

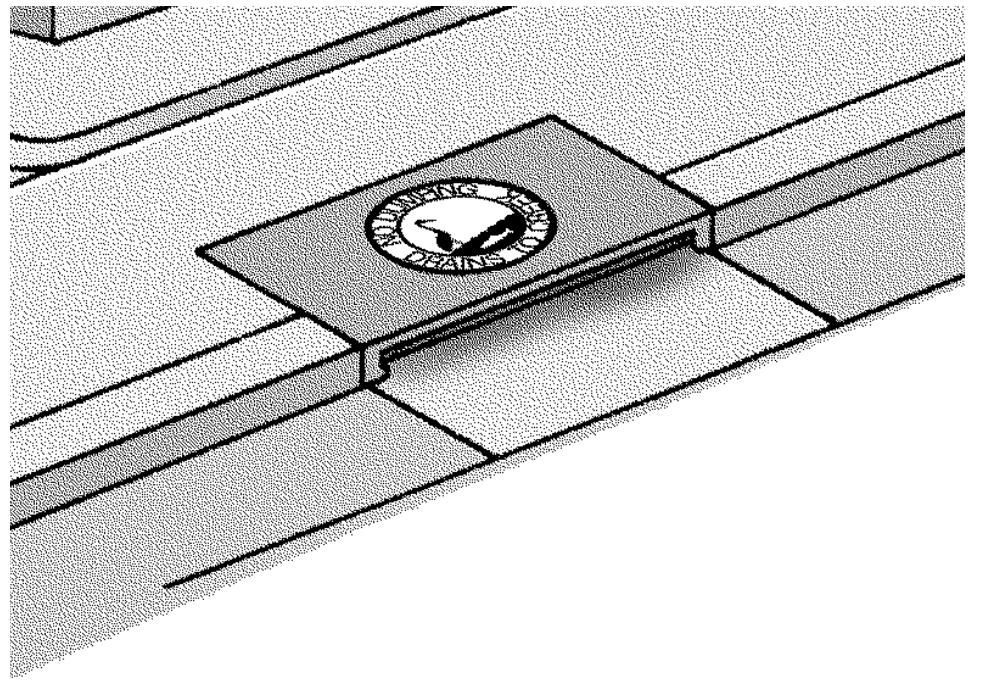
Remember that the storm drain and sewer are two separate systems!

All outside drains are storm drains which flow directly to the nearest creeks, fish and wildlife habitats, downstream recreational areas, and drinking water supplies.

All indoor plumbing is part of a closed system. Water that goes down a sink, toilet, or other inside drain flows to a sewage treatment plant for treatment.

Storm Drain Protection

- ◆ Never dispose of anything into storm drains. (See: *Material Storage Recycling and Disposal*)
Nothing but rain water should go into storm drains.
- ◆ Clean up spills immediately to minimize them and keep them from entering storm drains. (See: *Spill Prevention and Control*)
- ◆ Keep vehicle wash water out of storm drains. Soap and other cleaning agents, even if labeled biodegradable, are toxic to aquatic life.
- ◆ Identify locations of storm drains at or near your facility. All outdoor drains are storm drains.
- ◆ Post "NO DUMPING" signs, and stencil "NO DUMPING, DRAINS TO CREEK" near the storm drains.
- ◆ Periodically monitor storm drains for non-storm water discharges.



Sanitary Sewer Protection

- ◆ Never dispose of vehicle fluids or other hazardous materials into the sanitary sewer. (See: *Material Storage Recycling and Disposal*)
- ◆ Never dispose of rinse water from parts cleaning operations into the sanitary sewer. (See: *Parts Cleaning*)
- ◆ Plug all floor drains and make sure all materials are disposed of properly.
- ◆ Post signs near sinks prohibiting disposal of hazardous fluids and chemicals.



Selecting and Controlling Inventory

- ☞ Buy supplies in bulk and use bulk dispensers. This cuts down on empty waste containers that, depending on the original contents, may need to be disposed of as hazardous waste.
- ☞ Select suppliers who recycle used materials in addition to providing fresh materials whenever possible.
- ☞ Insist that your supplier provide directions for storage and disposal.

Use Safer Alternatives

- ☞ Choose materials that can be recycled.
- ☞ Use recycled (i.e., refined or purified) products. Engine oil, transmission fluid, antifreeze, and hydraulic fluid are available in recycled form.
- ☞ Choose parts-cleaning solutions and other materials that are less toxic whenever possible.
- ☞ Avoid transmission and brake fluids that contain chlorinated hydrocarbons if another type will do.
- ☞ Replace solvent cleaners with aqueous-based cleaners.
- ☞ Use non-caustic detergents instead of caustic cleaning agents.
- ☞ Choose cleaning agents that can be recycled.
- ☞ Avoid halogenated compounds, petroleum-based cleansers, and cleansers with phenol. These are highly toxic, cause difficult problems if spilled to a sewer or storm drain connection, and are often costly to recycle or dispose of. Note: All cleaning solutions are hazardous to the environment.

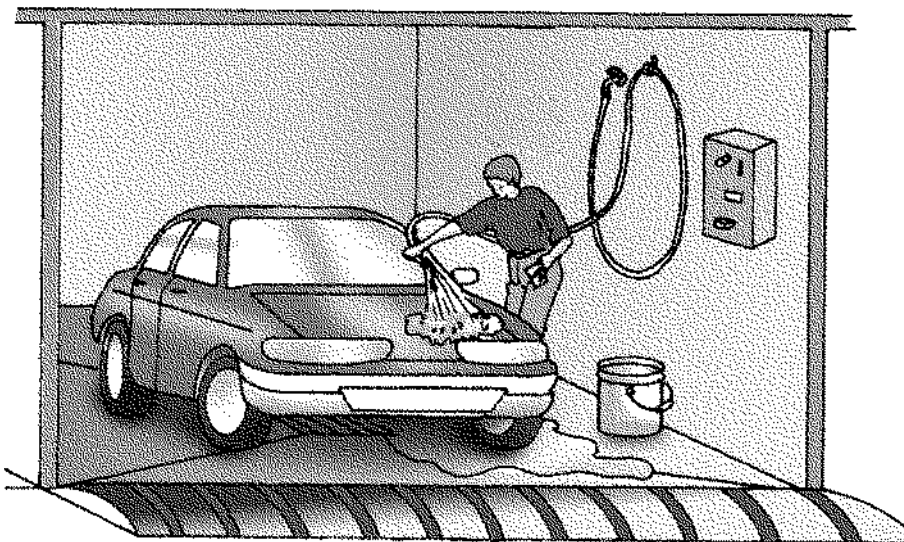
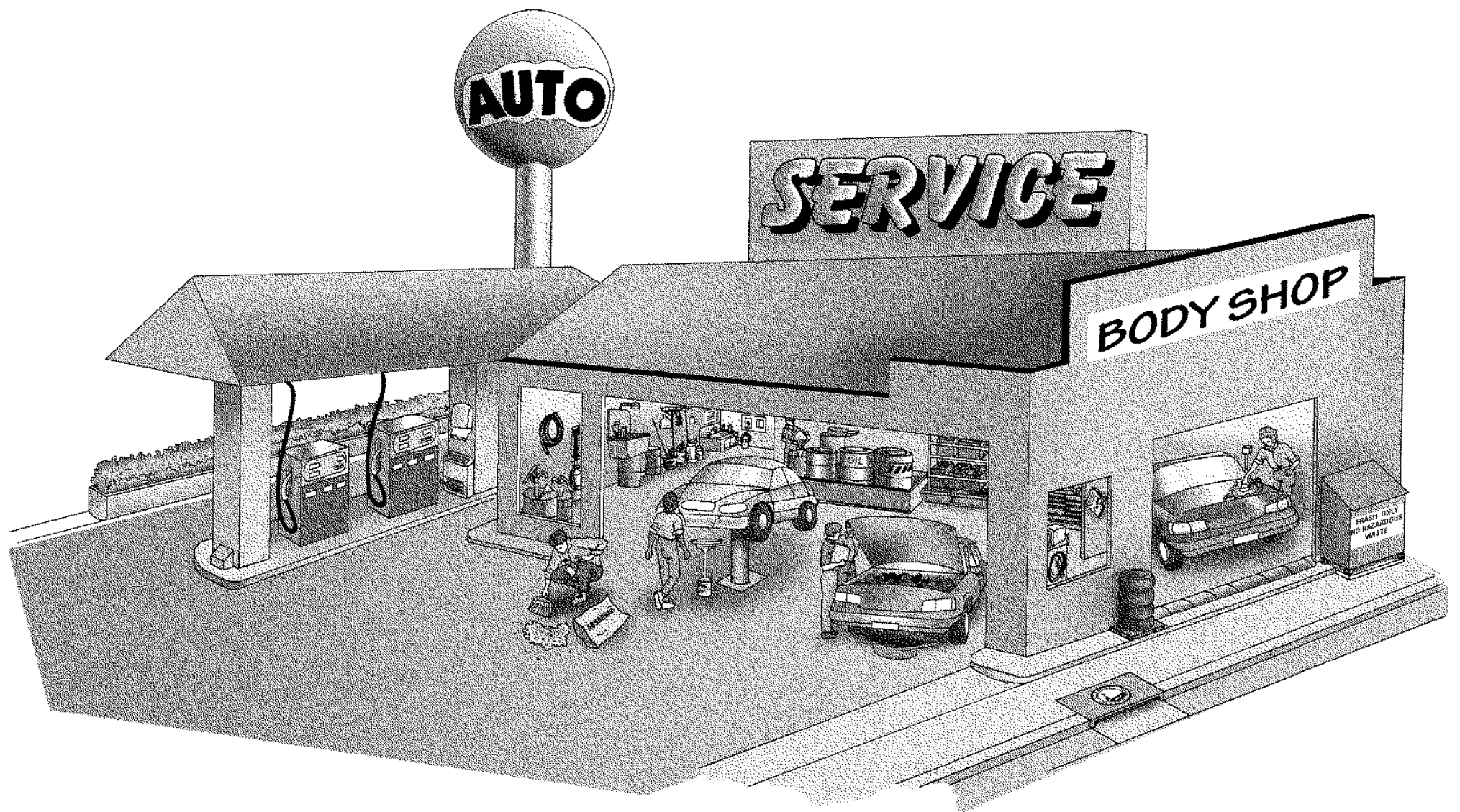
Training and Education

Employees

- ✓ Train your employees how to use the required and recommended practices in these fact sheets at the time you hire them and provide continued training at least once a year thereafter.
- ✓ Integrate employee feedback into training and best management practice implementation.
- ✓ Post signs outlining steps to be taken in case of spills.
- ✓ Hold periodic "spill drills" to assure proper spill response actions.
- ✓ Keep a record of all spills, including how and why the spill occurred, and use this information to improve your training program.
- ✓ Post signs prohibiting the disposal of vehicle fluids and solvents into sinks, toilets, and storm drains.
- ✓ Label drains to indicate whether they flow to a treatment system or directly to the sewer or a storm drain.
- ✓ Keep yourself informed of new developments through workshops, seminars, and trade association membership. Modify your practices when you find a new idea that serves your shop better.
- ✓ Show employees through your actions that there is a "management commitment" to reduce waste and protect the environment.

Customers

- ✓ Ask customers not to discard liquids into your trash cans or storm drains. If they dispose of materials improperly at your facility, you will be responsible for the violation.
- ✓ Help customers dispose of wastes properly by accepting their used motor oil for recycling and their other fluids for your "hot waste" barrels.



Introduction

Storm drains carry rainwater from our homes, commercial and industrial facilities, and streets directly into the nearest creeks, fish and wildlife habitats and water recreational areas. Storm water is not treated and does not go into the local wastewater treatment plant. As illustrated above, all creeks from our area drain through the Laguna de Santa Rosa to the Russian River and out to the ocean. The Laguna de Santa Rosa is the second largest freshwater wetland complex in northwestern California, and the Russian River is an important drinking water source and recreational area.

Nothing but rainwater should go into storm drains.

Your automotive repair facility can help prevent pollution by using these suggested practices. Many of these require little or no additional work or expense. The information in this brochure should be shared with all individuals working at your facility.

The following phone numbers are resources you can use to help prevent discharge of pollutants to the storm drain, or in case a discharge has occurred, to minimize damage.

In this way you can protect the environment and your community from damage and may protect yourself from liability.

Agency Resource Guide

Emergency Spills

Call 911

Storm Drain Questions, Additional Copies of Materials

Inside Santa Rosa City Limits: Santa Rosa Public Works: 543-3880

Outside Santa Rosa City Limits: Sonoma County Environmental Health: 565-6565

Sanitary Sewer Discharge Requirement Questions

Santa Rosa Subregional Industrial Waste Section: 543-3369

Hazardous Materials Recycling and Disposal Questions

Sonoma County Ecodesk: 565-DESK

Hazardous Waste and Materials Management Questions

Inside Santa Rosa City Limits: Santa Rosa Fire Department CUPA: 543-3526

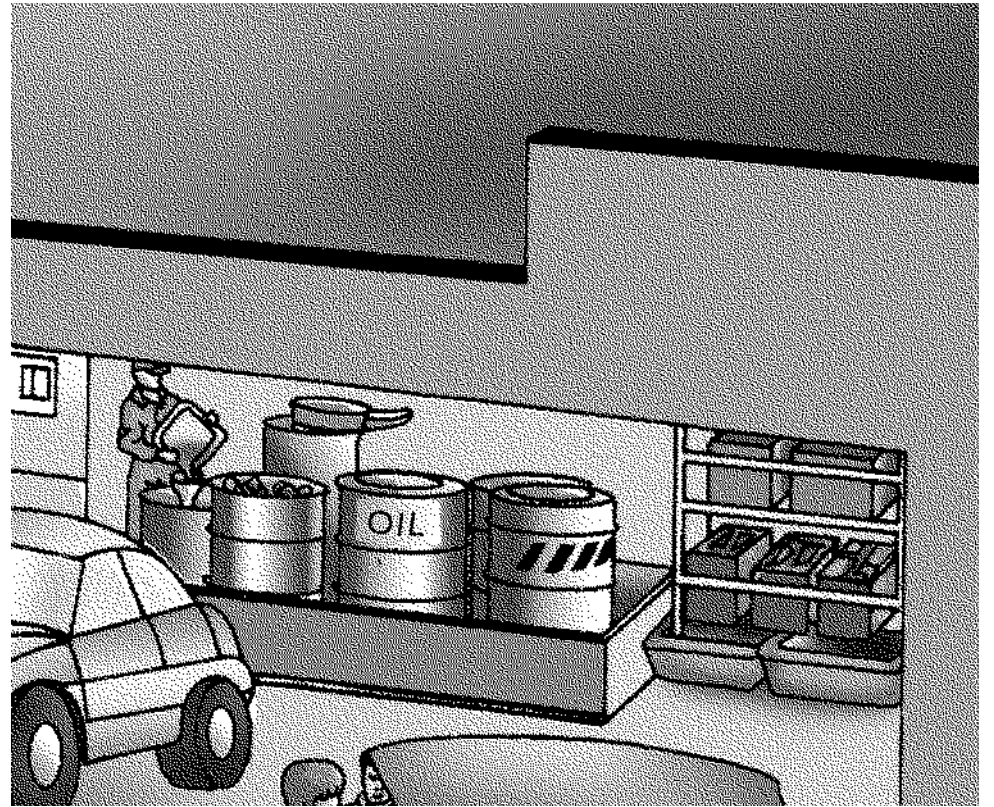
Outside Santa Rosa City Limits: Sonoma Co. Dept. of Emergency Services CUPA: 565-1152

Dumpster Service, Cleaning or Replacement

Empire Waste Management: 585-8848

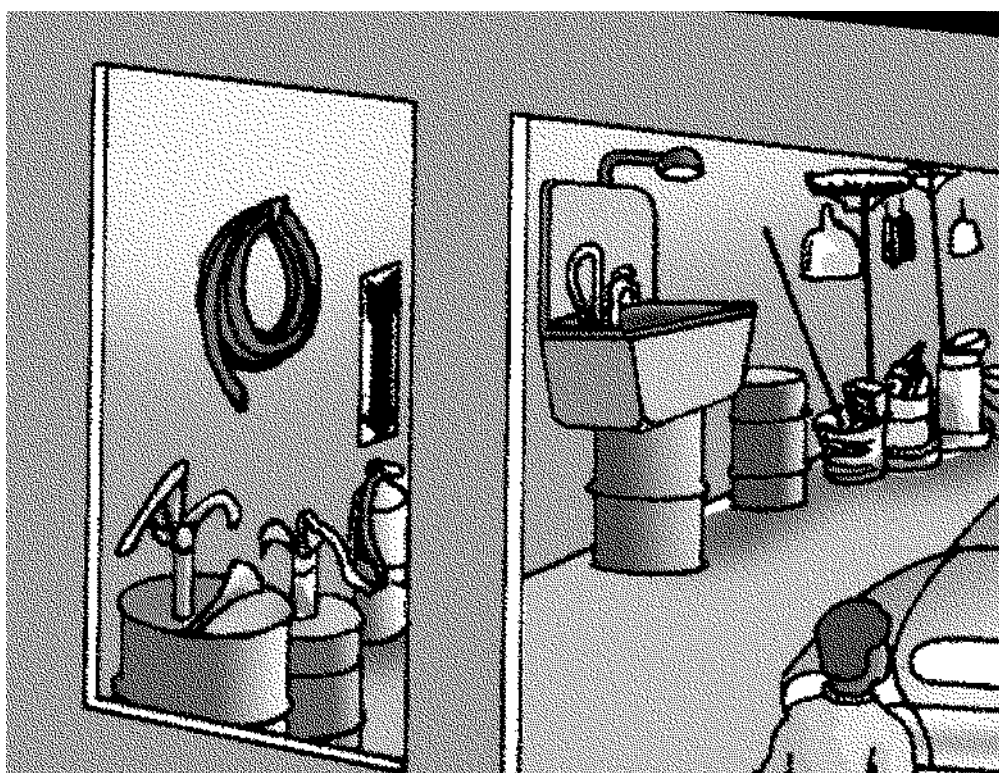
Spill Prevention & Control

- ◆ Before spills occur, train all employees in spill prevention and cleanup.
- ◆ Post a Spill Cleanup Plan in the work area.
- ◆ Place spill cleanup materials in highly accessible locations that are close to the work area.
- ◆ Purchase and maintain the proper materials for containment and cleanup of different spills. These include rags, absorbent "kitty litter", absorbent pads, oleophilic mops (absorb oil but not water), regular mops, drip pans, absorbent booms to contain spills, and mats to cover storm drains.
- ◆ If you have several vacuums, designate one for each waste (motor oil, antifreeze, etc.) and recycle the liquid. Make sure the vacuums are clearly labeled to prevent mixing of wastes. Do not use the vacuum for gasoline, solvents, or other volatile fluids because of the explosive hazard.
- ◆ Place storage containers in a convenient and safe place. Avoid moving wastes long distances to prevent spills.
- ◆ Change fluids in designated working areas inside service bays. Do not work outside where spills and leaks can flow into the storm drains.
- ◆ Properly contain and cover all solid and liquid wastes — especially during transfer.
- ◆ Immediately place drip pans under leaking or wrecked vehicles as they arrive, even if you believe that all fluids were drained before the vehicle reached your shop. Immediately drain all fluids from vehicles to be salvaged or wrecked.



Spill Cleanup

- ◆ In the event of a spill that threatens to discharge or discharges to a storm drain or sanitary sewer drain from your business, call 911.
- ◆ Immediately cover, berm, or close all storm drains and sanitary sewer drains. Block flow with sandbags, rags, and absorbents.
- ◆ Use dry absorbent material (i.e. "kitty litter") to soak up the liquid immediately. Use absorbent booms to contain the spill as necessary. Sweep up the absorbent material and dispose of it as a hazardous waste.
- ◆ Or, use a wet/dry shop vacuum cleaner to collect spills and dispose of the liquid as a hazardous waste. Do not use the vacuum for gasoline, solvents or other volatile fluids because of the explosive hazard.
- ◆ Use a dust pan and squeeze blade for picking up spills directly for disposal.



Parts Cleaning

- Clean parts without liquid cleaners whenever possible. Use a wire brush or rags instead.
- Choose parts-cleaning solutions and other materials that are less toxic whenever possible. (See: *Selecting and Controlling Inventory*)
- Minimize use of solvents.
- Perform all liquid parts cleaning using an approved centralized station so solvents and residues stay in one area.

Waste Solvent Collection

- ◆ Use a self-contained parts washer if your shop has one. Make sure it is used in a manner to collect all waste solvent.
- ◆ Install solvent tanks away from all drains.
- ◆ Install drip pans, drain boards and drying racks so that drips are directed back into the fluid holding tank.
- ◆ Inspect degreasing solvent tanks daily for leaks. Make necessary repairs immediately. Keep tank covered when not in use to minimize air emissions from evaporation.
- ◆ Store waste solvent in closed containers. Never mix solvents with waste oil. Keep chlorinated solvents separate from non-chlorinated solvents.
- ◆ Recycle waste solvent off-site, on-site, or ship for disposal as a hazardous waste. Do not dispose of waste solvents in the sewer or storm drain. Never mix solvents with waste oil. (See: *Material Storage, Recycling and Disposal*)

Material Storage and Handling

- ☞ Protect materials from rainfall, runoff, and wind dispersal.
- ☞ Store materials indoors.
- ☞ Cover outdoor storage area with a roof or other waterproof cover, or use storage sheds. Minimize storm water exposure by enclosing the area or building a berm around it. Storage sheds and roofed areas must meet building and fire code requirements.
- ☞ Designated outdoor storage areas should be paved, free of cracks and gaps, and impervious in order to contain spills and leaks.
- ☞ Keep garbage dumpster lids closed. Replace leaking dumpsters immediately; call Waste Management for replacement. (See: *Agency Resource Guide*). Plug dumpster drain holes.
- ☞ Cover or remove vehicle parts stored outdoors during the rainy season. Cover must be waterproof.

Storage of Oil and Other Hazardous Materials

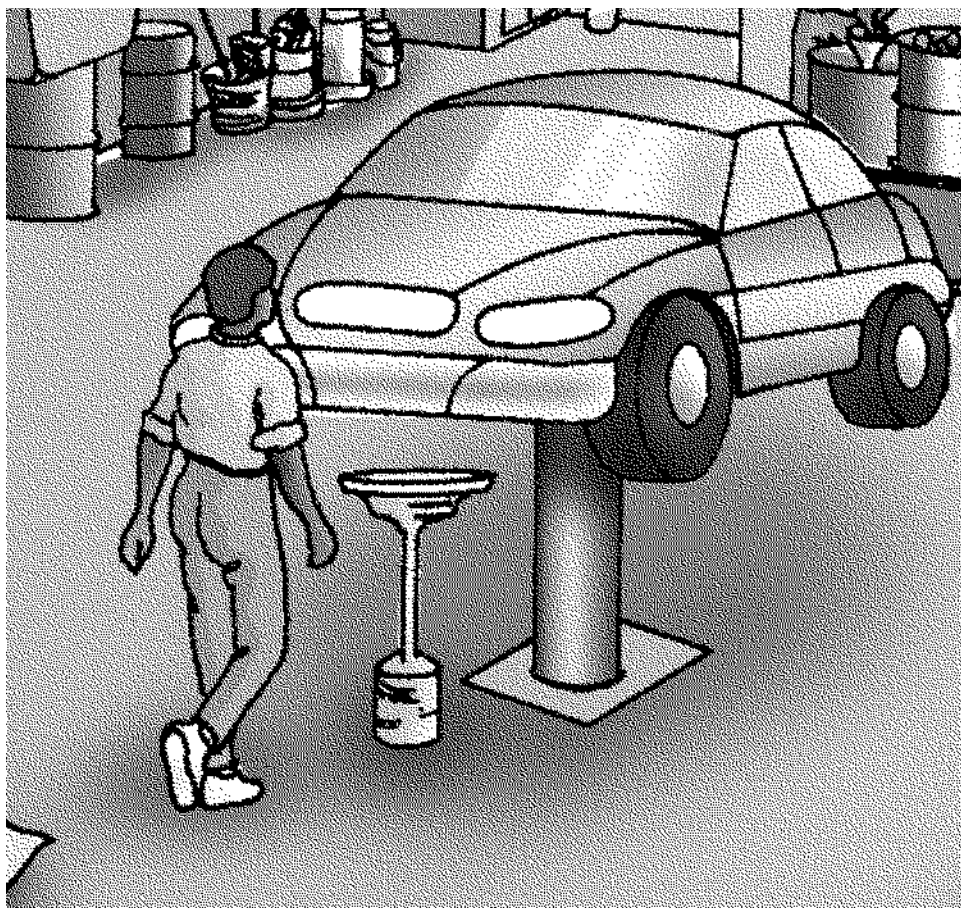
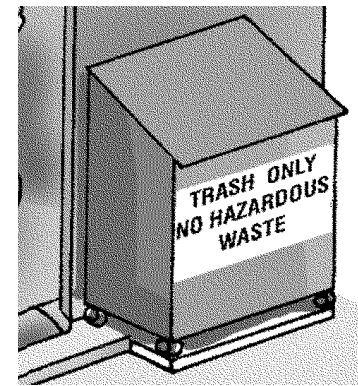
- ☒ Segregate wastes. Storage of reactive, ignitable, or flammable liquids must comply with fire codes.
- ☒ Immediately transfer fluids from drip pans to hazardous waste containers.
- ☒ Never mix solvents with waste oil.
- ☒ Drain oil filters into waste oil bin. Store them in a closed, leak-proof container labeled "DRAINED, USED OIL FILTERS" and "ACCUMULATION START DATE ____."
- ☒ Clearly label waste containers.
- ☒ Don't leave open containers of hazardous waste in or around shop. Hazardous wastes must always be stored in a closed container and in secondary containment. There should be no drain within the secondary containment area.
- ☒ Store batteries within secondary containment, either inside or outside under a tarp or roof.

- ☒ Store batteries so that they are not likely to fall and rupture.
- ☒ Store cracked batteries in a leak-proof secondary container. Treat dropped batteries as if cracked.
- ☒ Collect all waste solvent and store in closed containers.

Material Recycling & Disposal

Recycle:

- ✓ Motor oil, oil filters, grease, antifreeze
 - ✓ Brake fluid, transmission fluid, gear oil, hydraulic fluid, radiator fluids
 - ✓ Freon and other refrigerants (It is not permissible to vent these materials to the atmosphere.)
 - ✓ Cleaning solutions, solvents (Never mix with waste oil.)
 - ✓ Automotive batteries
- ☞ Fluids not recycled must be disposed of as hazardous materials. They may not be poured into drains leading to the sewer or into storm drains.
 - ☞ Empty containers (drained of all pourable liquids) may go to the trash, except for aerosol cans or containers with excessive residual fluids.
 - ☞ Aerosol cans or containers with excessive residual fluids must be disposed of as hazardous waste.
 - ☞ Dispose of baking soda used to neutralize spilled acid from a battery during cleanup as hazardous waste because it may contain lead and other contaminants.
 - ☞ Call the Sonoma County Ecodesk (565-DESK) for a list of hazardous waste recyclers and disposal sites.



Vehicle Fluid Removal

- ◆ Remove fluids from vehicles inside the shop over a concrete floor. Asphalt and dirt absorb fluids, complicating spill cleanup.
- ◆ Drain fluids into a pan or "quarter barrel." Provide secondary containment, such as a larger drip pan, outside the primary fluid collection container to contain spills. Place absorbent pads around the drain pan area if you anticipate splashing.
- ◆ Immediately empty the drip pan or "quarter barrel" into the designated storage container for that material after servicing each car. Hazardous waste must always be stored in a closed container.
- ◆ Never mix waste oil with solvents.
- ◆ Use a drain sink that mounts to the top of your used fluid drums to make it easier to empty drain pans.
- ◆ Collect spent fluids and store them in separate, clearly labeled containers. This makes recycling the fluids easier.
- ◆ Recycle fluids. (See: *Material Storage, Recycling, and Disposal*)
- ◆ Fluids not recycled must be disposed of as hazardous wastes. They may not be poured into drains leading to the sewer or into storm drains.

Leaking, Damaged, or Wrecked Vehicles

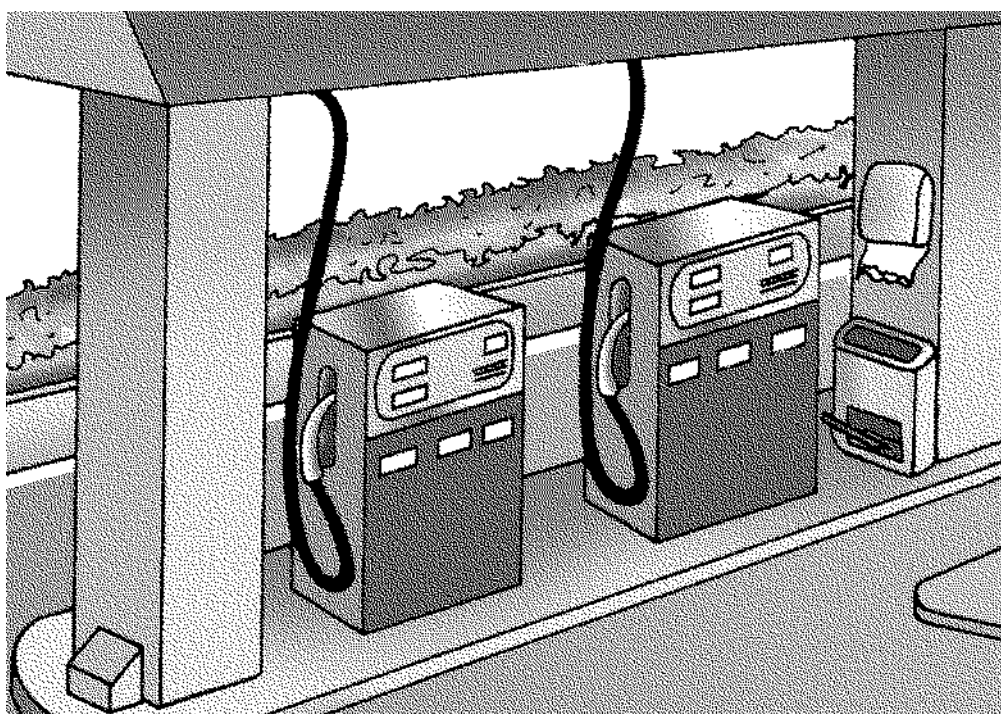
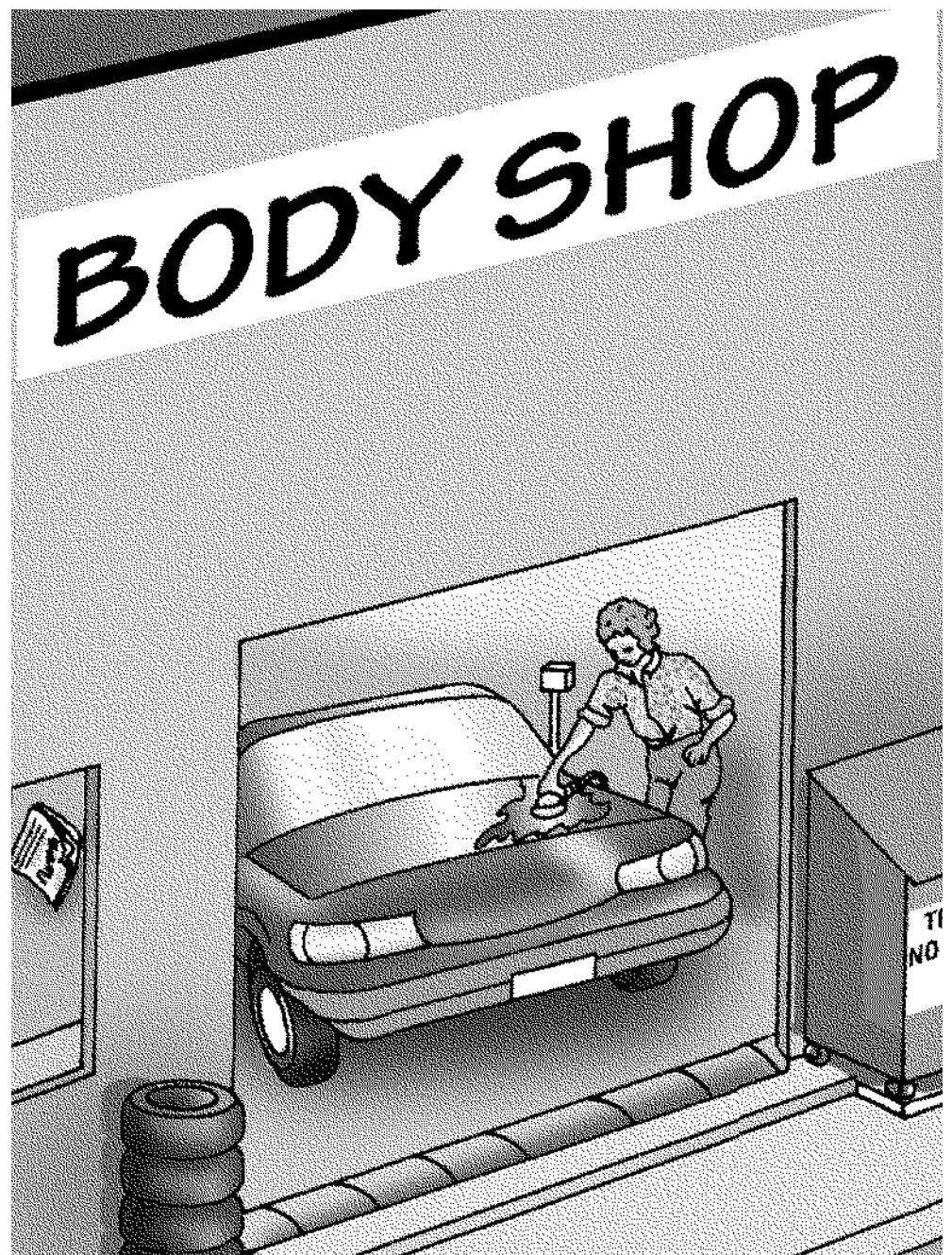
- ◆ Immediately place drip pans under leaking or wrecked vehicles to capture fluids, even if you believe that the fluids have been drained before the vehicle reached your shop.
- ◆ Immediately drain leaking fluid from vehicles to be salvaged or wrecked.
- ◆ Keep a supply of drip pans accessible for use by the towing company or customers if cars are towed to or left at your facility outside of business hours.
- ◆ Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries, even if you think all the acid has drained out. Treat dropped batteries as if cracked.

Body Repair

- Conduct body repair work indoors.
- When receiving damaged vehicles, immediately inspect for fluid leaks. Immediately place drip pans under the vehicle to capture fluids, even if you believe that the fluids have been drained out before the vehicle reached your shop.
- Capture metal filings produced by grinding or machining metal parts.
- Vacuum up loose chips, filings, and dust from sanding metal or Bondo to keep these materials out of the storm and sanitary sewers. Debris from wet sanding can be allowed to dry overnight on the shop floor, then swept and vacuumed.
- Perform all wet and dry sanding indoors. Sanding waste should be managed as hazardous waste unless laboratory testing proves it is nonhazardous.
- Capture filings from asbestos brake shoes in a separate container. This container should be kept closed and must be disposed of as a hazardous waste.
- Minimize use of hose-off degreasers to clean body parts before painting. Instead, brush off loose debris and use rags to wipe down parts.

Painting

- ◆ Minimize waste paint and thinner by carefully calculating paint needs based on surface area and by using the proper sprayer cup size.
- ◆ Reduce waste by using low volume paint mixing equipment and high efficiency painting tools.
- ◆ Collect and treat water used to control overspray or dust in the paint booth.
- ◆ Clean spray guns in a self-contained cleaner. Recycle the cleaning solution when it becomes too dirty to use. Never discharge waste to the sewer or storm drain.
- ◆ Minimize use of chemical strippers designed to remove old paint.
- ◆ Chemical stripping waste must be handled and disposed of as hazardous waste.



Fueling

- ◆ Install vapor recovery nozzles to help control drips as well as air pollution.
- ◆ Discourage "topping-off" of fuel tanks.
- ◆ Place secondary containment around the fuel truck when it is transferring fuel to the storage tank. The truck operator should remain with the truck while the transfer is in progress.
- ◆ Place a stockpile of spill clean-up materials where it will be readily accessible.
- ◆ Immediately clean up spills by spreading absorbent material, sweeping it up, and disposing of it as a hazardous waste in an approved container. An approved container is a metal container with a tight-fitting lid and proper hazardous waste label.
- ◆ Use dry clean-up methods on fuel bays and pavement whenever possible. If using water, recycle all waste water from fuel bay and pavement cleaning. Discharge of this wash water to the sewer system requires permission from the Industrial Waste Section. Discharge of any wash water to the storm drain is prohibited.
- ◆ Ensure that shutoff valves, designed to keep fuel out of the storm drain and sewer system in the event of a spill, are functioning properly. Make repairs as necessary.

Fuel Area Design

- ◆ Design fueling area to prevent spills from running off into storm drains.
- ◆ Use a perimeter drain or slope pavement inward toward sump to contain spills.
- ◆ Cover fueling area. Where covering is not possible and the fuel island is surrounded by asphalt, apply a sealant that protects asphalt from spilled fuels.
- ◆ Pave fueling area with concrete rather than asphalt for better spill control and longer life.
- ◆ Carry out all Federal and State requirements regarding underground storage tanks.

Pavement and Facility Maintenance

Inside

- ◆ To clean the shop floor:
 - ✓ Sweep the floor using a dry absorbent material.
 - ✓ Sweep and vacuum the shop floor frequently.
 - ✓ Avoid wet mopping. If using water, recycle all wash water. Discharge of this wash water to the sewer system requires permission from the Industrial Waste Section. Discharge of any wash water to storm drains is prohibited.
- ◆ Do not pour mop water into the parking lot, street, gutter, or storm drain.
- ◆ Clean out oil/water separators and grease traps at least every three months.
- ◆ Clean up spills immediately. (See: *Spill Prevention and Control*)
- ◆ Keep equipment clean. Do not allow excessive build-up of oil and grease.
- ◆ Inspect equipment for leaks on a regular basis.

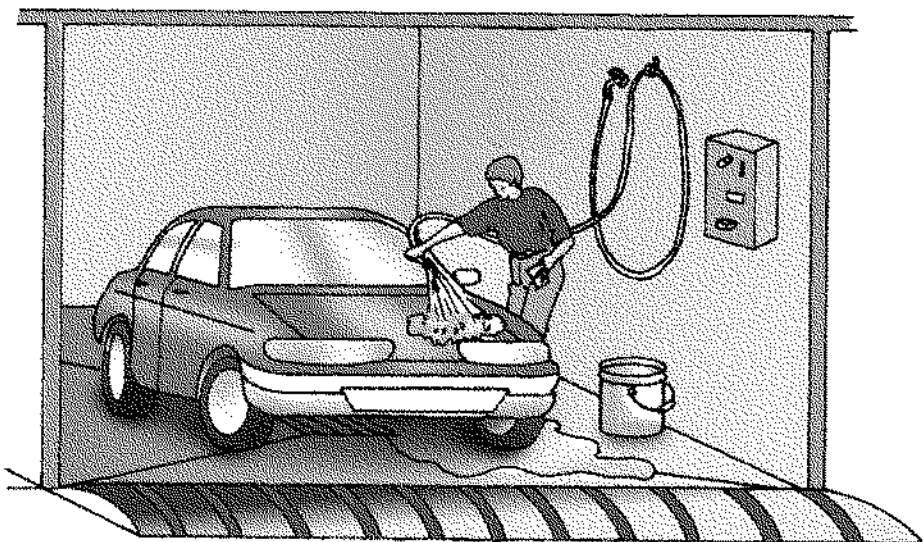
Pavement Areas

- ◆ Use dry clean-up methods on fuel bays and pavement whenever possible. If using water, recycle all wash water. Discharge of this wash water to the sewer system requires permission from the Industrial Waste Section. Discharge of any wash water to storm drains is prohibited.
- ◆ Clean up spills immediately. (See: *Spill Prevention and Control*)
- ◆ Avoid working outdoors. If you must work outside, treat the area as an extension of your service bay. Keep it clean and use dry cleanup practices.
- ◆ Keep storm drains on the property free of leaves, debris, and litter.



Landscaped Areas

- ✿ Retain existing vegetation or plant native vegetation to reduce water, fertilizer, and pesticide use.
- ✿ Avoid applying pesticides and fertilizers during the rainy season to avoid runoff of pesticides and fertilizers to the storm drain.
- ✿ Avoid over-watering landscaped areas to conserve water and to avoid discharging water which may be contaminated with nutrients and pesticides.



Vehicle Washing/Steam Cleaning

- ◆ Consider using off-site commercial washing and steam cleaning businesses.
- ◆ Use designated wash areas only.
- ◆ Cover wash area to prevent contact with storm water, berm wash area to contain wash water, and install a drain connected to the sanitary sewer. Contact the Industrial Waste Section for requirements prior to installation. Discharges to the sanitary sewer require a permit.
- ◆ Discharge vehicle wash water to the sanitary sewer only after contacting the Industrial Waste Section to obtain a sewer discharge permit. All commercial wash facilities must have and comply with a sewer use permit.
- ◆ Collect and treat water and other wastes from engine cleaning and steam cleaning with an oil/water separator before discharging to the sanitary sewer. Discharge to the sewer requires a permit.
- ◆ Do not discharge water from vehicle washing to the storm drain if you:
 - ☞ are a commercial vehicle washing facility or
 - ☞ use soap or other cleaning agents or
 - ☞ clean engines, undercarriages, tires, or wheels or
 - ☞ allow wash water to carry soap, oil, dirt, or other pollutants to the storm drain. (Soaps, even if labeled biodegradable, are toxic to aquatic life.)
- ◆ Do not allow tire dressings, wheel cleaners, or other fluids applied after washing to enter the storm drain. Apply tire dressings or other fluids to a cloth, then apply to vehicle.