



RADIATOR REPAIR POLLUTION PREVENTION GUIDELINES

Purpose

The purpose of this information sheet is to describe the Pollution Prevention Practices for radiator repair facilities to help comply with the District's Pollution Prevention Permit conditions. Pollution Prevention Practices focus on the reduction or elimination of pollutants or wastes at the source.

This Pollution Prevention Practice information consists of required practices which are specified in the EBMUD Wastewater Discharge Permit issued to your shop and additional practices such as good operation practices, process modification and material substitution. This document provides detailed information on these practices.

REQUIRED POLLUTION PREVENTION PRACTICES

Sealing Floor Drains

⇒ Seal all floor drains in both the service and the storage areas to prevent contaminated wastewater from discharging to the sanitary sewer, as prohibited by your Permit. Check with you local fire department and building departments and property owners before sealing. If there is a problem meeting this Permit requirement, contact your wastewater control representatives.

⇒ Make sure employees do not pour discarded radiator and automotive wastes down sinks, toilets, or floor drains.

Post a Sign

⇒ Post your Discharge Prohibition sign in a high profile area to remind employees and to inform customers and others of the discharge prohibition. Additional copies are available by calling (510) 287-1651.

Hazardous Waste Manifests/Receipts

⇒ Provide access to hazardous waste manifest and receipts upon request by EBMUD personnel.

ADDITIONAL POLLUTION PREVENTION PRACTICES

Radiator Shop Specific Practices

Good Operating Practice	Pollution Prevention Opportunity
Remove and recycle antifreeze	To minimize drag-in
Provide hang bars over boil-out tank	To allow draining and rinsing and to prevent drag out
Provide drain boards between tanks	To minimize spillage to the floor
Blow out the residual caustic solution to boil-out tank using compressed air	To minimize drag out to flushing booth and extend bath life
Filter or settle out test tank solids when water is cloudy and reuse the water	To minimize water usage
Remove boil-out tank solids and off-haul. Reuse the liquid and reconstitute the bath with flushing booth rinse water	To minimize the need to dump tank
Solder over drip pan rather than test tank	To prevent contamination of test tank water with zinc and lead
Clean paint spray guns in a self-contained cleaning device. Recycle the cleaning solution when it is too dirty to use. Do not discharge to the sanitary sewer	To prevent discharge to the sanitary sewer and minimize waste
Process Modification	Pollution Prevention Opportunity
Use a recirculating flush booth or reuse flushing booth rinse water for boil-out make-up water	To minimize water usage
Reuse test tank water in flushing booth	To minimize water usage
Increase water pressure and decrease water flow in non-recirculating flush booths	To minimize water usage
Use smaller process tanks with ultrasonic cleaning for lighter jobs	To reduce the volume of wastewater
Capture wet/dry spills with a shop vacuum and transfer to the boil-out tank	To minimize hazardous waste volume
Material Substitution	Pollution Prevention Opportunity
Reduce use of cleaner or flux containing metal chelating compounds	To minimize tank contamination with metals
Use a low zinc flux	To reduce zinc level in sludge

To Prevent Leaks and Spills

- ⇒ Have a drip pan in place before pulling radiator drain plugs.
- ⇒ Collect leaking, dripping, and drained fluids in drip pans or containers. If different wastes are kept separate they may be recycled. Contact your recycler for specific requirements.
- ⇒ Keep a drip pan under vehicles when detaching hoses or removing parts that may cause a leak. Use a drip pan under any vehicle that may leak while working on it.
- ⇒ Use larger, low brimmed pans under cars when ordinary drip pans are too cumbersome.
- ⇒ Promptly transfer used fluids to storage for recycling. Do not leave drip pans or other open containers where they may be bumped and spilled.

Clean Floors

- ⇒ A sealed concrete floor or a floor with an oil-resistant coating is easier to clean and maintain.
- ⇒ Use dry cleanup practices such as rags or absorbent whenever possible for routine clean up.
- ⇒ When the floor requires a thorough cleaning, pre-clean heavily soiled areas before maintenance mopping.

When Spills Occur

- ⇒ Have a written spill procedure posted in areas where spills may occur. Train employees on how to respond to a spill.
- ⇒ Small spills may be cleaned up with rags. Absorbent may be used, however, used absorbent may be considered a hazardous waste. Check with your local hazardous materials management agency.

When Spills Occur (cont.)

- ⇒ Consider using a wet/dry shop vacuum cleaner to collect spills. Do not use vacuums for gasoline, solvents, or other volatile fluids because of the explosive hazards.
- ⇒ Use a special hydrophobic mop or squeegee to clean up the spill. Dispose of the wastewater in the appropriate water container.
- ⇒ For spills that leave your facility, refer to your hazardous materials response plan filed with the local fire department or other local hazardous materials (Haz Mat) authority that describes how to prepare for and respond to larger spills.
- ⇒ If a spill occurs that enters the sanitary sewer, call (510) 287-1651.

Handling Contaminated Rags

- ⇒ Do not launder used rags for clean up and spills of contaminated waste on site. Store soiled rags in a closed container according to you local fire codes.
- ⇒ Inform your laundry service if rags have been used for clean up of contaminated wastes. Use a laundry facility that is permitted to handle the contaminated rags.

Storing and Disposing of Waste

- ⇒ If you store liquid containers outdoors, keep them on a paved, impermeable surface within a berm or other secondary containment to prevent spills from leaving the site. If possible, cover the area. Rain mixed with hazardous waste must be treated as a hazardous waste.

	EMERGENCY PHONE #	FAX #
HAZARDOUS MATERIALS		
Alameda Co. Health Care Services, Haz-Mat Division	567-6771	337-9432
Berkeley	644-7719	644-6015
Contra Costa County	646-2286	646-2073
URBAN RUNOFF CLEAN WATER PROGRAMS		
Alameda County Countywide CWP	670-5543	670-5262
Contra Costa County CWP	313-2360	313-2333
Alameda	748-4602	748-4697
Albany	528-5720	524-9359
Berkeley	644-7719	644-6015
Emeryville	596-4306/4330	658-8095
Oakland (non-hazardous materials)	238-7116	238-6412
Oakland (hazardous materials)	238-7761	
Piedmont	420-3050	
CITY PUBLIC WORKS/ENGINEERING		
Alameda	748-4520/748-4510	521-8762/748-4697
Albany	528-5788/524-9543	524-9359/524-9359
Berkeley	644-6523/644-6540	644-8830/644-6827
Emeryville	596-4330/596-4330	658-8095/658-8095
Oakland	615-5570/238-4777	615-5550/238-6412
Richmond	307-8091	
CITY FIRE/POLICE DEPARTMENTS		
Alameda Fire/Public Works	748-4601/748-4508	748-4606/523-5322
Albany Fire/Police	528-5771/525-7300	528-5774/525-1360
Berkeley Fire	644-6665/644-6723	644-6679
El Cerrito Fire	215-4450/215-3231	235-6618/235-6618
Emeryville Fire/Police	596-3750/596-3700	420-1785/653-5883
Oakland Police/Fire	238-3259/238-3824	238-7761/273-3030
Piedmont Fire/Police	420-3030/420-3000	653-8272/420-3002
Richmond	307-8031	
Regional Water Quality Control Board		
Emergency Response	286-1043	
LAW ENFORCEMENT AGENCIES		
Oakland Police - Environmental Crimes	238-3259/3481	273-3030
Alameda County District Attorney	569-9281	569-0505
Alameda County Sheriff's OES	667-7721 (24 hr)	667-7740/667-7728
EPA Office of Criminal Investigations	(415) 744-2485	(415) 744-2494
US Department of Defense	637-2972	637-2965
OTHER		
Bay Area Air Quality Management District	(415) 771-6000	
California OES (Spills & Releases)	(800) 852-7550	(916) 262-1621/262-1677
Department of Toxic Substance Control	540-3739	540-3937
Department of Fish and Game	(707) 944-2011	
East Bay Regional Park District	635-0135 x2511	569-1432
East Bay Municipal Utility District	287-1651	
Bay Area Storm Water Information	1-888-BAY-WISE	
Alameda County Hazardous Waste Disposal	1-800-606-6606	
Contra Costa County Hazardous Waste Disposal	1-800-750-4096	