



## Type 3.01 General APP Lined Impoundments

<b>Permittee:</b>		<b>Inventory No.:</b>	
<b>Reviewer:</b>		<b>LTF:</b>	
<b>Project Manager:</b>		<b>NOI Received:</b>	
<b>Today's Date:</b>		<b>TSU Memo #:</b>	
<b>Checked By:</b>			

Notice of Intent to Discharge - A.A.C. R18-9-D301(A)	
<b>A.</b>	<p><b>A 3.01 General Permit for a lined impoundment and a lined secondary containment structure.</b></p> <p><b>An applicant shall:</b></p>
Y: yes, meets the requirement; N: no, does not meet the requirement (see comment below); NA: does not apply	
	<p><b>1.</b> 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);</p>
Comment	
	<p><b>2.</b> Ensure that inflow to the lined surface impoundment or lined secondary containment structure is from one or more of the following sources:</p>
	<p><b>a.</b> Evaporative cooler overflow, condensate from a refrigeration unit, or swimming pool filter backwash;</p>
Comment	
	<p><b>b.</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;</p>
Comment	
	<p><b>c.</b> Stormwater runoff that is not permitted under A.R.S. § 49-245.01 because the facility does not receive solely stormwater or because the runoff is regulated but not considered stormwater under the Clean Water Act;</p>
Comment	
	<p><b>d.</b> Emergency fire event water;</p>
Comment	
	<p><b>e.</b> 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;</p>
Comment	
	<p><b>f.</b> Non-contact cooling tower blowdown and non-contact cooling water, except discharges from electric generating stations with more than 100 megawatts generating capacity;</p>
Comment	
	<p><b>g.</b> Boiler blowdown;</p>
Comment	
	<p><b>h.</b> 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;</p>

Comment		
	i.	Wastewater from food washing;
Comment		
	j.	Heat exchanger return water;
Comment		
	k.	Wastewater from industrial laundries;
Comment		
	l.	Hydrostatic test water from a pipeline, tank, or appurtenance previously used for transmission of fluid;
Comment		
	m.	Wastewater treated through an oil/water separator before discharge; and
Comment		
	n.	Cooling water or wastewater from food processing.
Comment		

Notice of Intent to Discharge - A.A.C. R18-9-D301(B)		
<b>B.</b>	<b>In addition to the requirements in R18-9-A301(B), an applicant shall submit:</b>	
Y: yes, meets the requirement; N: no, does not meet the requirement (see comment below); NA: does not apply		
	1.	A listing and description of all sources of inflow;
Comment		
	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;
Comment		
	3.	A narrative description of how the conditions of this general permit are satisfied. The narrative shall include a Quality Assurance/Quality Control program for liner installation, impoundment maintenance and repair, and impoundment operational procedures; and
Comment		
	4.	A contingency plan that specifies actions proposed in case of an accidental release from the facility, overtopping of the impoundment, breach of the berm, or unauthorized inflows into the impoundment or containment structure.
Comment		

Design and Installation Requirements - A.A.C. R18-9-D301(C)		
<b>C.</b>	<b>An applicant shall:</b>	
Y: yes, meets the requirement; N: no, does not meet the requirement (see comment below); NA: does not apply		
	1.	Design and construct surface water controls to:
	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 at least 2 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
Comment		

	<b>b.</b>	Direct any surface water run-on from the 100-year 24-hour storm event around the facility if not intended for capture by facility;
Comment		
	<b>2.</b>	Ensure that the facility design accommodates any significant geologic hazard, addressing static and seismic stability. The applicant shall document any design adjustments made for this reason in the Notice of Intent to Discharge;
Comment		
	<b>3.</b>	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; and
Comment		
	<b>4.</b>	Comply with the following impoundment lining requirements:
	<b>a.</b>	If a synthetic liner is used, ensure that the liner is at least a 30-mil geomembrane liner or a 60-mil liner if High Density Polyethylene, or an alternative, that the liner's calculated seepage rate is less than 550 gallons per acre per day, and:
		i. Anchor the liner by securing it in an engineered anchor trench;
Comment		
		ii. Ensure that the liner is ultraviolet resistant if it is regularly exposed to sunlight; and
Comment		
		iii. Ensure that the liner is constructed of a material that is chemically compatible with the wastewater or impounded solution and is not affected by corrosion or degradation;
Comment		
	<b>b.</b>	If a soil liner is used:
		i. Ensure that it resists swelling, shrinkage, and cracking and that the liner's calculated seepage rate is less than 550 gallons per acre per day;
Comment		
		ii. Ensure that the soil is at least 1-foot thick and compacted to a uniform density of 95 percent to meet the "Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effect (12,400 ft-lbf/ft <sup>3</sup> ), D698-00ae1," (2000) published by the American Society for Testing and Materials. This material is incorporated by reference and does not include any later amendments or editions of the incorporated material. Copies of the incorporated material are available for inspection at the Arizona Department of Environmental Quality, 1110 W. Washington, Phoenix, AZ 85007 or may be obtained from the American Society for Testing and Materials International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959; and
Comment		
		iii. Upon installation, protect the soil liner to prevent desiccation; and
Comment		
	<b>c.</b>	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.
Comment		

### Operational Requirements - A.A.C. R18-9-D301(D)

<b>D.</b>	<b>An applicant shall:</b>	
Y: yes, meets the requirement; N: no, does not meet the requirement (see comment below); NA: does not apply		
1.	Maintain sufficient freeboard to manage the 100-year, 24-hour storm event including at least 2 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;	
Comment		
2.	Remove accumulated residues, sediments, debris, and vegetation to maintain the integrity of the liner and the design capacity of the impoundment;	
Comment		
3.	Perform and document a visual inspection for damage to the liner 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 stormwater inflow;	
Comment		
4.	Repair damage to the liner by following the Quality Assurance/Quality Control Plan required under subsection (B)(3); and	
Comment		
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.	
Comment		

### Recordkeeping - A.A.C. R18-9-D301(E)

<b>E.</b>	<b>A permittee shall maintain at the site, the following information for at least 10 years and make it available to the Department upon request:</b>	
Y: yes, meets the requirement; N: no, does not meet the requirement (see comment below); NA: does not apply		
1.	Construction drawings and as-built plans, if available;	
Comment		
2.	A log book or similar documentation to record inspection results, repair and maintenance activities, monitoring results, and facility closure;	
Comment		
3.	Capacity design criteria;	
Comment		
4.	A list of standard operating procedures;	
Comment		
5.	The construction Quality Assurance/Quality Control program documentation; and	
Comment		
6.	Records of any inflow into the impoundment other than those permitted by this Section.	
Comment		

## Closure Requirements - A.A.C. R18-9-D301(G)

**G.**

**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:**

**Y:** yes, meets the requirement; **N:** no, does not meet the requirement (see comment below); **NA:** does not apply

**1.** Remove liquids and any solid residue on the liner and dispose appropriately;

Comment

**2.** Inspect the liner for evidence of holes, tears, or defective seams that could have leaked;

Comment

**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 define the lateral and vertical extent of contamination and, within 60 days of the exceedance, notify the Department and submit an action plan for achieving clean closure for the Department's approval before implementing the plan;

Comment

**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,

Comment

**b.** Remove and dispose of the liner elsewhere if the impoundment is bermed, and

Comment

**c.** Grade the facility to prevent the impoundment of water; and

Comment

**5.** Notify the Department within 60 days following closure that the action plan was implemented and the closure is complete.

Comment