

Figure 6.
Drain table for parts
containing oil.

WASTE TIRES

Waste tires present two unique pollution and public safety concerns: the potential for fires, and the possibility of providing a breeding ground for disease-carrying mosquitoes and rodents. Although waste tires do not ignite easily, once on fire, they burn very hot and are difficult to extinguish. Extinguishing methods are costly and can produce an oil run-off that can pollute soil and nearby surface and ground water. If improperly stored, tires may collect rainwater which can create an ideal breeding ground for mosquitoes.

Practices required by Delaware's Office of State Fire Marshal for new tire piles of greater than 100 tires:

Practices for all tire piles

1. All new tire piles of greater than 100 tires need a permit from Delaware's Office of State Fire Marshal which can be reached at (302) 739-4394.
2. All tire piles should be stacked in solid piles and in orderly manner.
3. Facility operators need to have the follow the these practices for fire prevention:
 - Maintain Fire lanes between piles
 - Keep tire piles separate from buildings and other flammable sources
 - Control weeds, grass, and other combustible materials around piles
 - Locate piles on a level area
 - Keep piles separate from sources of ignition such as volatile materials, welding and cutting equipment.
 - Designate pile area as a no smoking area.
4. A Security Fence 6 feet in height with 2 strands of barbed wire is recommended to protect tire pile from vandalism.
5. A 30 inch earthen berm should be built around tire pile to contain any liquids that could result due to combustion.
6. Bulldozers, Front-end Loaders, etc., should be available for fire suppression and control.

7. A preemergency plan should be coordinated with the local fire department.

For piles less than 10,000 tires:

- Maximum pile height is 14 feet.
- Maximum width and length is 25 feet by 100 feet
- Aisle Space between piles is 24 feet.
- Distance from any building is 25 feet.
- Distance from perimeter fence or property line is 50 feet.
- Water Supply for fire hazard should be 1,000 gals/min. for 3 hour duration.

For piles greater than 10,000 tires:

- Maximum pile height is 20 feet.
- Maximum width and length is 50 feet by 100 feet
- Aisle Space between piles is 24 feet.
- Distance from any building is 200 feet.
- Distance from perimeter fence or property line is 50 feet.
- Water Supply for fire hazard should be 2,000 gals/min. for 3 hour duration.

Environmental and Health Recommendations from DNREC for Waste Tires:

1. Store waste tires in a sunny area. (Sunlight speeds evaporation of standing water and kills heat-intolerant mosquito larvae.)
2. Store waste tires in a covered trailer, roll-off box or cage to prevent rainwater and melting snow from collecting. Tire recyclers can be contacted concerning these containers if facility is interested.
3. Store only small quantities of waste tires (150 or less) on site. Transport tires regularly to a waste-tire processor.
4. Many used tires can be resold. Recycle waste tires regularly to avoid fire hazard and storage problems. See Table 3 - for possible Tire Recyclers.

Figure 7. Do not keep piles of tires like this on-site. Recycle them Now!!



The Solid Waste Management Group which can be reached at (302)739-3820 would be glad to assist your facility in discussing best management practices for waste tires.

WINDOW-WASHING FLUID

Although window-washing fluid is not considered hazardous, because it mainly contains alcohol, water and detergent, it does contain small amounts of antifreeze and must be carefully managed. Window-washing fluid should be carefully drained, stored and recycled to prevent pollution from spills.

Recycling Window-Washing Fluid:

1. Drain window-washing fluid from vehicles as soon as possible after they enter your facility.
2. Reuse window-washing fluid in salvage facility or employee vehicles.
3. Sell or give away removed window-washing fluid to customers.
4. Store window-washing fluid in covered containers on a curbed, coated or lined, concrete surface with spill controls, including drip-pans and absorbents.

PLEASE DO NOT:

- * Do not pour window-washing fluid on the ground.

- * Do not pour window-washing fluid down sanitary sewers, storm water sewers or septic drains.
- * Do not mix window-washing fluid with other fluids.

Figure 8. This is an example of a storm drain which drains into stream or surface water body.



Table 3 - Recyclers and Equipment Resource List

List provided by Delaware Auto & Truck Recyclers Association, James Environmental Management, Inc. and compiled by DNREC, Hazardous Waste Branch, February, 1999. The list is not intended as a recommendation or presented as a complete listing. Additional Permitted Waste Haulers can be found in the appendix.

Material Type/ Company	Address	Material	Phone
Airbags			
ARA	3975 Fair Ridge Dr. Suite 20, Terrace Level-North Fairfax, VA 22033- 2924	ARA's Automotive Recyclers Air Bag Training Video	(703)385-1001
Antifreeze Recycling Equipment Vendors			
BTC Enterprises	P.O. Box 605 Medford, NJ 08055	On-site Recycling of Antifreeze and Supplier of recycling equipment.	(609)953-4947
Ed Fawley Enterprises	11890 Old Baltimore Pike Suite F, Beltsville, MD 20705	Manufacture Antifreeze Recycling Equipment (Deionization Process)	(800)736-1404
Hi-Tech Industries	17029 Devonshire St., #124 North Ridge, CA 91325	Antifreeze Recycling Equipment and Recycle Antifreeze	(800)553-0509 or www.hi- techind.com
Kleer-Flo Co.	15151 Technology Dr. Eden Prairie, MN 55344	Antifreeze and Solvent Recycling Equipment	(800)328-7942 or (612)934- 2555
PRS Incorporated	977 South 700 West SLC UT 84104	Recycle Antifreeze	(800)651-2221
Robinair	Robinair Way Montpelier, OH 43543	Antifreeze and Refrigerant Recycling Equipment	(800)628-6496 or (419)485- 5561
Safety Kleen	1506 Penrod Ct. Glenburnie, MD 21061	Recycler of Solvents, Antifreeze, and Used Oils. Supplier of recycling equipment	(800)669-5865
W.E.N Industries	12 Webb Dr. Merrimac, NH 03054	Antifreeze and Gasoline Recycling Equipment	(800)326-0469
Wharton and Barnard	Several locations in Delaware	Antifreeze Recycling Equipment	(800) 282-8566
White Industries	8804 Bash St., Ste. A Indianapolis, IN 46256	Antifreeze and Refrigerant Recycling Equipment	(800)633-2827 or (317)849- 6830
Battery Disposal			

Exide	227 Shellyland Rd. Mannheim, PA 17545	Lead Acid Batteries Smelter	(800)839-1761 or (717)653-6774
Fitzgerald Auto Salvage, Inc.	Rt. 207 and 113 P.O. Box 26 Lincoln, DE 19962	Will accept Used Batteries for shipment to disposal facility	(302)422-7584
Interstate	38 Albe Dr., Suite 10 Newark, DE 19702	Will Receive used Lead Acid Batteries for shipment	(302)292-1250
Battery Bins			
Brock Supply	P.O. Box 1000 Tempe, AZ 85280-1000	Environmental Equipment Supply	(800)889-0425

Table 3 – Continued

Material Type/ Company	Address	Material	Phone
Brake Fluid - See Oil Recyclers			
Catalytic Converter Collection Center			
Fitzgerald Auto Salvage, Inc.	Rt. 207 and 113, P.O. Box 26, Lincoln, DE 19962	Will accept Catalytic Converters for resale as salvage	(302)422-7584
Hydraulic Fluid- See Oil Recyclers or Oil Heaters			
Mercury Recyclers			
Bethlehem Apparatus Co., Inc.	890 Front St., Hellertown, PA 18055	Will accept Mercury Containing Devices	(610)838-7034
Cleanlights Recycling, Inc.	665 Hull Rd. P.O. Box 212 Masson, MI 48854	Will accept Mercury Containing Devices, Fluorescent Lamps, Computer Equipment, and Batteries.	(800)676-0044
Cleanlights Recycling, Inc.	4455 South Pine St. Spartanburg, SC 29302	Will accept Mercury Containing Devices, Fluorescent Lamps, and Batteries.	(864)597-1566
Lamp Recyclers of Louisiana, Inc.	46257 Morris Rd. Hammond, LA 70404	Will accept Mercury Containing Devices and Fluorescent Lamps	(504)345-4147 (800)309-9908
Lighting Resources, Inc.	498 Park 800 Drive Greenwood, IN 46143	Will accept Mercury Containing Devices, Fluorescent Lamps, and PCB oil	(317)888-3889
Mercury Technologies Intl./ Advanced Environmental Recycling Company.	2591 Mitchell Ave. Allentown, PA 18103	Will accept Mercury Containing Devices and Fluorescent Lamps.	(610)797-7608

Mercury Waste Solutions	21211 Durand Ave. Union Grove, WI 53182-9711	Main Facility with Mercury Retort capability for switches. Will provide information on local representatives.	(800)741-3343
Midwest Recycling & Recovery Services, Inc.	P.O. Box 667 860 White St. Dubuque, IA 52001	Will accept Mercury Containing Devices	(319)556-8037 (800)311-9572
Recyclights, Inc.	4220 Perimeter Dr. Columbus, OH 43228	Will accept Mercury Containing Devices and Debris	(800)831-2852
Sunpro	7392 Whipple Ave., NW North Canton, OH 44720	Will accept Mercury Switches	(800)488-0910
Oil Filter Disposal			
Delaware Solid Waste Authority	P.O. Box 455 Dover, DE 19903	Prefer oil filters not crushed and will transport filters	(302)739-5761
Oil Recyclers/ Transporters			
Casie Protank	3209 N. Mill Rd. Vineland, NJ 08360	Nonhazardous and Hazardous fuel/oil transporter and facility.	24hr#(609)696-4401 or (800)354-2584
Eldredge, Inc.	898 Fernhill Rd. West Chester, PA 19380	Hydrocarbon Waste Transporter and Processor, Hazardous Waste Removal: Bulk Drums, Roll-off's, etc.	(800)220-2052

Table 3. – Continued

Material Type/ Company	Address	Material	Phone
Oil Recyclers/ Transporters			
Engov Limited	898 Fernhill Rd. Vineland, NJ 08360	Recycler for Solvents, Wastewater, and Used Oils	(302)633-4480
Grigco Used Oil Service	P.O. Box 76, Dover, DE 19903	Transporter for Used Oil and Wastewater	(302)734-3340
International Petroleum Corp of DE	505 S. Market St. Wilmington, DE 19801	Non-Hazardous Waste Used Oil Transporter and Processing facility, will accept water/waste oil mixtures, and gasoline.	(800)222-2511
Mid States Oil Refining	606 Lewisville Rd. Elkton, MD 21921	Non-Hazardous Waste Used Oil Transporter and Refinery	(800)331-5408
Safety Kleen	1506 Penrod Ct. Glenburnie, MD 21061	Recycler for Solvents, Antifreeze, and Used Oils. Supplier of	(800)669-5865

		recycling equipment	
Seaway Service, Inc.	34 Clinton St. Delaware City, DE 19706	Hazardous and Non-Hazardous Waste Transporter	(302)834- 4261
Oil Heaters			
Aertech	7 Marshall St. Milford, DE 19963	Waste Oil Heater and Automotive Repair Equipment	(302) 422- 8155
Refrigerant Recycling and Removal Suppliers			
Recovery Systems and Services	122 Quigley Blvd. New Castle, DE 19720	Recover Refrigerants for Reuse by facility	(302)322- 1349
Robinair	Robinair Way Montpelier, OH 43543	Antifreeze and Refrigerant Recycling Equipment	(800)628- 6496 or (419)485- 5561
White Industries	8804 Bash St., Ste. A Indianapolis, IN 46256	Antifreeze and Refrigerant Recycling Equipment	(800)633-2827 or (317)849- 6830
Solvents - Cleaning Systems			
Engov Limited	490 Century Blvd. Wilmington, DE	Recycler for Solvents, Wastewater, and Used Oils	(302)633-4480
Kleer-Flo Co.	15151 Technology Dr. Eden Prairie, MN 55344	Antifreeze and Solvent Recycling Equipment	(800)328-7942 or (612)934- 2555
Safety Kleen	1506 Penrod Ct. Glenburnie, MD 21061	Recycler for Solvents, Antifreeze, and Used Oils. Supplier of recycling equipment	(800)669-5865
Spill Clean-up Materials Supplier			
New Pig Corp.	1 Pork Ave. Tipton, PA 16684	Spill kits, Absorbent booms and pads, etc.	(800)468-4647
Tire Recycler			
Magnus Environmental Corp.	1000 South Heald St. Wilmington, DE 19801	Recycle Truck and Car Tires	(302)655-4443
Used Oil – Bioremediation			
Micro-Guard	7911 Fallbrook Houston, TX 77064	Bioremediation product supplier	(281)807-7055

