

CITY OF OAK RIDGE
Stormwater Management



Best Management Practices for Water Quality Protection
Auto Body Repair and Paint Shops/Retail Auto Supply

Introduction:

In the state of Tennessee, water pollution in our streams is a direct result of pollutants that have been dumped or spilled onto the ground and that are then washed from rain and wind into our creeks and streams. Retail auto supply stores, auto body repair, and paint shops have the potential to contribute hazardous chemicals into our waterways. Mismanagement of waste storage areas (waste oil and solid waste), surface cleaning, outdoor work on vehicles, and spills from vehicle fluids can all contribute pollutants to the waterways. Implementing the best management practices (BMPs) described in this document can help minimize or eliminate pollution resulting from these activities.

These potential pollutants include:

- Heavy Metals (copper, lead, nickel, and zinc)
- Oil and Grease
- Toxic chemicals (solvents, chlorinated compounds)

BEST MANAGEMENT PRACTICES

Washing Cars

Designate and clearly mark impervious (impermeable) indoor or outdoor area to be used solely for vehicle washing.

- Install sumps or drain lines to collect wash water.
- Construct a berm around the area to collect wash water.
- Use portable containment and vacuum collect the wash water.
- If the wash area is outdoors, cover the area when not in use.
 - Contact the City of Oak Ridge sewer authority to see if pretreatment is required before discharging wash water to sanitary sewer.
 - Collect all wash water from vehicle cleaning operations and discharge to a sanitary sewer, holding tank, or process treatment system through an enclosed recycling system.
- Use phosphate-free detergents.
 - Regardless of the detergent, the wash water still needs to be discharged to the sanitary sewer and not into a storm drain.
- Provide trash containers in wash area, cover with wind-proof lids, and empty on a regular basis.
- Use hoses with nozzles that automatically turn off when left unattended.
- Do not degrease the engine in the wash area; take the vehicle to an area that can process the wastewater.

Cleaning Auto Body Parts

- First brush off the dirt and use rags to wipe down the parts.
- If degreasers are used to clean the parts, conduct degreasing in a designated area and contain the wastewater for proper disposal. Do not let the wastewater run into the gutter, street, or storm drains.
- Avoid using acid-based wheel cleaners.
 - If an acid-based metal cleaner or cleaner/conditioner is used to treat bare metal and rinse water is recommended to stop the chemical reaction, use as little water as possible and wipe down the area with a rag or towel. Wastewater should be contained and disposed of properly.

Cleaning Floors

- Use dry cleaning methods (i.e. sweeping, vacuuming) to prevent the discharge of pollutants to the storm drain.
- Use biodegradable products in place of a standard cleaning agent.
- If water is used, contain runoff and collect wash water to be disposed of into the sanitary sewer.
 - If wash water does not contain soap or other cleaning agents, discharge to a pervious surface.
 - If wash water contains harsh soaps or other cleaning agents and cannot be discharged into the sanitary sewer, it may need to be disposed of as hazardous waste.

Sanding

Dry Sanding

- Perform sanding activities indoors, and in a contained area.
- To reduce the amount of airborne dust, use vacuum sanding equipment whenever possible.
- Sweep or vacuum to pick up dust from dry sanding of primer, metal, or body filler.

Wet Sanding

- Do not use wet sanding in a wash rack or in areas with a floor drains.
- Use a spray bottle to squirt water onto the panel that is being sanded to minimize drips and spills.
- Place a pan under the car panel being wet sanded to catch drips.
- Clean up drips with a rag, or sweep/vacuum up dry drips.

Dispose of wet sanding waste:

- Settle the waste and then separate the water from the sludge.
- Discharge the water into the sanitary sewer.
- Dispose of the sludge at an offsite disposal facility.

Painting Activities

- When cleaning auto body parts before painting, refer to *Cleaning Auto Body Parts* section
- Conduct all painting indoors.
- Only use water to control overspray or dust.
 - The water should be treated prior to discharge into the sanitary sewer system.
- Use drop/ground cloths underneath outdoor (exterior) painting, scraping, and sandblasting work.
- Use drop/ground cloths underneath any outdoor mixing of paints, solvents, and tool cleaning.
- Contain any blasting and spray painting activities.
 - Use wind-blocking tarps to keep sand blasting dust and overspray onsite.
 - Do not conduct these activities under high wind conditions.
 - Do not conduct these activities over or near open water, or when rain is predicted.

Paint Waste

- Never discharge gun-cleaning solution to the sewer or storm drain.
- Properly clean, store, and dispose of painting, finishing, and coating materials.
 - Do not dispose of liquid wastes on impervious surfaces (i.e. pavement or ground).
 - When using water-based paints, clean paint brushes and tools in sinks connected to sanitary sewers.
 - Make sure to either recycle or properly dispose of non-water-based paints, finishes, or other materials (e.g. paint thinner, turpentine, etc.).

Protect and Maintain Storm Drain Inlets

- Label storm drain inlets to minimize dumping wastewaters or polluted wash water.
- Inspect drains on premises regularly to prevent accumulated pollutants from washing down storm drains.

Managing Waste Oil

- Properly label all containers and tanks (e.g. *Used Motor Oil*).
- Prevent containers and tanks from rust, leakage or deterioration and repair defects immediately.

- Only store used motor oil in proper tanks and storage containers, in a safe area away from workers.
- Motor oil should always be kept separate (mixing and storage) from all other chemicals (e.g. gasoline, brake cleaner, carb cleaner or other solvents).
- All storage containers must be closed with appropriate lids when not in use.
- Inspect tanks and containers of used oil for leaks and damage frequently.
- A spill kit should be kept on site and near waste oil storage areas.

Managing Solid Waste

- Dumpster areas should be kept clean and swept frequently.
- Lids on dumpsters and trash receptacles should be kept closed.
 - Make sure drainage plugs are properly inserted.
- Reserve dumpsters for solid waste only; no liquids.
- Place dumpsters so they will not drain into a storm drain, or a body of water.

Clean Oil Storage

- Make sure clean oil is stored and labeled properly.
 - Keep away from doors or exit areas.
- Make sure a spill kit is readily available near storage areas.
- Keep sharp objects away to avoid punctures.

Outdoor Auto Repair

- Make sure cars with known leaks have drip pans underneath to contain spillage.
- For retail shops, place “No Auto Work in Parking Lot” signs in parking lot to prevent customers from working on cars outside of the store.
 - This prevents contaminants from being spilled or dumped and ultimately draining to storm drains
- Limit fluid transfers to inside the facility.
- When automobiles are stored outside make sure to keep auto hoods closed.

Spill Control

- A spill response plan should always be available and maintained.
- Always refer to Safety Data Sheets (SDS) for restrictions and hazards on every chemical purchased.
- Excess spill cleanup materials should be available where it will be readily accessible.
- Check for leaks and drips routinely.
- Use as little water as possible when cleaning leaks, drips and other spills.
- Make sure to contain spills as much as possible, and dispose of absorbent materials promptly and properly.
- Avoid bleach or disinfectants.

Illicit Discharge

- Illicit Discharge refers to any discharge to the municipal separate storm sewer system (stormwater drains) that is not composed entirely of stormwater and not previously exempt.
 - Ex. car wash wastewater, radiator flushing disposal, improper used oil disposal.
- It is illegal to dispose of waste water or pollutants into the storm drain.
- The civil penalty for an illicit discharge violation can be assessed for up to \$5,000 per day per violation.
- Report any illicit discharges immediately by email stormwater@oakridgetn.gov or by phone (865) 425-3497.

For more information please visit our website: <http://stormwater.oakridgetn.gov>

For questions, please contact:

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