



PUBLIC WORKS DEPARTMENT

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Stormwater Pretreatment Standards

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This Standard applies to Industrial or Commercial properties within the Salem Storm Sewer Services system, not single or multi residential properties under four units.

The objective is to remove identified or expected pollutants from being discharged to the Storm Drain system or waterways, to reduce pollutants that could significantly effect the environment or receiving stream. Pollutants that are introduced (City street run-off) into the Storm system are to be addressed at the end of the pipe by the City's treatment systems and controls.

The control priorities are:

1. **Eliminate source.** By covering the area and re-directing the area drains to the sanitary sewer (fueling facilities, generators, trash areas) or using diversion systems to direct the polluted waters to the Sanitary System and the clean waters to the Storm System.
2. **Manage/Control area/source.** Area "Management Plans" (sweeping contracts) are allowed as a mechanism to control pollutants (trash and metals) provided the plan is documented, the site routinely inspected for compliance, and the owner agrees to retrofit the system if it is found to not be performing as expected.
3. **Treat the pollutant.** The "Type of Treatment" used will be based on the identified or expected pollutant sources on the site, and the discharge location. Discharges to the City storm system may be allowed a lower degree of control, if the City treats for re-introduced pollutants (street run-off) downstream. Separator and coalescing separator type treatment systems will be sized to provide a fifteen-minute settling/separation time, unless engineering calculations are provided showing a quicker settling/separation rate for the expected pollutant.

Retro-Fits/Code Upgrades of existing facilities will be required when properties are found to be a significant source of pollutants, or when significant remodels/upgrades occur at the building/property.

Maintenance plans will be required from the property owner for treatment systems having manufacturer identified maintenance programs/needs/schedules. IF no manufacturer maintenance program has been identified, facilities are expected to provide system maintenance at a frequency to insure proper operational effectiveness and/or prevent pass through of pollutants.

General Pretreatment Guidelines

<u>Discharge</u>	<u>Treatment *</u>
To Creek, Wet Land, or Water way	B or F
To City Storm system	B, F, S or CS based on pollutant
To Ground	B or F with Copy of UIP from State DEQ

Typical Facility requiring Treatment

<u>Facility Type</u>	<u>Min. Treatment Type *</u>	<u>Objective</u>
Car Parking		
Less than 50 spaces	Trap Catch Basins	oil, trash
Greater than 50 spaces	B, F or S	oil, metals, trash
Truck / Commercial Vehicle, Airport, Bus terminals, etc.	B, F or CS	oil, metals, trash
Auto Parts or Service	B, F or CS	oil, metals, trash
Auto Dealership	B, CS, or Diversion	soap, oils, fuels
Parking lots w/Charity washing	Management Plan/ Diversion System	soap, oils, fuels
Vehicle washing	Cover & Sanitary Sewer or Diversion	soap
Equipment/Rental Centers	B, or CS	mud, oil, trash, metals
Private roadways systems	B, F, or S	Pollutant and spill
Private Stormwater collection	B, F, or S	Pollutant and spill
Concrete or Stone cutting	S	solids, pH
Cement Plants	S	solids, pH
Rock quarry or mining	S	solids
Outside business operations, productions, or practices	Diversion or?	based on pollutant
Power Generation systems	B, F, or CS	oil, solids
Outside Fuel/Chemical Storage	Containment, B/Diversion	spill control
Fueling/Transfer facilities	Cover & Sanitary/Holding	spill control
Animal waste	Cover & Sanitary or Diversion	BOD / Bacteria
Restaurant Food/Grocery (trash)	Cover & Sanitary/Holding	BOD
Solid waste handling facilities as a business	Covered Wash Area, and B or F	solid, oil, BOD
Fountains, pools, and spas	Sanitary Connection	see "Pool Standard"
Ponds "Man made"	(Effect on water quality at discharge point, and Invasive animal/plant)	

*** CODES USED**

UIP	Underground Injection Permit
B	Bio-Treatment System
S	Separator Treatment System (fifteen minutes or engineered settling time)
CS	Coalescing Separator Treatment System
F	Filter Type Treatment System or Treatment Train (settling and bio-treatment)
Diversion	Storm/Sanitary Diversion System (with automatic controls)
Holding	Holding or Dry Sump (requiring routine staff cleaning)