

Rouge Friendly Business Program

for

VEHICLE SERVICE BUSINESSES

THE **ROUGE RIVER** PROJECT A WORLD CLASS EFFORT



BRINGING OUR RIVER BACK TO LIFE

Rouge River National Wet Weather Demonstration Project

Wayne County Department of Environment

Thank you to those individuals who contributed to this manual through their helpful comments.

John Aldrich Barry Johnson

Camp Dresser & McKee Camp Dresser & McKee

Kelly Cave Noel Mullett

Camp Dresser & McKee Wayne County Department of Environment

Doug Dennison Judy Schaefer Johnson, Johnson & Roy, Inc. MDEQ

Steve Holmi Don Tilton

Michigan Department of Environmental Quality Tilton & Associates, Inc.

(MDEQ)

A special thank you to the members of the Automotive Roundtable which served as a basis for the rest of the Rouge Friendly Business Program manuals and assessment forms.

Charles Alawan Delno Malzahn

Metro Detroit Service Station Association Greater Detroit Chamber of Commerce

George Badeen Ronald Meyer

Midwest Auto Auction, Inc. Automotive Service Association

William Gill Jennifer Sterly

Michigan Car Wash Association Greater Detroit Chamber of Commerce

John Kerekes

American Petroleum Institute

Prepared by:

Lynn M. Lefebvre and Karen G. Reaume Environmental Consulting & Technology, Inc. July 1997

This manual was produced by the Rouge River National Wet Weather Demonstration Project, which is funded, in part, by the United States Environmental Protection Agency grant #X995743-02.



TABLE OF CONTENTS

Rouge Friendly Business Program	
How You Can Benefit	
Eligible Businesses	2
How Does The Program Work	2
Program Sponsors	2
Questions	2
How Your Business Can Impact Water Quality	
Stormwater Runoff	
Watersheds	
Storm Drains	
Pollution Pathways	
Pollution Prevention	'
Best Management Practices	
Overview	. 4
Facility Management	(
Changing Vehicle Fluids	
Repairing Vehicles	
Fueling & Servicing Vehicles	!
Removing & Storing Batteries	
Grinding, Finishing & Painting Metal	
Cleaning Vehicles	13
Cleaning Paved Surfaces	14
Cleaning Up Spills & Leaks	1:
Parts & Tools Cleaning	1′
Storing & Handling Inventory	18
Storing & Disposing Wastes	20
Parking Vehicles Outside	23
Dumpster & Loading Dock Maintenance	24
Maintaining Landscaped Areas	2
Employee Training/Education	20
Assessment Form and Action Plan	2'
Who To Call For Help	
Defendance	

Rouge Friendly Business Program

The importance of the Rouge River cannot be overstated. In years past the Rouge River provided recreational opportunities for many people in the watershed. Unfortunately, the quality of the River has deteriorated so it can no longer be the recreational resource we once enjoyed. We are now engaged in a community wide effort to restore the water quality for the safety and enjoyment of all

The Rouge Friendly Business Program is the first water quality education program in the watershed to focus entirely on helping businesses help the Rouge River. The mission of the Rouge Friendly Business Program is to restore the water quality of the Rouge River by reducing pollutants entering the river. In this program, information and assistance is provided to businesses to help them prevent pollution. We hope you will join with other individuals within the Rouge River Watershed to become a *Rouge Friendly Business*.

How You Can Benefit

our citizens.

Participating businesses benefit in several ways including:

- Free advertising from decals, magnets and brochures provided by the Rouge project;
- Customers prefer to patronize Rouge Friendly Businesses;

- Reduction in operating expenses by improved housekeeping;
- Personal satisfaction that your business is doing something to help protect the environment;
- Free technical assistance to identify opportunities to prevent pollution.

Eligible Businesses

Any business located within the Rouge River Watershed can become a Rouge Friendly Business. To assist you, we have prepared material oriented to issues faced by all businesses as well as materials targeted to four types of businesses common to the area:

- Vehicle Services
- Food Services
- Construction
- Metal Machining

How Does The Program Work?

A business requests a Rouge Friendly Business Action Plan package from the Wayne County Rouge Program Office (RPO) and completes the following:

- Assessment form and action plan;
- Requests a site visit;
- Pledges to implement plan and prevent pollution.

Technical assistance is provided by the RPO throughout the process by means of written fact sheets and site visits.

Program Sponsors

The Rouge Friendly Business
Program is sponsored by Wayne
County's Department of
Environment. Funding for the
program's development and first
years of implementation has been
provided by a USEPA grant. This
program is part of a coordinated
effort to help communities comply
with the Clean Water Act as we
work together to restore and protect
our river.

This program was developed with the help of an advisory group comprised of local businesses and community leaders.

Questions

To find out more about the Rouge Friendly Business Program, call the Business Coordinator at (313) 961-0700.

How Your Business Can Impact Water Quality

Stormwater Runoff: Carrying Pollutants in its Path

Stormwater runoff is the excess water which flows over land during and after a rainfall or snow melt. As water flows over the land, it picks up and carries many materials that impact water quality. These materials include leaves, litter, excess fertilizer, animal droppings, exposed soil, and oil and grease from parking lots and streets.

Because this pollution comes from many sources, it is called nonpoint source pollution.

Watersheds: Land Draining to Rivers and Lakes

The Rouge River Watershed consists of all land and waterways that drain into the Rouge River. Since water flows downhill, watershed boundaries are ridges or high points. Therefore, all the people who live, visit or work in this area have the potential of impacting the Rouge River.

Storm Drains

The Rouge River is an important part of the local drainage system that receives and carries stormwater. The drainage system also includes structures such as catch basins, pipes (storm drains), gutters, open channels and stormwater detention and retention ponds.

The most important thing to remember is that stormwater flows directly into the river. Whatever is washed down a storm drain eventually reaches the Rouge River and the Great Lakes without benefit of any treatment.

Pollution Pathways

Most people know that it is illegal to dump chemicals or other pollutants down a storm drain. But, did you know that you may be polluting the Rouge if you allow pollutants to be washed into a storm drain with rain or washwater! For instance, you may be polluting if you:

- rinse washwater down a storm drain
- spill materials or wastes in your parking lot without cleaning them up
- allow materials or wastes stored outside to leak

Anything on the ground can become a water pollutant since stormwater runoff, and washwater collect pollutants as they travel.

Pollution Prevention

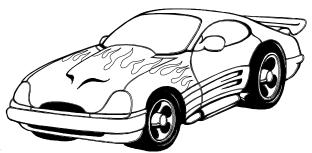
Preventing pollution is better than cleaning it up - for the business and the environment. Environmental clean up costs continue to increase every year. Many of these costs are paid for by the business community. It is easier and less costly to prevent pollution than to try to clean it up. This is true for employees as well as for business owners - both can be liable for the cost to clean up the pollution they cause.

Each type of business has certain activities, that may contribute to pollution of the Rouge River. The following pages will give you, the business owner or manager, helpful tips on preventing pollution.

One of the first things that you can do is to identify the drains on your site and determine where they lead. Next, identify the materials that are allowed to enter these drains. Finally, take steps to ensure that only non-contaminated water enters the storm drain.

Best Management Practices For Vehicle Service Businesses

Vehicle service shops can help protect water quality in important ways when employees realize what they do *can* and *does* impact the Rouge River.



The following pages describe Best

Management Practices (BMPs) for preventing pollution from the activities common to automotive shops and other vehicle-related businesses. They are as follows:

☐ Facility Management	☐ Cleaning Up Spills & Leaks
☐ Changing Vehicle Fluids	☐ Parts & Tools Cleaning
☐ Repairing Vehicles	☐ Storing & Handling Inventory
☐ Fueling & Servicing Vehicles	☐ Storing & Disposing Wastes
☐ Removing & Storing Batteries	☐ Parking Vehicles Outside
☐ Grinding, Finishing & Painting Metal	☐ Dumpster & Loading Dock Maintenance
☐ Cleaning Vehicles	☐ Maintaining Landscaped Areas
☐ Cleaning Paved Surfaces	☐ Employee Training/Education

These BMPs can show you how you can operate your business to reduce the amounts of antifreeze, oil, grease, and other substances that may enter storm drains and sanitary sewers. Understanding and using the information found on the following fact sheets will help you keep your shop in tune and protect the river.

FACILITY MANAGEMENT



ISSUES

Flooding, indoor drains, roof drains, and grease traps can all present unexpected stormwater problems. Chemicals may be flooded out of a facility or oil/water separators may malfunction. The following suggestions can help you prevent such pollution from occurring.

TIPS

Keep spill booms or other containment devices near facility openings such as loading docks to divert liquids and/or confine spills.
 Inspect roof drains at least twice a year to be sure there is no build up of leaves and/or other materials in the drains. If there is a build up, clean out the drains and dispose of the materials properly.
 Properly maintain and service all pretreatment equipment, including separators and grease traps.
 Identify all sanitary sewers and storm drains on your property. Be sure that all inside drains connect to the sanitary sewer and **not** the storm drain.

CHANGING VEHICLE FLUIDS



ISSUES

Vehicle fluids include any fluid normally used in a vehicle such as engine oil, transmission fluid, power steering fluid, brake fluid, hydraulic fluid, and radiator fluid (ethylene glycol or propylene glycol). Many of these fluids can be hazardous in themselves, and may pick up contaminants during use in the vehicle. They can contaminate water supplies and kill fish and other aquatic life even in small quantities.

<u> </u>	Change vehicle fluids indoors whenever possible. If it must be done outdoors, stay clear of any storm drains or sanitary sewers, or temporarily cover them while you work.
	Provide containment to prevent spills from entering groundwater or stormwater.
	Minimize spills and drips: use spigots, drip pans and funnels when transferring fluids.
ב	Recycle all spent fluids. Under no circumstances may any vehicle fluid be poured down any drain or dumped in the trash. Never mix with other chemicals.

REPAIRING VEHICLES



ISSUES

Stormwater runoff from vehicle and equipment maintenance/repair areas can become polluted by a variety of contaminants such as solvents and degreasing products, waste automotive fluids, oils and greases, acids, and caustic wastes. Consider following the suggestions below to help eliminate pollution from vehicle and equipment maintenance/repair areas.

Do not work outside designated service bays where spills and leaks can wash into storm drains.
Eliminate possible contamination by closing up any floor drains that may still be in your shop.
Berm working areas with curbing, similar to speed bumps, so that spills can be easily contained for cleanup.
Inspect equipment and vehicles regularly for leaking oil and fluids.
Collect leaking or dripping fluids in drip pans or containers - keep fluids separate and transfer them promptly to the proper waste or recycling drum.
Clean up leaks, drips, and other spills without large amounts of water. Use rags for small spills, a damp mop for general cleanup, and dry absorbent for larger spills.

FUELING & SERVICING VEHICLES



ISSUES

In general, your fueling area and other servicing areas should be designed and operated to minimize spilled fuel and leaked fluids coming in contact with stormwater. Consider the following helpful suggestions.

Post signs discouraging "topping-off" of fuel tanks.
Cover the fueling area if possible.
Locate roof downspouts so stormwater is directed away from fueling areas.
Use a perimeter drain or slope pavement inward with drainage to a sump; install an oil/water separator if a dead-end sump is not used or feasible.
Pave fueling area with concrete rather than asphalt; if you already have asphalt, apply a suitable sealant to protect the asphalt (fuel deteriorates asphalt).
Install fuel pump shut-offs: automatic shut-off at each pump and a manual shut-off inside the building.
Install vapor recovery nozzles on all of the pumps to help control drips as well as air pollution.

REMOVING & STORING BATTERIES



ISSUES

Lead-Acid batteries are considered a hazardous waste because of their acid and lead content. These are exempted from hazardous waste regulations if they are returned for recycling. The suggestions below can help you with storage practices and recycling.

Store batteries, new and used, indoors on an open rack so you can tell immediately if any are cracked or leaking and to avoid buildup of explosive gas. All batteries should be stored so as to avoid any accidental falls.
Store all cracked batteries in a water tight secondary containment, such as a concrete bin with sealer on the floor and walls. Do this with all cracked batteries, even if you think all the acid has drained out, because they may not be completely dry.
If you drop a battery, treat it as if it is cracked. Put it into containment until you are sure it is sound.
Cracked batteries may be shipped for recycling if they are carried in proper containers.
Contain and absorb spilled acid from broken batteries. Absorbents and baking soda used to neutralize spilled acid during clean up must be disposed of as hazardous waste because it may contain lead and other contaminants

GRINDING, FINISHING & PAINTING METAL



ISSUES

Stormwater runoff can become polluted by solvents and dusts from sanding, grinding, and painting. This runoff may contain toxic materials like cadmium and mercury. These and other potentially harmful substances can enter waterbodies directly through storm drains where they can harm fish and wildlife. Paints and solvents can also pollute soil and groundwater.

<u></u>	Use tarps and vacuums to collect wastes produced by sanding and painting. Tarps, drip pans, or other spill collection devices should be used to collect spills of paints, solvents, or other liquid materials.
	Avoid sanding in windy weather when possible. Enclose all outdoor sanding areas with tarps or plastic sheeting.
	Keep workshop areas clean of debris and grit so that the wind will not carry any waste into areas where it can contaminate stormwater.
٦	Use dry cleanup methods such as vacuuming or sweeping to clean up dust from sanding and grinding metal and body filler. Debris from wet sanding can be allowed to dry overnight on the shop floor, then swept and vacuumed. Liquid from wet sanding should not be discharged to the storm drain.
	Minimize the use of hose-off degreasers to clean body parts before painting; instead, brush off loose debris and use rags to wipe down parts.

Minimize waste paint and thinner by carefully calculating paint needs based on surface area and using the proper sprayer cup size to limit the amount of leftover paint and cleanup solvent.
Do not use water to control overspray or dust in the paint booth unless you can contain this wastewater and treat it before discharge into the sanitary sewer system.
Clean spray guns in a self-contained cleaner. Recycle the cleaning solution when it becomes too dirty to use. Never discharge cleaning waste to the sewer or storm drain.
Consider switching to spray equipment that delivers more paint to the target and less overspray such as electrostatic spray equipment, airatomized spray guns, high-volume/low-pressure spray guns, or gravity feed guns.
Used paints, paint room exhaust filters, residue and used cleaning solvent, and paint stripping residue may be considered hazardous, and if so, must be handled, stored, transported, and disposed of as a hazardous waste.

CLEANING VEHICLES



ISSUES

Cleaning vehicles and equipment outdoors or in areas where washwater will flow toward storm drains can pollute the river. Washwater can contain high concentrations of oil and grease, phosphates, and high suspended solid loads which can pollute surface waters when it flows into drainage systems. Consider the following suggestions to help you eliminate, reduce, or recycle pollutants that otherwise may contaminate stormwater.

TIPS

Use phosphate-free biodegradable soaps.
 If discharging to the sanitary sewer, designate a vehicle washing area and use only that area for vehicle washing. Wastewater should be treated by an oil/water separator or similar treatment system to remove oil, grease, and solids.
 Wastewater from steam-cleaning or pressure-washing should be recycled as much as possible. Wastewater discharges should never enter a storm

drain and may require treatment if disposed in a sanitary sewer.

CLEANING PAVED SURFACES



ISSUES

Did you know that you can reduce pollutants entering the river if you clean the pavement at your workplace? Cleaning the paved surfaces with either a broom or a mechanical sweeper on a regular basis can remove many of the large particles and litter. Every little bit helps.

Use a broom, vacuum, mechanical sweeper and/or mop to clean parking lots and paved areas around your facility regularly instead of hosing down these areas.
If you use a wet mop, dump the washwater down the sanitary sewer according to state and local requirements.
If you sweep/vacuum paved areas, dispose of the debris with other solid waste.
If water must be used to clean pavement, contain the washwater and dispose of it into the sanitary sewer or on to a vegetated area (if not toxic to plants).

CLEANING UP SPILLS & LEAKS



ISSUES

Cleaning up spills and leaks promptly from vehicles and equipment can significantly reduce pollution that reaches waterbodies through storm drains. By following the suggestions below, you can help prevent pollution as well as keep a cleaner shop and save money.

TIPS

Preparation

<u> </u>	
	Purchase, maintain and use the proper absorbent for clean up of different spills (absorbent materials). These absorbents should be easily accessible anywhere in the facility. *Use rags for small spills *Use absorbents for large spills
	Use drain mats or plugs to prevent spilled fluids from entering sanitary and storm drains, plus to help contain spilled fluids for clean up. If possible, seal all floor drains to prevent accidental discharge to sanitary drains.
	Keep a portable inflatable berm on hand for immediate response. An inflatable berm can be quickly deployed to cover an auto-sized area conveniently. Transfer fluids collected by the berm to a hazardous waste drum.
	Train your employees how to respond to a spill. Prepare a clean up plan.

Response to a spill

- Clean up **small spills** with rags; avoid paper towels. Send the rags to a laundry service and be sure to inform them of what the shop rags have been used for.
- Clean up **medium spills** with dry absorbent material (i.e.,kitty litter) to soak up the liquids. Use absorbent snakes as temporary booms to contain a liquid while you clean it up. Sweep up the used absorbent and snakes and dispose of them as hazardous wastes, or use a wet/dry shop vacuum cleaner to collect spills and dispose of the liquid with the hazardous wastes. If you keep several vacuums on hand, you can designate one for each waste and recycle the liquid. Do not use vacuums for gasoline, solvents, or other volatile fluids because of the explosive hazards.
- Contain **large spills**, then clean them up. If you have prepared a spill response and emergency plan, it will describe how to prepare for and respond to larger spills. If you have a floor drain, it must have an emergency shutoff to keep the spill from the sewer. In the case of a spill, notify the authorities as required in your plan.

PARTS & TOOLS CLEANING



ISSUES

Solvents used to clean parts and tools are hazardous materials and have the potential to ignite in sewers. Consider the following suggestions to help you eliminate, reduce or recycle those solvents/pollutants that otherwise may contaminate stormwater.

Designate specific areas for parts cleaning. Do not wash or rinse parts outdoors.
Use self-contained sinks or tanks when working with solvents. Inspect degreasing solvent tanks daily for leaks; make necessary repairs immediately.
Allow parts to drain over the solvent sink or tank, rather than allowing them to drip or spill on to the floor.
Keep the solvent sink or tank covered when not in use.
Whenever possible, choose parts-cleaning solutions and other materials that are non-toxic . Water-based cleansers can provide acceptable cleaning experiment with concentrations to find one that works.
Avoid halogen compounds, petroleum-based cleansers and cleansers with phenol. These are all highly toxic, cause difficult problems if spilled to a sewer connection, and are often costly to recycle or dispose.
Use a licensed service to haul and recycle or dispose of wastes.

STORING & HANDLING INVENTORY



ISSUES

Careful storage and handling of the materials you use can help prevent spills and leaks that could otherwise enter the sanitary or storm sewer system. Making sure lids are closed, shelves are sturdy, and work areas are clean are easy ways to prevent pollution from entering the Rouge River. The following are more suggestions to help you prevent the loss of materials and money in addition to helping the River.

Keep chemicals and other hazardous materials off of the facility floor in case of a flood.
Check that shelving is sturdy and has not weakened.
Keep your storage and work areas clean and well organized to reduce the chance of accidents, increase efficiency, and minimize leak/spill detection and reaction time.
Be sure that all containers are properly labeled to reduce the chance of using the wrong material, reduce hazardous waste generation by preventing accidental mixtures, and comply with regulatory requirements for hazardous materials and hazardous wastes.
Where possible, eliminate or reduce the number or amount of hazardous materials and wastes by substituting non-hazardous or less hazardous materials.

If they cannot be stored inside, store barrels, containers, batteries, and tires off the ground in an area where they will not be exposed to rainwater. Enclose the area with a berm or curbing and cover with a roof, cover, or tarp.
 If you keep liquid containers outdoors, keep them on a paved, impermeable surface, within a berm or other secondary containment to prevent spills from running off into the yard. Be sure that the containers are rigid, durable, water tight, and rodent-proof.
 When transferring liquids, use a funnel, spigot or hose to minimize spills.

STORING & DISPOSING WASTES



ISSUES

Hazardous waste and industrial waste materials, containers, and storage areas exposed to rain and/or runoff can pollute stormwater. The following tips on storage and disposal can help you eliminate or reduce pollutants that otherwise may contaminate stormwater.

TIPS

Waste Containers

	Place all waste in containers that are clearly labeled, rigid, durable, water tight, rodent-proof and compatible with the waste.
	Inspect your waste containers regularly for spills and leaks; if they leak they should be replaced or repaired. Keep the container lid tightly closed to keep the rainwater out and prevent leakage.
Wast	te Storage Area

Waste storage areas should not be exposed to rainwater. Achieve this by
covering the area with a roof, cover or tarp; surrounding it with a berm or
curbing, and eliminating all drains.

Keep waste storage areas clean and conduct regular inspections so that
leaks and spills can be detected as soon as possible.

Waste Handling

Never mix waste types, i.e., hazardous waste with solid waste or different hazardous waste types.

	Do not pour liquid waste to floor drains, sinks, outdoor storm drains, or sewers. Post signs at sinks and paint stencils at drains to tell people not to pour wastes down drains.
Wast	e Minimization
	Choose materials that can be recycled .
	Where possible, select suppliers who provide fresh materials and accept the used materials for recycling.
	Keep on hand only the quantities of materials that you need and use them on a "first-in, first-out" basis to avoid the need to discard unopened containers when the materials' shelf life expires.
	Store products in areas that will preserve their shelf life; the Material Safety Data Sheet (MSDS) describes proper storage conditions for specific materials.
Wast	e Disposal Options
	Recycle solvents, paints, oil filters, antifreeze, motor oil, batteries, water and lubricants.
	Recycle paint, paint thinner, and solvents either on-site or off-site. Some recycling options are ranked by the level of effort required below: Least Effort: Dirty solvent can be reused for cleaning dirty spray
	equipment and parts before equipment is cleaned in fresh solvent.
	Moderate Effort: Arrange for collection and transportation of paints, paint thinner, or spent solvents to a commercial recycling facility.
	Most Effort: Install an on-site solvent recovery unit. If your facility creates large volumes of used solvents, paint, or paint thinner, you may consider buying or leasing an on-site still to recover used solvent for reuse. Contact the Michigan Department of Environmental Quality Environmental Assistance Division for more information about on-site recycling of used solvents.

Preferred Storage and Disposal Practices

	Recommended	Recommended	
	Storage	Disposal Methods	Hazardous Waste
LIQUIDS			
Waste oil	Tank or drums	Oil recycler	Possibly
Transmission fluid	Drum	Oil recycler	Possibly
Gear oil	Drum	Oil recycler	Possibly
Solvents (solvent sink)	Solvent sink	Solvent recycler	Yes
Solvents, thinners, & misc. fluids	Tank or drums	Fluids recycler (where possible) or hazardous wastehauler	Yes
Brake fluid	Tank or drums	Hazardous wastehauler	Yes
Antifreeze	Tank or drums	Recycler or W.W.T.P. w/permission	Possibly
Paints	Original container, with lid or drum	Recycler or hazardous wastehauler	Possibly
SOLIDS			
Used parts:clean metal scrap	Bin (covered or indoors)	Scrap collector	No
Used oily parts, fuel filters, etc.	Drum	Hazardous wastehauler	Possibly
Metal shavings	Bin (covered or indoors)	Scrap collector	No
Asbestos filings	Sealed bin	Hazardous wastehauler	Yes
Tires	Covered or indoors	Tire hauler	No
Batteries-lead acid	Open rack indoors	Battery recycler or	Exempt if recycled
Batteries-dry cell	Container indoors	hazardous wastehauler	
Oil filters non-terne plated, drained & recycled	Drum (drain first)	Oil recycler	Possibly
Used rags	Rag bin with lid or Drum	Rag laundry or hazardous wastehauler	Possibly
Cans, bottles, aerosol cans, etc.	Drum	Municipal trash	No
Soiled cleanup absorbent	Drum	Municipal trash (only if non-hazardous waste) or hazardous wastehauler	Possibly
Paint filters	Drum	Trash or hazardous wastehauler	Possibly

^{*}Possibly = you need to test first -or- it may be exempt if recycled under certain conditions. If unsure, contact your MDEQ - Waste Management Division District Office.

PARKING VEHICLES OUTSIDE



ISSUES

Stormwater runoff from wrecked or stored cars can become polluted by any fluids that may have leaked from the cars such as oils and greases, acids, solvents and degreasing products. These and other harmful substances can enter waterbodies through storm sewers that connect directly to rivers and lakes. Consider the following suggestions below to help eliminate pollution from vehicles stored outdoors.

If possible, store vehicles indoors or under a roof so stormwater does not contact the area. If you must store vehicles outdoors while they await repair, watch them closely for leaks.
If you park wrecked cars outdoors or store vehicles outside for salvage or for parts, you may need to create a special area to accommodate them. The area should be roofed, if possible, paved with concrete, mounded or bermed, and kept clean.
Drain all fluids from wrecked cars when they arrive to prevent any spills or leaks.

DUMPSTER & LOADING DOCK MAINTENANCE



ISSUES

Dumpsters used for garbage should be protected from rainwater and loading docks should be kept clean to avoid unwanted substances from entering storm drains. In order to help prevent such pollution, consider the following suggestions.

TIPS Keep dumpster lid closed to keep out rainwater. Never place liquid waste or leaky garbage bags into a dumpster. Keep dumpsters and/or the dumpster enclosure locked to prevent illegal dumping. Do not hose out dumpster interior. Apply absorbent over any fluids spilled in the dumpster. Absorbent and fluid mixture will usually be knocked out when the dumpster is emptied. Keep litter from accumulating around the loading docks by providing trash receptacles. Sweep up litter, do not hose down the area. Prevent a spill incident in your loading dock area by covering the storm drain or converting the storm drain to a blind sump. Leaking dumpsters and compactors, and dumpsters that need to be cleaned out, should be reported to the management and replaced by the dumpster

leasing company.

MAINTAINING LANDSCAPED AREAS



ISSUES

Maintaining landscaped areas properly can help prevent fertilizers, pesticides, soil and grass clippings from polluting the Rouge River. Such pollution could kill fish, decrease the flow of the river, or increase plant and algae growth in the river. Consider some of the suggestions below to minimize or eliminate the amount of chemicals and other materials that may enter the river through storm drains.

Water lightly and frequently to reduce the potential for disease and insect damage. Michigan grasses only require 0.5 to 1.5 inches of water per week. A 15 to 20 minute daily watering during dry weather is usually sufficient.
Use fertilizers sparingly. Over fertilizing can actually encourage certain insects and diseases. Read directions carefully and follow them.
Use compost as an alternative to fertilizer. Compost contributes organic matter and gradually releases nutrients to the soil. Check with your city to see if they have free compost.
Minimize the use of pesticides in order to keep your lawn safe for earthworms and other "good insects". Read and follow the instructions on the label carefully, do not over apply pesticides.
Store all fertilizer and pesticide containers safely to prevent spills and dispose of the empty containers properly in the garbage.
Use a mulching mower whenever possible to leave grass clippings on the grass for added nutrients. Sweep all excess clippings onto the grassy area or into your compost pile if applicable.

EMPLOYEE TRAINING/EDUCATION



ISSUES

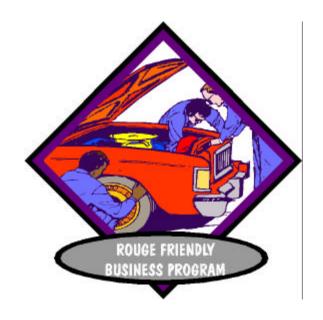
Employees and employers are often not aware that their actions can affect stormwater quality and ultimately the Rouge River. Employers need to educate themselves and their employees in order to protect the river.

Employee Training/Education should be based on 4 objectives:

- 1. Promote a clear identification and understanding of the problem, including activities with the potential to pollute stormwater;
- 2. Identify solutions (BMPs);
- 3. Promote employee ownership of the problems and the solutions; and
- 4. Integrate employee feedback into training and BMP implementation.

111	S
	Train all employees on all applicable BMPs in this package.
	Post instructional/informational signs around your shop as reminders for customers and employees, such as: ★Post "Do not pour liquid wastes into sinks and floor drains" signs ★Post "Don't Top Off" signs at gas pumps ★Stencil "No Dumping" signs on storm drains
	Develop a routine to inspect facility equipment and procedures regularly; a once-a-week walk-through can help identify potential difficulties before they become major problems.
	Join trade organizations, subscribe to trade journals, and participate in workshops and seminars to help keep yourself informed about regulations and pollution control technology.

Rouge Friendly Business Program



Assessment Form and Action Plan for Vehicle Service Businesses

Business Information		
Date		
Business Name		
Type of business		
Number of employees		
Address	Zip	
Contact person	Title	
Phone		

Assessment Form and Action Plan for Vehicle Service Businesses

The Rouge Friendly Business Program was started to protect the Rouge River and the Great Lakes from pollutants generated by area businesses. For example, oil and grease, solvents, and metals may be discharged to the sanitary sewer or storm drain by vehicle service businesses. Vehicle Service Businesses are those that repair automobiles, trucks, buses, airplanes, boats, etc; or perform services such as parts cleaning, body work, vehicle washing, fuel dispensing, or radiator, muffler, or transmission repair.

This assessment form allows you to determine whether or not your business activities pollute the Rouge River and develop an action plan to prevent this pollution. After completing this assessment form and reviewing the accompanying reference manual, you will have a good idea about how your business activities can affect the Rouge River and how to use Best Management Practices (BMPs) to prevent pollution.

This form is entirely *voluntary* and *confidential*. Its entire purpose is to make businesses aware of their actions and help prevent pollution from reaching the Rouge River. All you have to do is complete this form either on your own or with the help of staff from the Wayne County Rouge Program Office (RPO). Send in the enclosed postcard and RPO staff will schedule a site visit, go over the assessment form with you and make suggestions for necessary improvements.

In return for your pollution prevention efforts, we will provide free publicity for your business through news articles, bumper stickers, and brochures. We will also encourage consumers to look for the Rouge Friendly Business logo when they select services.

If you have questions or want help completing this form, please call and ask for the Rouge Friendly Business Coordinator at (313) 961-0700.

Directions For Completing the Assessment and Action Plan

Your Rouge Friendly Business manual presents guidelines for reducing pollutants from each of these activities. By completing the rest of this form, you can create an "Action Plan" to reduce pollution caused by your business activities.

- For each action that follows, check the appropriate box in the ASSESSMENT column. (Typically there are three boxes: *Does not apply, Always/usually, or Needs improvement*)
- Then, check the corresponding box in the ACTION PLAN column (*Plan to continue or Plan to implement*) to make the BMP part of your action plan.
- If you check *Plan to implement*, also indicate who will do it, in what time frame, and what the action will be.
- If the action requires ongoing employee training or commitment from management, check that box too as a reminder to include it in your employee education activities.

EXAMPLE	ASSESSMENT	ACTION PLAN
Parking lots & other paved	Does not apply	
areas are kept clean by use of	☐ Always/usually	→ □ Plan to continue
a broom, vacuum or wet mop.		→ ☑ Plan to implement
		Who Manager
		When Twice a month
		What Managers will inspect paved
		areas and assign clean up
	⊠ Req	uires ongoing education/commitment

	ASSESSMENT	ACTION PLAN
Facility Management Containers holding chemicals and other hazardous materials are	☐ Does not apply ☐ Always/usually	→ □ Plan to continue
protected from flooding.	☐ Needs improvement	→ Plan to implement Who When What
		☐ Requires ongoing education/commitment
Indoor drains are only connected	Does not apply	
to the sanitary sewer.	☐ Always/usually☐ Needs improvement	→ □ Plan to continue→ □ Plan to implement
		WhenWhat
		☐ Requires ongoing education/commitment
Only stormwater or permitted	☐ Does not apply	
discharges enter the storm sewers.	☐ Always/usually	→ □ Plan to continue
	☐ Needs improvement	→ □ Plan to implement Who
		When
		☐ Requires ongoing education/commitment
Changing Vehicle Fluids		
Vehicle fluids handled and disposed	Does not apply	
in a way that prevents their entry	Always/usually	→ □ Plan to continue
into a storm drain.	☐ Needs improvement	→ □ Plan to implement Who
		When
		w nat
		☐ Requires ongoing education/commitment

	ASSESSMENT	ACTION PLAN
Repairing Vehicles		
All vehicles are repaired in	Does not apply	
areas where leaks and spills can	☐ Always/usually	→ □ Plan to continue
not flow toward storm drains.	☐ Needs improvement	→ Plan to implemen
		Who When
		What
		·
		Requires ongoing education/commitment
Fueling & Servicing Vehicles		
Fueling and air/water servicing	Does not apply	
areas are either designed to prevent	☐ Always/usually	→ □ Plan to continue
the runon of stormwater and the	☐ Needs improvement	→ ☐ Plan to implemen
runoff of spills, or are operated in		Who
in a way that minimizes and promptly		When
cleans up spills.		What
Removing & Storing Batteries		Requires ongoing education/commitme
Batteries are stored in a manner	Does not apply	
that prevents their contents from	☐ Always/usually	→ ☐ Plan to continue
being released into the environment.	☐ Needs improvement	→ □ Plan to implement
		Who
		When —
	<u></u>	What —
	F	Requires ongoing education/commitment
Grinding, Finishing & Painting Metal	_	
Areas exposed to stormwater are free of	Does not apply	_
paint, solvents, washwaters, dust, grit,	☐ Always/usually	→ □ Plan to continue
chips and metal shavings.	☐ Needs improvement	→ Plan to implement
		Who
		M/ hon
		When What

	ASSESSMENT	ACTION PLAN
Cleaning Vehicles	_	
Wastewater from car washes is	Does not apply	<u>_</u>
discharged to the sanitary sewer	☐ Always/usually	→ □ Plan to continue
according to local requirements or s recycled.	☐ Needs improvement	→ Plan to implement Who
is recycled.		When
		What
	☐ Req	uires ongoing education/commitment
Cleaning Paved Surfaces		
Parking lots & other paved areas are	Does not apply	
kept clean by use of a broom, vacuum,	☐ Always/usually	→ □ Plan to continue
and/or wet mop.	☐ Needs improvement	→ ☐ Plan to implement
		Who
		When
		What
		Requires ongoing education/commitment
Cleaning Up Spills & Leaks		
Spills are not washed, swept, or	Does not apply	_
directed outdoors.	Always/usually	<u> </u>
	☐ Needs improvement	→ ☐ Plan to implement
		Who When
		What
		V IIII.
	☐ Re	quires ongoing education/commitment
Spills are contained, promptly	☐ Does not apply	
absorbed, and disposed as	☐ Always/usually	→ ☐ Plan to continue
appropriate for a solid or hazardous	☐ Needs improvement	→ □ Plan to implement
waste.		Who
		When
		What
	☐ Re	equires ongoing education/commitment
	_ ne	1 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6

Parts & Tools Cleaning	ASSESSMENT	ACTION PLAN
Part and tool cleaning is done in a	Does not appl	dv
designated area designed to prevent	☐ Always/usuall	<u>_</u>
disposal of solvents and washwaters	☐ Needs improv	_
into a storm drain.	ineeds improv	Who
		When
		What
	☐ Rec	quires ongoing education/commitment
Storing & Handling Inventory		
Inventory is stored indoors or	Does not apply	
under cover where it cannot contact	☐ Always/usually	→ ☐ Plan to continue
stormwater.	☐ Needs improvement	→ □ Plan to implement
		Who
		When
		What
		Requires ongoing education/commitment
Inventory is handled out of the rain	Does not apply	
in a manner that minimizes spills.	☐ Always/usually	→ ☐ Plan to continue
	☐ Needs improvement	→ ☐ Plan to implement
		Who
		When
		What
	 1	Requires ongoing education/commitment
Containers are closed tightly when they	Does not apply	
are transported, and when they are not	☐ Always/usually	→ □ Plan to continue
being used.	☐ Needs improvement	→ □ Plan to implement
		Who
		When
		What
		Requires ongoing education/commitment

	ASSESSMENT	ACTION PLAN
Storing & Disposing Wastes	_	
Dumpsters, waste materials, and	☐ Does not apply	
other containers are kept covered	☐ Always/usually	→ □ Plan to continue
and regularly checked for leaks.	☐ Needs improvement	→ ☐ Plan to implement
		Who
		When
		What
		Requires ongoing education/commitment
Waste is minimized by purchasing	Does not apply	
the least hazardous products, using	☐ Always/usually	→ ☐ Plan to continue
only what is needed, and recycling	☐ Needs improvement	→ ☐ Plan to implement
or re-using whenever possible.	Needs improvement	Who
of to using whenever possible.		When
		What
		Requires ongoing education/commitment
Parking Vehicles Outside		
When used cars or engines are	☐ Does not apply	
saved for parts, they are drained	☐ Always/usually	→ ☐ Plan to continue
of fluids and the fluids are	☐ Needs improvement	→ □ Plan to implement
properly disposed.		Who
		When
		What
Dumpster/Loading Dock Maintenance		Requires ongoing education/commitment
Litter is regularly cleaned up	Does not apply	
around the dumpsters and in	☐ Yes	→ □ Plan to continue
the loading dock area.	□ No	→ □ Plan to implement
ane rouding dock area.		Who
		When
		What
		Requires ongoing education/commitment

Maintaining Landscaped Areas	ASSESSMENT	ACTION PLAN
Fertilizers and pesticides are applied	Does not apply	
only when they are necessary and	☐ Always/usually	→ □ Plan to continue
in a manner that minimizes exposure	☐ Needs improvement	
to stormwater.	r	Who
		When
		What
		☐ Requires ongoing education/commitment
Grass clippings are either left on	Does not apply	
the grass or put into a compost pile.	☐ Always/usually	→ Plan to continue
	☐ Needs improvement	→ □ Plan to implement
		Who
		When
		What
		Requires ongoing education/commitmen
Employee Training/Education		
Employee Training/Education Employees are trained in how to	☐ Does not apply	
	☐ Does not apply ☐ Always/usually	→ □ Plan to continue
Employees are trained in how to	_	_
Employees are trained in how to	Always/usually	→ Plan to implement
Employees are trained in how to	Always/usually	→ ☐ Plan to implement Who When
Employees are trained in how to	Always/usually	→ ☐ Plan to implement Who When
Employees are trained in how to	Always/usually	→ ☐ Plan to implement Who When
Employees are trained in how to	Always/usually	→ ☐ Plan to implement Who When What
Employees are trained in how to prevent stormwater pollution.	☐ Always/usually ☐ Needs improvement	→ ☐ Plan to implement Who When What
Employees are trained in how to prevent stormwater pollution. Employees know what drains lead	☐ Always/usually ☐ Needs improvement ☐ Does not apply	→ ☐ Plan to implement Who When What ☐ Requires ongoing education/commitment → ☐ Plan to continue
Employees are trained in how to prevent stormwater pollution. Employees know what drains lead to the storm drainage system and what	☐ Always/usually ☐ Needs improvement ☐ Does not apply ☐ Always/usually ☐ Always/usually	→ ☐ Plan to implement Who
Employees are trained in how to prevent stormwater pollution. Employees know what drains lead to the storm drainage system and what	☐ Always/usually ☐ Needs improvement ☐ Does not apply ☐ Always/usually ☐ Always/usually	→ ☐ Plan to implement Who
Employees are trained in how to prevent stormwater pollution. Employees know what drains lead to the storm drainage system and what	☐ Always/usually ☐ Needs improvement ☐ Does not apply ☐ Always/usually ☐ Always/usually	→ ☐ Plan to implement Who When What ☐ Requires ongoing education/commitment → ☐ Plan to continue

	ASSESSMENT	ACTION PLAN
Managers are committed to	Does not apply	
environmental protection and	☐ Always/usually	→ □ Plan to continue
convey this commitment to	☐ Needs improvement	→ ☐ Plan to implemen
employees.	Who	
	When	
	What	
	☐ Requires on	ngoing education/commitment
Other Additional Actions To Prot Water Quality	☐ Requires on	_
	☐ Requires on	_
Water Quality	Requires or	_
Water Quality	ect Does not apply	ngoing education/commitment
Water Quality	Requires of Book not apply Always/usually Needs improvement	ngoing education/commitment Plan to continue
Water Quality	Requires of Books not apply Always/usually Needs improvement Who	

Thank you for completing the assessment form and action plan.

WHO TO CALL FOR HELP

MDEQ, Pollution Emergency Alert System (PEAS).....(800) 292-4706 Contact in the case of any major spill - 24 hour hotline.

	• Management (i.e., lakes, rivers, streams, page Department of Environmental Quality (MDEQ	· · · · · · · · · · · · · · · · · · ·
<u>e</u>	akland & Wayne County)	
Jackson District Office (V	Vashtenaw County)	(517) 780-7690
MDEQ, Surface Water Qua	ality Division	(517) 373-2190
MDEQ, Water Quality Div	ision	(517) 373-3710
Groundwater Program	MDEQ, Waste Management Division Request groundwater discharge application.	(517) 373-8148
	request groundwater discharge application.	

Sanitary Sewer System

Oakland County,

(contact the following three departments in the case of a spill or wit	1 /
City or Township OfficePho	ne #
Drain Commissioner's Office	(248) 858-0958
Detroit System Control Center	(313) 224-4775
Washtenaw County, 911 or	
Emergency Management Department	(734) 971-1152
Wayne County Department of Environment,	
Division of Public Works	(313) 224-3620
General information.	
Industrial Pre-treatment Program	(734) 326-7304
Information on what materials are acceptable. Permits for	
wastewater discharge to sanitary sewers.	
Detroit System Control Center	(313) 224-4775
Contact in the case of a release/spill to the sanitary sewer system.	
Watershed Management Program General Information	(734) 326-3936

Oakland County, Police Department.....Local # Washtenaw County, 911 or Sheriff Department Tip Line....(734) 973-7711 Wayne County, Illegal Dumping Hotline.....(888) 223-2363 **Hazardous Products and Hazardous Waste** MDEO, Environmental Assistance Division (EAD).....(800) 662-9278 SARA: Emergency Planning & Community Right-to-Know Hotline......(800) 535-0202 RCRA and CERCLA (Superfund Hotline).....(800) 424-9346 Information on RCRA, CERCLA (Superfund), and SARA regulations. Answers are not legally binding and cannot be considered "official" agency policy; they are helpful in interpreting the regulations. U.S. Environmental Protection Agency (USEPA), Chemical Emergency Preparedness Program....(800) 424-9346 Information regarding Tier III, Emergency Planning and Community Right-to-Know laws. Waste Management Branch.....(800) 368-5888 Technical information about federal environmental regulations that affect small businesses. **Waste Reduction and Recycling** Oakland County, Solid Waste Planning.....(248) 858-1352 Washtenaw County, Department of Public Works, Solid Waste.....(734) 994-2398 Pollution Prevention Inspection Program.....(734) 971-4542 x 2042 Wayne County Department of Environment, Land Resources Division.....(734) 326-3936 Michigan Recycling Coalition.....(517) 371-7073 MDEQ, EAD.....(800) 662-9278 MDEO, Waste Management Division Scrap Tire Program.....(517) 335-4779

Hazardous Waste Program....(517) 373-0263

Request list of registered haulers and general information.

Request list of licensed waste transporters and general information.

-	4 •	• 1	_	Τ
Pes	2111	hr	$\boldsymbol{\Delta}$	CO
1 (フレエ	JU	·	ノろし

Pesticide Use	
Michigan State University Cooperative Extension,	
Oakland County	
Washtenaw County	
Wayne County	(313) 833-3413
Michigan Department of Agriculture,	
Pesticide and Plant Pest Management Division	(517) 373-1087
MDEQ, Waste Management Division	(517) 373-2730
Information on pesticide disposal.	,
·	
National Pesticide Telecommunications Network	(800) 858-7378
Advice on recognizing and managing pesticide poisoning,	,
toxicology, general pesticide information and emergency	
response assistance.	
Flammable Materials Local Fire DepartmentLocal #	
Michigan State Police, Fire Marshal Division	(517) 322-1924
Soil Erosion Control Oakland County, Drain Commissioner's Office	(248) 858-0958
Washtenaw County,	
Environmental Health Department	(734) 971-4542

Wildlife and Habitat Protection

Michigan Department of Natural Resources (MDNR), Livonia District Office (Oakland & Wayne County)......(734) 953-0241 Jackson District Office (Washtenaw County).....(517) 522-4097

Other Important Numbers

Oakland County,

Health Department.....(248) 858-1280 or (248) 424-7000

Health Department	(734) 484-7200
Public Health Environmental Service Center	
Wayne County,	
Environmental Health Department	(734) 727-7400
Michigan Department of Health,	
Division of Water Supply	(517) 335-8322
Occupational Health	(517) 322-1608
-	

REFERENCES

Camp Dresser & McKee et al, California Storm Water Best Management Practice Handbooks, March 1993.

City of Bellevue Utilities Department, Business Partners for Clean Water Program, *Water Quality Protection for Bellevue Businesses*, October 1993.

Connecticut Department of Environmental Protection, Office of Pollution Prevention and Bureaus of Air, Water & Waste, *Automotive Fact Sheets*, May 1995.

Montana State University Extension Service, Solid Waste and Pollution Prevention Programs, *Pollution Prevention in Automotive Service: Tune Up Your Shop to Reduce Waste*, 1994.

San Francisco Water Pollution Prevention Programs, *The Green Wrench Guide:Pollution Prevention Tips for Auto Repair and Body Shops*, 1993.

University of Nebraska Cooperative Extension, *A Tool Kit for Vehicle Maintenance Shops*, 1995.

U.S. Environmental Protection Agency, *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices*, EPA 8320R-92-006, 1992.

Ventura County Storm Water Pollution Control Program, *Best Management Practices for Automotive Related Industries*, 1993.