

Nonhazardous Solid Waste Impoundments (NSWIs) in Idaho

Surface impoundments are used for management of non-municipal liquid waste, including storage, treatment through aeration, equalization, neutralization, and other methods. The relative simplicity and low operating costs of surface impoundments make them an attractive technology for liquid waste handling, processing, and disposal in select instances. Processing and disposal of liquid wastes in a properly located, constructed, maintained, and operated surface impoundment is an environmentally sound waste management practice.

Solid Waste Rules, Definitions, and Policies Relevant to NSWIs

1. IDAPA 58.01.06.005.44 provides that discarded liquids are solid wastes. The definition of solid waste, in relevant part: “[a]ny garbage or refuse, sludge from a waste water treatment plant, water supply treatment plant, or air pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities...”
2. IDAPA 58.01.06.001.03.a.i. states that the Rules do not apply to “liquid wastes when the discharge or potential discharge of the liquid waste is regulated under a federal, state or local water pollution discharge or wastewater land application permit, including management of any solids if management of the solids are addressed in a permit term or condition”. Background material from 2001, when the Rules were being developed, state the same. This provision indicates that liquid wastes that are not otherwise regulated are subject to the Rules.
3. IDAPA 58.01.06.005.34 defines “pumpable waste” as “[w]astes, including non-domestic septage, sludge, wastewater and non-municipal solid wastes, which are pumped from a holding area or container into a watertight tank truck or equivalent and transported for processing or disposal.”
4. IDAPA 58.01.06.005.32 defines “processing facility” as “[a] facility that uses biological or chemical decomposition to prepare solid waste for reuse, excluding waste handling at transfer stations or recycling centers.”
5. IDAPA 58.01.06.005.14 provides the definition of a “facility” for purposes of the Rules as: “Any area used for any solid waste management activity, including but not limited to:
 - a. Storage;
 - b. Transfer;
 - c. Processing;
 - d. Separation;
 - e. Incineration;
 - f. Treatment;
 - g. Salvaging; or
 - h. Disposal of solid waste.”
6. IDAPA 58.01.06.009.02.c. defines a Tier I solid waste management facility as including “[a] processing facility that only manages PCS not excluded under Subsection 001.03.a.ix. or pumpable wastes and the cumulative volume of material at the facility at any one (1) time is less than or equal to two hundred (200) cubic yards”.
7. IDAPA 58.01.06.009.03.c. defines a Tier II solid waste management facility as including “[a] processing facility that only manages PCS not excluded under Subsection 001.03.a.ix. or pumpable wastes and the cumulative volume of material at the facility at any one (1) time is greater than two hundred (200) cubic yards”.

Current Oversight

IDAPA 58.01.016.401 requires DEQ approval of plans and specifications for industrial (non-municipal) wastewater facilities before construction begins. In order to be approved, the design and specifications must show that the facility will meet the requirements of DEQ's more general authorities, like the groundwater quality rule, but no specific standards are provided in Section 401. Once the design is approved, construction of the impoundment is completed in accordance with the approved design, and the impoundment is seepage tested, there may be no further oversight of the facility unless there is a land application permit, an IPDES discharge permit, or a complaint. Since the number of facilities managing non-municipal liquid waste in Idaho, not otherwise regulated under a discharge permit or a land application permit, has historically been very low, DEQ has not previously expended the resources to regulate them under the Solid Waste Management Rules, IDAPA 58.01.06 (the "Rules"), despite the applicability of these regulations.

Regulation of Nonhazardous Solid Waste Impoundments under the Rules

In recent months operational difficulties at existing facilities, requests for more oversight over these facilities, and requests for IDEQ design review of new facilities, have all contributed to the recognition that DEQ must applying the Solid Waste Management Rules to otherwise unpermitted solid waste impoundment facilities. Under the RCRA citizen suit provision, Section 7002, both the State and the operators of such facilities are exposed to potential lawsuits if these facilities are not properly regulated.

At the commencement of this guidance development process DEQ is referring to impoundment facilities regulated under the Rules as Nonmunicipal Solid Waste Impoundments (NSWIs). The working definition of a NSWI is: **"An impoundment facility commercially receiving solid waste from off-site where: (1) the facility is not within the site certified area of an approved landfill, (2) the waste does not pass the paint filter test prior to placement in the impoundment unit, and (3) operations are not otherwise regulated under a discharge or land application permit."** Note that facilities engaged in food processing or other manufacturing or industrial activities with onsite treatment of their liquid waste stream(s), are not regulated as NSWIs because they are otherwise regulated by discharge permits or land application permits. Further, food processing wastewater is usually managed on-site and such facilities do not commercially receive wastewater from offsite. Also note that the working definition of NSWI does not include impoundment facilities co-located at an approved landfill, where operation of the impoundment(s) is included in the landfill's Operating Plan.

NSWIs are considered solid waste management facilities as that term is used in the Rules. Under the definition of "facility" they are engaged in storage, processing, separation, treatment, or disposal of solid waste, depending on their specific facility design. Based on the proposed content of the impoundment(s) and a facility's proposed management practices, it is expected that most NSWIs will be designated as Tier III facilities. An impoundment facility that accepts multiple waste streams is a nonmunicipal solid waste facility that is "managing solid waste in a manner or volume that is likely to pose a substantial risk to human health and the environment," and therefore does not qualify as a Tier I or Tier II facility. A NSWI designated as a Tier III solid waste management facility engaged in processing will be required to comply with the following:

- **Siting:** Applicants must comply with the general siting requirements in 58.01.06.013.01 and the siting application requirements in 58.01.06.013.02;
- **Design:** Facilities will be required to comply with 58.01.06.013.11.c., which requires the submission of a design application, in conjunction with 58.01.16.401, which requires plan and specification approval of industrial wastewater lagoons prior to construction. DEQ will continue to apply IDAPA 58.01.16.493 as an efficient substitute standard for industrial wastewater lagoon design, and will continue to be open to reviewing and approving alternative lagoon designs not compliant with Section 493. Seepage tests will be required prior to operation.
- **Operations:** 58.01.06.013.03 contains much of the operational oversight that will apply to NSWIs. An Operating Plan is required under 58.01.06.013.04 and 58.01.06.013.11.d., and facilities will be under a legal obligation to follow their Operating Plan. Of primary importance is the requirement that a facility only accept waste types approved in the Operating Plan, and the acceptance of additional waste types requires Health District and DEQ approval of an Operating Plan amendment. In order to obtain approval, facilities will be required to make a demonstration that mixing in the new waste type will not create an environmental hazard. Also, while all NSWIs will be required to address odor concerns in an Operating Plan, 58.01.06.013.11.a. specifically requires Tier III facilities to develop and follow an odor management plan.
- **Groundwater Monitoring:** By default, under 58.01.06.013.05-06, Tier III facilities are required to monitor for groundwater contamination. However, it is expected that most facilities, if properly designed, may qualify for a variance from the monitoring requirements pursuant to 58.01.06.013.03.m, or at agency discretion. Regular seepage testing may be considered by DEQ as a prerequisite for obtaining a variance or applying its discretion.
- **Closure:** 58.01.06.013.07-08 will require owners/operators to address closure of their facilities. Closure is also addressed in the municipal wastewater rules 58.01.16.493.10 Note that there is no financial assurance requirement applicable to Tier III nonmunicipal solid waste facilities.

Guidance Development Process Stakeholder Participation

DEQ is requesting stakeholder input on the following aspects of the regulation of NSWIs:

1. Input on the working definition of “Nonhazardous Solid Waste Impoundment.”
2. Review of the organizational structure of the guidance document being developed. An outline of the proposed guidance will be provided to stakeholders prior to the first stakeholder meeting.
3. Input on the definitions of terms used and/or necessary to adequately describe aspects of NSWI facilities and the regulation thereof. Terms like “impoundment”, “storage”, “separation”, “processing”, “treatment”, and “disposal”, as they pertain to liquid wastes.
4. Input on the Facility application process.
5. Input on specific design standards for solid waste impoundments, drying beds, or liquid waste evaporative impoundments. The design standards that are set out in the Rules relate to “dry” landfilling, PCS “processing” facilities, processing (typically interpreted as composting) facilities, incineration facilities, CESQG management facilities, and transfer stations. Industry input on which terms to use, and a consensus on their definitions would be valuable and appreciated.

6. Assist in the development of robust waste acceptance policies intended to protect NSWIs from inadvertent acceptance of hazardous waste and from liquid waste generators and/or haulers that present erroneous or falsified documentation. These policies can educate generators and transporters about the facility's limitations, whether analytical lab results are required before acceptance, and any other requirements driven by hazardous and solid waste regulations.

Guidance Schedule

DEQ has scheduled four public meetings to gather input from stakeholders. In addition, written comments may be submitted at any time, including for a period after the final stakeholder meeting. Please refer to the NSWI Guidance Development webpage <http://www.deq.idaho.gov/nonhazardous-solid-waste-impoundment-guidance> for meeting information. To receive future electronic notices pertaining to this guidance initiative, please provide your email address to: NSWI-Guidance@deq.idaho.gov