EPA will retain the confidentiality of the document(s) until the Director makes a final determination in accordance with OAC Chapters 3745-49 and 3745-50 as to whether the document(s) constitutes a trade secret and must remain confidential. Ohio EPA will notify you of any determination made as to the confidentiality of the document(s).
deactivated waste can be made by blending alkaline materials with the waste in the chemical stabilization process.

(j) In accordance with OAC Rules 3745-270-07(B)(1), (2) and (3), for all wastes subject to these requirements defined as K061 EAF Dust in Permit Condition B.3(j)(i), the Permittee must test a representative sample of the treated waste from the mixing container used in the full scale treatment process or TCLP extract of the full scale treated waste container according to the frequency specified in Permit Condition B.3(k). The Permittee must follow the testing frequency and procedures in Permit Condition B.3(k).

(i) “K061 EAF Dust” waste is defined as any waste requiring stabilization treatment prior to disposal, meeting the listing description of K061 in OAC Rule 3745-51-32 and characterized by the generator as the single EPA HW number K061. Waste “mixtures” or “derived-from” waste as defined in OAC Rule 3745-51-03 characterized by the generator as the single EPA HW number K061 are subject to the requirements of Permit Condition B.3(h)(iii). Waste shipments characterized as EPA HW Number(s) other than K061, but which also include K061, are subject to the requirements of Permit Condition B.3(h)(iii).

(ii) “Batch” is defined as an accumulation of waste that is treated by adding reagents at a specific ratio to the weight of the waste material as defined by a specific mix design. A “batch” can, for example, be comprised of a single 15-ton load of waste delivered by truck, a 25-ton portion of waste off-loaded from a railcar, a mixture of several different waste streams treated simultaneously by the same mix design, a 150-ton accumulation of waste treated simultaneously in the Campaign Bin or an 8-ton accumulation of waste aggregated from individual containers such as bags, boxes or drums.

(iii) “On-specification” is defined as a “batch” of waste for which no abnormalities have been identified by the fingerprint screening process, including a visual inspection and an evaluation of the amount of material present (i.e., single batch accumulations less than seven tons of otherwise “on-specification” waste from the same WSID treated by the same mix design is an on-specification batch.

(iv) “Off-specification” is defined as a “batch” of waste which has been determined by fingerprint testing or visual inspection to be outside the normal range of any fingerprint screening parameter or is outside the range of variation for which the mix design has been field-proven to be effective, as determined below:

(a) A waste is “off-specification” for metal content if the constituents being treated exceed the upper limit of the current baseline metal concentration range for a WSID-mix design by ten percent (for a metal present at three
Variable Frequency Sampling and Testing Procedure

(i) In order to develop an effective mix design, the Permittee performs both bench and field experimental testing of waste batches. Any waste batch treated experimentally must be treated successfully, as demonstrated by analysis results meeting the LDR standards in OAC Rule 3745-270-40, prior to land disposal of that waste batch.

(ii) Each mix design for which qualification is sought must first undergo “initial qualification” by testing a sequence of 5, 10 or 20 consecutive batches. Each batch must be treated successfully, as demonstrated by analysis results meeting the LDR standards in OAC Rule 3745-270-40 required for land disposal of that waste. In the event that a sequence of at least five (5) passing results cannot be achieved, testing of every batch will continue until such time as a sequence of at least five (5) consecutive passing results is achieved.

(a) After a mix design is qualified for Category C in Permit Condition B.3(k)(iii), and in the event that the Permittee elects to continue initial qualification for Category B and a failure occurs, the mix design must be re-qualified under Permit Condition B.3(k)(iv), Category C.

(b) In the event that the Permittee elects to continue initial qualification for Category A after qualification for Category B and a failure occurs, the mix design must be requalified under Permit Condition B.3(k)(iv), Category C and/or Permit Condition B.3(k)(v), Category B.

(iii) Once “initial qualification” for a mix design has been achieved, a testing frequency category will be assigned to a mix design based on the number of batches successfully tested in accordance with Permit Condition B.3(k)(iii). Initial qualification (or requalification) batches may be added to the testing sequence to qualify for Category B (after qualification for Category C) or Category A (after qualification for Category B) after initial qualification (or requalification) has been completed, including subsequent successful testing performed in accordance with Permit Conditions B.3(k)(iii)(a), B.3(k)(iii)(b), or B.3(k)(iii)(c), as long as they are sequential (i.e., not separate by intermittent failures of one or more batches of “on-specification” waste):

(a) Category A – A sequence of twenty (20) qualification batches is successfully treated; thereafter, test one (1) batch in every twenty (20) batches treated.

(b) Category B – A sequence of ten (10) qualification batches is successfully treated; thereafter, test one (1) batch in every ten (10) batches treated.
including small scratches, indentation, tears or punctures to the liner as it is installed. All such damage
must be inspected by the liner installation contractor inspector and repaired.

(h) The Permittee must remove liquids or sludge from the secondary containment systems within twenty-
four (24) hours, or in as timely a manner as is possible, after the inspection during which the materials
were found in these areas.

D.5 Operating Requirements
OAC Rule 3745-55-94

(a) The Permittee must not place hazardous wastes or treatment reagents in the tank system if they could
cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise
fail.

(b) The Permittee must prevent spills and overflows from the tank or containment systems using the
methods described in the permit application. The Permittee must comply with the requirements of OAC
Rule 3745-55-96 if a leak or spill occurs in the tank system. The Permittee must, at a minimum, use the
following controls and practices to prevent spills and overflows from tank or containment systems:

(i) The storage tanks and wastes must be compatible. Tanks must not be used for mixing non-
compatible waste. Prior to adding to the contents of any tank, the tank inventory control logs
must be reviewed to ensure that the tank is operated according to design specifications. Incompatible waste must be stored as specified in Permit Condition B.7(a).

(ii) Loading and unloading of transportation vehicles to or from tanks must be conducted at
locations where secondary containment is capable of minimizing the release of spilled material
to the environment.

(iii) Upon completion of the waste transfer, the valves must be closed and all hoses must be
disconnected over a portable container to collect drippings. The storage tank must be gauged
and the tank’s valve locked.

(c) Organic emissions from the storage tanks must be controlled by utilizing carbon adsorption or other
equivalent systems.

(d) Smoking must be prohibited and “No Smoking” signs must be placed in clear view in the storage tank
areas. Open flames and heat sources must be prohibited in the storage tank areas, unless these areas
are cleared of all ignitable wastes, residues, and vapors.

D.6 Inspection Schedules and Procedures
OAC Rule 3745-55-95

(a) The Permittee must inspect the tank systems, in accordance with the Inspection Schedule found in
Section F of the permit application and must complete the items in Permit Conditions D.6(b) and D.6(c)
as part of those inspections:

(b) The Permittee must inspect the overfill controls, in accordance with the procedure and schedule in the
permit application.

(c) The Permittee must inspect the following components of the tank system once each operating day:

(i) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;

(ii) Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature
gauges, monitoring wells) to ensure that the tank system is being operated according to its
design; and

(iii) Construction materials and the area immediately surrounding the externally accessible portion
of the tank system, including the secondary containment system, to detect erosion or signs of
releases of hazardous waste (e.g., wet spots, dead vegetation).
decontaminated and that previously held an incompatible waste or material, unless the requirements of Permit Condition D.11(a) are met.

D.12 Compliance Schedule

Reserved
They must be inspected monthly and repaired if required. Leachate found within the systems must be removed for shipment to an approved treatment, storage, or disposal facility. Pertinent information, including origin of leachates, quantities, and analytical results, must be recorded within the facility’s post-closure operations record;

(iii) Prevent run-on and run-off from eroding or otherwise damaging the final cover:

(a) Erosion control structures must be maintained during post-closure care. Erosion damage must be repaired and corrected.

(b) The facility must be inspected monthly or after every major rainfall (two or more inches per eight hour period). Erosion or pooling of water must be corrected.

(c) Erosion controls (slopes/vegetation) must be monitored and maintained in accordance with the facility’s post-closure care plan.

(iv) Protect and maintain surveyed benchmarks used in complying with the surveying and recordkeeping requirements of OAC Rule 3745-57-09.

(v) General Facility Care

(a) Grass cutting must be performed as needed, but at least annually. Damaged or dead vegetation must be removed and replaced with equivalent vegetation. No trees, shrubs, or other deep rooted plants must be allowed to grow on closed waste units. Areas damaged by erosion must be repaired and re-vegetated.

The Permittee must remove trees, shrubs or other deep-rooted plants in the fall quarter of each year. The Permittee must notify an Ohio EPA on-site inspector verbally, by letter, or by telephone at least forty-eight (48) hours prior to beginning the vegetation removal efforts. On-site staff at their discretion can exempt the Permittee from the 48 hour notification requirement. Any damage to the closed waste unit cover system caused by the growth or removal of trees, shrubs or other deep-rooted plants must be promptly repaired.

(b) Buildings located on-site must be maintained in good repair. Compliance with all permits, fire codes, etc., must be maintained.

(c) All existing roadways must be maintained in good repair. No new roadways shall be constructed over any final cover areas unless approved.
(e) The Permittee must maintain and operate the primary liquid collection and removal system to collect and remove liquids that may be potentially contaminated from the Stabilization/Containment Building. The primary leachate collection system must be operated in a manner that allows the system to function without clogging through the scheduled closure of the Stabilization/Containment Building. The Permittee must maintain and operate the secondary liquid collection and detection system installed immediately below the primary liner for the purpose of monitoring and removing any liquid that could pass through the concrete and the primary HDPE liner.

(f) The Permittee must expeditiously remove all accumulated liquids and solid material from collection and holding sumps located in the Stabilization/Containment Building. Each sump must be inspected on a daily basis (operating day) and after storms (2 inches per 8 hours) for the purpose of monitoring the accumulated water level. All water removed from the run-off collection system is to be treated as potentially contaminated.

(i) The Permittee must remove material from the sumps when such material has reached the bottom of the grate. All sumps within the Stabilization/Containment Building must be cleaned out once each calendar month regardless of the amount of material that has accumulated.

(ii) The Permittee must record in the facility operating record the dates when material is removed from the sumps; and, must also note on daily inspection forms any amount of material that is observed within the sumps at the time of the inspection and if removal of material from the sump(s) is necessary.

(iii) In the event that liquids freeze within a sump, the Permittee must note in the daily inspection log that accumulated materials are in the sump and the time of discovery. The Permittee must remove the accumulated material by allowing the frozen liquid to thaw or by other means that will not compromise the integrity of the sump. The Permittee must note in the daily inspection log the date and time the material was removed.

(g) When the presence of an aqueous phase is an appropriate active ingredient in the chemical-physical treatment process, the amount of liquid used in the process must be based upon treatment formulations derived from bench scale results and/or from existing documented information from similar treatment of similar wastes under similar conditions. Liquids used in the process must be legitimate treatment ingredients or a component of the waste being treated.

(h) D001 ignitable liquid waste must not be managed in the treatment process unless such waste can be effectively treated (i.e., remove the characteristic of ignitability by either destroying or removing the organic constituents that gave the waste its ignitable characteristic; as used herein, destruction is not achieved through dilution) as required by
K.8  **Request for Permit Modification**  
OAC Rules 3745-54-98(H), 3745-54-99(J), 3745-54-100(H) and 3745-54-101  

If the Permittee or the director determines that the IGWMP established by this Permit no longer satisfies the regulatory requirements, then the Permittee must submit an application for a permit modification within ninety (90) days of this determination to make any appropriate changes to the program.

K.9  **Compliance Schedule**  

Reserved
(i) the maximum above-grade side slope must not exceed 33.33%;

(ii) the slope of the final cover top surface must range from 3% to 5%; and,

(iii) The maximum above-grade elevation must not exceed 106 feet (i.e., 700 feet above mean sea level) including the final cap thickness.

(iv) All above grade side slopes must be designed to achieve a minimum deep-seated static slope stability factor of safety of 1.5 and a corresponding seismic factor of safety of 1.0.

(o) The landfill must maintain both a leak detection/collection system and primary leachate collection and removal system in accordance with the plans contained in the permit application, Ohio hazardous waste rules, and the terms and conditions of this permit.

(p) For each phase of landfill construction, the Permittee must have a qualified professional engineer monitor and examine the construction and certify, in accordance with OAC Rule 3745-50-42(D)(1), that construction is in accordance with the document, statements, designs, and plans contained in the permit application and the terms and conditions of this permit. Said engineer must be selected and paid for the Permittee and approved by Ohio EPA.

(q) The Permittee must not dispose of waste in Cell M which will cause the global slope stability factor for static condition to fall below 1.5. To ensure that the global slope stability factor for static condition remains above 1.5, the Permittee must follow the testing protocol outlined in section D.4(f)(5) of the approved permit application.

M.3. Containment and Detection of Releases

(a) The Permittee must monitor, operate, and maintain the primary leachate collection system (PLCS) and secondary leachate collection system (SLCS), as applicable, of Cell M.

(i) The level of leachate accumulation on the primary synthetic liner, excluding the sumps, must not exceed the height of one foot, as required by OAC Rule 3745-57-30(A)(2), except for temporary excursions in Cell M when leachate infiltration rates temporarily exceed the capability of the PLCS pumps. Compliance will be evaluated in accordance with Permit Condition M.7(c).

(ii) To minimize the potential for excursions, the Permittee must activate the PLCS pumps whenever the leachate levels on the liner exceed 10 inches above the primary liner as defined in Appendix D.5 for each sub-cell in Cell M.
(b) For containers less than 90 percent full, the Permittee must either crush the container, or add other material so that the container is at least 90 percent full prior to landfill disposal.

(c) The Permittee must cover and enclose containers placed in the landfill with compatible bulk wastes, stabilized material, or intermediate cover. This material must be placed to fill void spaces between the containers.

M.12 Special Requirements for Disposal of Small Containers (Lab Packs)
OAC Rule 3745-57-16

The Permittee must meet the requirements of OAC Rule 3745-57-16 and Section D of the permit application prior to the placement of small containers of hazardous waste in overpacked drums (lab packs) in a landfill.

M.13 Special Requirements for F020, F021, F022, F023, F026 and F027
OAC Rule 3745-57-17

EPA hazardous waste numbers F020, F021, F022, F023, F026 and F027 must not be placed in a landfill unless the Permittee operates the landfill in accordance with a management plan for these wastes that is approved by the Director pursuant to the standards set forth in OAC Rule 3745-57-17, and in accordance with all other applicable requirements of OAC Chapter 3745-57.