Automotive and Equipment Repair Related Business

Make Clean Water a Part of Your business

Many pollutants associated with auto and equipment repair business can be carried by rainwater into streams and rivers through on-site drainage systems, or may filter into the groundwater. If done in an environmentally sensitive way, water quality impacts from auto and equipment repair activities can be avoided.

This fact sheet was developed to help automotive and equipment repair-related businesses to keep both the workplace and the community clean. Consider the information offered and make use of the resources available to help you keep Medford's waterways livable and full of life…for you!

Defining the Problem

In urban environments, hard surfaces such as roofs, paved streets and sidewalks hold surface pollutants. When it rains, they are carried into catch basins and the stormwater drainage system. From there, the pollutants flow directly into waterways where they can harm fish, plants and wildlife and can damage recreational sites. In Medford these waterways include Bear Creek, and its tributaries.

Service-related activities that can affect Medford's water quality.

Changing oil and other fluids, waste oil, antifreeze and other vehicle fluids contain toxic chemicals and heavy metals from wear and tear of engine parts.

Cleaning engines and parts and flushing radiators, solvents are hazardous to employees and can ignite in pipelines.

Washing vehicles, even biodegradable soaps can be toxic when they reach a creek or waterway.

Body repair and painting, solvents, thinners, paints and sanding wastes all cause problems for both sanitary sewer and storm drain systems.

AUTOMOTIVE-RELATED POLLUTANTS

Pollutant:

Oil and Grease

Source:

- Dripping from leaky vehicles
- Spilled during vehicle maintenance
- Washed off during vehicle cleaning
- Washed by rain from oil filters or oil-soaked rags stored in uncovered or inadequate dumpsters. Once on the ground, oil and grease can be washed into the drainage system or absorbed into the groundwater.

Problem:

Oil and grease contain hydrocarbon compounds, some of which can injure or kill aquatic life even at low concentrations. When oil and grease coat fish gills, they die from lack of oxygen. These pollutants can block oxygen from entering the water. Just one (1) pint of oil on calm water can cause an oil slick the size of two (2) football fields.

Pollutant:

Toxic Substances

Source:

- Antifreeze
- Cleaners
- Paints
- Paint Thinners
- Gasoline or diesel fuel
- Glues

PROBLEM:

Organic solvents such as paint thinner, gasoline and cleaning fluids are flammable and explosive. They can move readily in stormwater runoff and through soil into groundwater. Removal from polluted water is extremely difficult and costly.

Pollutant:

Soluble Metals (also considered toxic substances)

Source:

- Vehicles and equipment
- Brake linings
- Tires
- Used antifreeze and oil
- Detergents, which may contain arsenic

Problem:

More than half of the metals in urban runoff may become attached to sediments and settle to the bottom of streams where they can remain indefinitely, harming bottom-dwelling organisms. Metals that are more water soluble, such as copper and zinc, tend to stay in the water and may create toxic conditions for fish and other aquatic life.

Pollutant:

Detergents

Source:

- Cleaning dirty parts of floors using detergent products may result in nutrients entering stormwater facilities.
- Entering waterways after washing off hard surfaces by rain or irrigation.

Problem:

Detergents may contain nutrients such as phosphorous and nitrogen. High nutrient levels in waterways stimulate excess weed and algae growth causing unpleasant tastes, odors and sights, and lowering oxygen levels in the water. Unused nutrients also infiltrate into groundwater – too many nutrients make water undrinkable. The surfactants in detergents, which break up oil particles, can harm living organisms in aquatic environments.

How You Can Help Protect Medford's Water Quality

Educate Employees and Customers

- Educate your employees on the information in this handout.
- Show customers what you're doing to protect Medford's water quality.

Maintain existing drainage system

- Maintain storm drains.
- Service oil/water separators regularly.

Keep the workplace clean

- Clean shop floors with broom and dustpan to prevent contaminants from being tracked outside.
- Label all containers.
- Use catch pans when draining fluids.
- Keep outdoor surfaces clean; never hose off surfaces into nearby storm drains.
- Cover materials and containers exposed to the weather.

Wash parts and equipment in designated areas

- Designated areas should be indoors and near treatment devices. Do not wash or rinse parts outside.
- Use an area that drains to a wastewater treatment system or a closed pit that can be pumped out later.
- When washing new and used vehicles on sales lots, use plain water in place of soap.
- Use commercial car wash in which all drains discharge to the wastewater collection system.

Prepare for and clean up spills

- Prevent spills by planning ahead.
- Make sure all employees know your spill prevention and cleanup plan.
- Clean up spills immediately with absorbent and broom/dust pan.
- Provide secondary containment where liquids are stored.
- Keep absorbents and other spill response materials readily available.

Dispose of wastes properly

- Find out whether your waste is considered hazardous.
- If wastes are hazardous, estimate the amount.
- Determine the best disposal method.
- Drain storage area properly.
- If necessary, use a reliable treatment, storage and disposal facility.
- Get help if necessary.

Reduce, reuse and recycle

- Buy only what you need.
- Purchase recycled products and recycle what you can.
- Separate wastes.

Use the least toxic product available

- Avoid chlorinated compounds for carburetor and brake cleaning.
- Minimize detergent use by steam cleaning or using hot water for cleaning metal parts, tools and equipment. When detergents must be used, use phosphate-free, non-caustic ones.
- Use non-solvent cleaners.
- Use water-based rather than petroleum-based cleaning materials.
- Steam cleaning should be done in a covered area and drained to the sanitary sewer not the storm drain.

If your business borders a stream, preserve stream bank vegetation

- Protect the stream corridor.
- Consider restoring the stream bank to a natural habitat.

Pick Up The Phone

City of Medford Resources

→	Business License	774-2025
→	Stormwater Information	774-2600
→	Stormwater Rate/Billing Information	774-2100
→	Pollution Complaints/Stormwater Discharge Violations	774-2600
→	Stormwater System Maintenance	774-2600
→	Disposal to the Wastewater Collection System	774-2750

Hazardous Waste/Disposal Alternatives

- *Emergency Spills:*
  City of Medford — 9-1-1
- *Hazardous Waste:*
  See the Telephone Yellow Pages
- *Recycling Services:*
  See the Telephone Yellow Pages
- *Discharge Permits:*
  Oregon State Department of Environmental Quality — 776-6010/X246
  Regional Wastewater Treatment Plant — 774-2750
- *Storage Considerations:*
  City of Medford Fire Marshall's Office — 774-2318
- *Technical Assistance:*
  Oregon Department of Environmental Quality — 776-6010X246