Interested Party Period: ISW/RSW Rules, OAC
Chapter 3745-29 and 3745-30

What do these rules cover?
These rules contain requirements for industrial solid waste (ISW) landfills and residual solid waste (RSW) landfills.

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Why are these rules being amended and what changes are being considered?
Ohio EPA is required by section 106.03 of the Ohio Revised Code to review the Agency's rules every 5 years to determine whether or not to continue the rules without change, amend the rules, or rescind the rules. The Agency has reviewed the current effective rules and has made the preliminary determination to merge the Industrial Waste Program and Residual Waste Program. The existing residual waste program establishes four landfill classifications based on the concentration of contaminants leaching from the waste. The classification impacts liner design, the post-closure care period, and one siting criterion. Since the rules were promulgated in 1992, Ohio EPA has permitted one Class II and no Class IV residual waste landfills. The merged program is proposing to reduce the landfill classifications to two.
Throughout, where deemed appropriate, the term “director” has been changed to “Ohio EPA.” The purpose is to lessen the number of instances where an action of the director is mandatory while keeping it open for certain situations when the authorization can go through the director. Also, in a move to eventually retire OAC 3745-27-99, the professional engineer rule, wording is added to require the signature and seal of a professional engineer as appropriate.

DMWM has also amended the rules for clarity and to be compliant with Legislative Service Commission and Ohio EPA rule writing standards.

### 3745-27-15 and 3745-27-16

Changes to this rule include the removal of citations to OAC Chapters 3745-29.

### 3745-29

To be rescinded.

### 3745-30-01

Changes to this rule include revisions to address the merged ISW/RSW programs. The non-hazardous, non-municipal waste stream will be called “industrial or manufacturing waste” or IMW. The old Class I designation will become “industrial landfill” and the old Class III designation will become “residual landfill.” Currently, all operating RSW facilities are permitted as Class III facilities and all ISW facilities have liner and cap designs consistent with those of a Class I RSW facility. This change in nomenclature will impact closed Class I RSW facilities that will now be defined as “industrial landfills”.

### 3745-30-02

Changes to this rule include those to address statutory changes and the elimination of the Class IV classification.

### 3745-30-03

Changes to this rule include the migration of the requirements from OAC 3745-30-04. A chloride trigger of 5 times the drinking water standard is being proposed to limit the liner options. If chloride concentration is above 1250 mg/l, a flexible membrane liner will need to be a component of the liner system.

### 3745-30-04

To be rescinded and combined with OAC 3745-30-03.

### 3745-30-05

Changes to this rule include those in response to the changes proposed in OAC 3745-30-07 and the streamlining of the QA/QC plan to a table showing testing requirements and acceptance criteria.

### 3745-30-06

Changes to this rule include a shift to make the siting criteria apply to the sources of pollution (e.g. areas of waste placement, areas of leachate storage) rather than the entire facility.

### 3745-30-07

Changes to this rule include:

- Specifications in the ISW rules were added for foundation, liner subbase, added geologic material, structural fill, cap soil barrier layer, geosynthetic clay liner, cap drainage layer, cap protective layer, final soil surfaces, ground water control structures, and acceptable separatory liner/leachate collection system components.

- Construction certification requirements in the ISW rules were added. To capture construction costs for developing an update to the closure cost estimate, the cost of construction was requested.

- General design criteria in the ISW rules were added with some clarifications and amendments to allow a lower factor of safety for undrained static slope stability, to allow deformation analysis for seismic slope stability, and to decrease the thickness of the recompacted soil liner for industrial landfills (also formerly Class I RSW) to 3 feet.

- The following requirements from the ISW rules were added with some added clarifications: leachate collection pipe specifications, pre-construction interface testing, and specifications for explosive gas control systems.
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- The addition of an analysis for piping failure from seepage forces. This is a new requirement to address this observed phenomenon.
- The removal of some soil specifications from the recompacted soil liner that were found to be unnecessary.
- The addition of several new requirements for flexible membrane liners, including a requirement for temperature resistant flexible membrane liner for disposal of secondary aluminum production waste and minimum standards for flexible membrane liner installers. The standard is equivalent to the approved installation contractor standard set forth by the International Association of Geosynthetic Installers. A requirement to clean the flexible membrane liner prior to seaming was also added. This is a standard practice recommended by membrane manufacturers and installers. The rules propose a requirement for electrical leak location surveys and wrinkle height in the flexible membrane liner. Electrical leak location surveys are capable of detecting damage to flexible membrane liners missed by existing construction quality assurance. The presence of wrinkles can result in increased liner leakage.
- Reducing the minimum number of survey marks to one and using the National Geodetic Survey Datasheets for control point information.
- Removal of the test pad requirement for the cap barrier layer and a streamlined test pad concurrence process.

3745-30-08
Changes to this rule include the allowance of owner/operators to return to detection monitoring without approval by the director and the deletion of DBCP and EDB, also known as the “pineapple pesticide” parameters. To match the federal CCR requirements, boron and molybdenum were added and the frequency for selenium monitoring was increased for coal burning operations.

3745-30-09
Changes to this rule include streamlining the notice sent to the public regarding impending closure of the facility. Instead of periodic notices in a newspaper, a sign at the facility is posted. These provisions continue to apply only to non-captive facilities. Once closure commences, a sign shall be posted for two years stating that the facility no longer accepts waste. This provision will now apply to captive and non-captive facilities.

To improve cap impermeability, the minimum slope is being increased from 2% to 5% and a flexible membrane liner is required to be above the geosynthetic clay liner or recompacted soil barrier layer. Due to the incorporation of a flexible membrane liner in the cap, a drainage layer is now required. The cap design now includes a geosynthetic clay liner option.

3745-30-10
The post-closure-care period is being changed to a 15-year period for all facilities, unless putrescible waste was accepted in which case the post closure care period is 30 years (to account for gas generation and settlement/slope stability). The ability to cease post-closure care obligations will be determined by the director. The post-closure certification includes items consistent with the MSW landfill program.

A number of requirements regarding leachate management and annual reports contained in OAC 3745-30-14 were duplicated in this rule because OAC 3745-30-10 does not apply after closure certification. Access roads and general landfill stability were added to the list of items required to be maintained during post closure care. A new measurable vegetation standard is being proposed to provide consistent application and expectation.

3745-30-14
Selected provisions in the ISW rules that were absent in the RSW rules were added, including the following:
- The select waste layer.
- Inspection of the first unit prior to waste acceptance.
- Spreading and compacting disposed waste at the working face.
- The management of blowing litter.
- The requirement to remove or prepare daily cover to not impede leachate flow to the collection system.
- The inclusion of a summary of the daily log in the annual report if the facility is not “captive.”
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- The requirement for daily cover for waste that is putrescible, odorous, dusty, combustible, or exothermically reactive as determined through the permit or license process.

Amendments to limit the requirement for intermediate cover to when waste is permeable (> 1 x 10^{-5} cm/s) and to specify that the annual leachate grab sample is to be taken from the leachate collection system (i.e. not from a storage tank, unless that is the only feasible location) are also included in this rule.

3745-30-15
Changes to this rule include a citation to procedures in OAC 3745-27-03 in lieu of retaining duplicative language. Due to the large amount of deleted language, the old rule is rescinded and replaced by a new rule.

What additional information is the Agency seeking?

The Agency is seeking comments from interested stakeholders (public, local officials, industry sectors, other state agencies, consultants and environmental organizations) who may be impacted by these rule revisions. General comments and specific factual information are welcome.

In addition to the draft rule amendments, Ohio EPA is also seeking comments and feedback on the draft Common Sense Initiative (CSI) Business Impact Analysis (BIA) form, which is being released with these draft rules during interested party review.

How are the amendments formatted in the draft rules?

The rules have been drafted as amended rules; the text that is considered for deletion is identified in strikeout font; new text is underlined. Proposed new regulations contain all underlined text. Proposed rescinded rules are noted as such in the header of the rule.

What is the rulemaking schedule?

At this time, the Agency is soliciting input on these draft rule revisions. Ohio EPA is required by section 121.39(D) of the Revised Code to contact potentially affected parties prior to adopting rule changes. At the close of the interested party comment period, the Agency will review the comments and make necessary changes to the rules. The Agency will then file proposed rules with the Joint Committee on Agency Rule Review, the Legislative Service Commission and the Secretary of State.

How can I comment on the draft rules?

Please submit your comments in one of the following ways:

- By email: michelle.mountjoy@epa.ohio.gov
- By postal mail:
  Michelle Mountjoy - Rules Coordinator
  Ohio EPA, Division of Materials and Waste Management
  P.O. Box 1049
  Columbus, OH 43216-1049

  Comments on the draft rules must be received no later than 5:00 p.m. on Tuesday January 21st, 2020.

How can I get more information?

Copies of this fact sheet, BIA form and the draft rules are on the Division of Materials and Waste Management website at: https://epa.ohio.gov/dmwm/dmwmnonhazrules#126793967-interested-party

For more information about these draft rules, please contact:

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annette.dehavilland@epa.ohio.gov