

R18-9-D301. 3.01 General Permit: Lined Impoundments

- A. A 3.01 General Permit allows a lined surface impoundment and a lined secondary containment structure. A permittee shall:
1. Ensure that inflow to the lined surface impoundment or lined secondary containment structure does not contain organic pollutants identified in A.R.S. § 49-243(I);
 2. Ensure that inflow to the lined surface impoundment or lined secondary containment structure is from one or more of the following sources:
 - a. Evaporative cooler overflow in excess of 1000 gallons per day;
 - b. Wastewater that does not contain sewage, temporarily stored for short periods of time due to process upsets or rainfall events, provided the wastewater is promptly removed from the facility as required under subsection (D)(5). Facilities that continually contain wastewater as a normal function of facility operations are not covered under this general permit;
 - c. Storm water runoff that is not permitted under A.R.S. § 49-245.01 because the facility does not receive solely storm water or because the runoff is regulated under the Clean Water Act but is not considered storm water under the Act;
 - d. Emergency fire event water;
 - e. Wastewater from air pollution control devices at asphalt plants if the wastewater is routed through a sedimentation trap or sump and an oil/water separator before discharge;
 - f. Non-contact cooling tower blowdown and non-contact cooling water, except discharges from electric generating stations with more than 100 megawatts generating capacity;
 - g. Boiler blowdown;
 - h. Wastewater derived from a potable water treatment system including clarification sludge, filtration backwash, lime and lime softening sludge, ion exchange backwash, and reverse osmosis spent waste;
 - i. Wastewater from food washing;
 - j. Heat exchanger return water in excess of 1000 gallons per day; and
 - k. Wastewater from industrial laundries.
- B. Notice of Intent to Discharge. In addition to the Notice of Intent to Discharge requirements specified in R18-9-A301(B), an applicant shall submit:
1. A listing and description of all sources of inflow;
 2. A representative chemical analysis of each expected source of inflow. If a sample is not available before facility construction, a permittee shall provide the chemical analysis of each inflow to the Department within 60 days of each inflow to the facility;
 3. A narrative description of how the conditions of this general permit is satisfied. The narrative shall include a Quality Assurance/Quality Control program for liner installation, impoundment maintenance and repair, impoundment operational procedures; and
 4. A contingency plan that specifies actions to be taken in case of an accidental release from the facility, overtopping of the impoundment, or breach of the berm, and unauthorized inflows into the impoundment or containment structure.
- C. Design and installation requirements. An applicant shall:
1. Design and construct surface water controls. The applicant shall:
 - a. Ensure that the impoundment or secondary containment structure maintains, using design volume or mechanical systems, normal operating volumes, if any, and any inflow from the 100-year, 24-hour storm event. The facility shall maintain two feet of freeboard or an alternative level of freeboard that the applicant demonstrates is reasonable, considering the size of the impoundment and meteorologic and other site-specific factors; and
 - b. Direct any surface water run-on from the 100-year 24-hour storm event not intended for capture by facility design around the facility.
 2. Ensure that the facility accommodates any significant geologic hazard, addressing static and seismic stability. The applicant shall document any design adjustments for this reason in the Notice of Intent to Discharge;
 3. Ensure that site preparation includes, as appropriate, clearing the area of vegetation, grubbing, grading and embankment, and subgrade preparation. The applicant shall ensure that supporting surface slopes and foundation are stable and structurally sound;
 4. Impoundment lining requirements. The applicant shall:
 - a. Ensure that the liner is at least a 30-mil geomembrane liner or a 60-mil liner if High Density

Polyethylene is used, or an alternative, and that the liner's calculated seepage rate is less than 550 gallons per acre per day:

- i. If a synthetic liner is used, the applicant shall anchor the liner by securing it in an engineered anchor trench; and
 - ii. The applicant shall ensure that the liner is ultraviolet resistant if it is regularly exposed to sunlight.
- b. If a soil liner is used, ensure it resists swelling, shrinkage, and cracking. The applicant shall:
- i. Ensure that the soil is at least one foot thick and compacted to a uniform density of 95% to meet the "Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effect (12,400 ft-lbf/ft³)," (D 698-91), published by the American Society for Testing and Materials, reapproved 1998. This material is incorporated by reference and does not include any later amendments or editions of the incorporated matter. Copies of the incorporated material are available for inspection at the Department of Environmental Quality and the Office of the Secretary of State, or may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, Conshohocken, PA 19428-2959; and
 - ii. Upon installation, protect the soil liner to prevent desiccation.
- c. For new facilities, develop and implement a construction Quality Assurance/Quality Control program that addresses site and subgrade preparation, inspection procedures, field testing, laboratory testing, and final inspection after construction of the liner to ensure functional integrity.
- D. Operational requirements. A permittee shall:
1. Maintain sufficient freeboard to manage the 100-year, 24-hour storm event plus two feet of freeboard under normal operating conditions. Management of the 100-year, 24-hour storm event may be through design, pumping, or a combination of both;
 2. Remove accumulated residues, sediments, debris, and vegetation to maintain the integrity of the liner material and design capacity;
 3. Perform and document a visual inspection for damage to the liner material and for accumulation of residual material at least monthly. The operator shall conduct an inspection within 72 hours after the facility receives a significant volume of storm water inflow;
 4. Repair damage to the liner following the Quality Assurance/Quality Control Plan required under subsection (B)(3); and
 5. Remove all inflow from the impoundment as soon as practical, but no later than 60 days after a temporary event, for facilities designed to contain inflow only for temporary events, such as process upsets.
- E. Recordkeeping. A permittee shall maintain the following information for at least 10 years and make it available to the Department upon request:
1. Construction drawings and as-built drawings, if available;
 2. A log book or similar documentation to record inspection results, repair and maintenance activities, monitoring results, and facility closure;
 3. Capacity design criteria;
 4. A list of standard operating procedures;
 5. The construction Quality Assurance/Quality Control program documentation; and
 6. Records of any inflow into the impoundment other than those permitted by this Section.
- F. Reporting requirements.
1. If the liner is breached, as evidenced by a drop in water level not attributable to evaporation, or if the impoundment breaches or is overtopped due to a catastrophic or other significant event, the permittee shall report the circumstance to the Department within five days of discovery and implement the contingency plan required in subsection (B)(4). The permittee shall submit a final report to the Department within 60 days of the event summarizing the circumstances of the problem and corrective actions taken.
 2. The permittee shall report unauthorized flows into the impoundment to the Department within five days of discovery and implement the contingency plan required in subsection (B)(4).
- G. Closure requirements. The permittee shall notify the Department of the intent to close the facility permanently. Within 90 days following closure notification the permittee shall comply with the following requirements, as applicable:
1. Remove any solid residue on the liner material and dispose of it appropriately;
 2. Inspect the liner material for evidence of holes, tears, or defective seams that could have leaked;
 3. If evidence of leakage is discovered, remove the liner in the area of suspected leakage and sample potentially impacted soil. If soil remediation levels are exceeded, the permittee shall, within 60 days, notify

- the Department and submit an action plan for the Department's approval before implementing the plan;
4. If there is no evidence of holes, tears, or defective seams that could have leaked:
 - a. Cover the liner in place or remove it for disposal or reuse if the impoundment is an excavated impoundment,
 - b. Remove and dispose of the liner elsewhere if the impoundment is bermed, and
 - c. Grade the facility to prevent the impoundment of water.
 5. Notify the Department within 60 days following closure that the action plan has been implemented and the closure is complete.

Historical Note

New Section adopted by final rulemaking at 7 A.A.R. 235, effective January 1, 2001 (Supp. 00-4).