Fleet Management P2 Fact Sheet

Utah Department of Environmental Quality

Promoting a Healthy Environment

Fleet Management

Companies involved in the transportation of goods produce many types of wastes, some hazardous, some not necessarily hazardous but still potentially damaging to the environment if not handled properly, and all requiring proper treatment and/or disposal at significant cost to the business. A list of the types of waste that such businesses must contend with might include:

- solvents
- use oil and old oil filters
- caustic cleaning solutions
- scrap tires
- antifreeze
- spent batteries
- refrigerants
- coolants
- sump sludge

Whatever the nature and characteristics of the waste may be, it all has one thing in common - all waste represents loss of resources and loss of money.

Your company can benefit in a number of ways from reducing the amount of waste it needs to dispose of. The benefits include:

- reduced operating costs
- reduced waste disposal costs
- reduced long-term liability
- preservation of environmental quality
- improved workplace safety and health
- projection of positive public image

Waste Reduction Technique for Fleet Management Wastes

Solvents

Trucking companies typically use solvents in a variety of operations, including parts cleaning, degreasing, and painting. Many of these solvents may be classified as hazardous waste, and may therefore require expensive treatment and/or disposal. A number of pollution prevention strategies can be used to reduce both the toxicity and the quantity of spent solvents requiring disposal:

- Try to find one multipurpose solvent that can serve a variety of uses, rather than having a different solvent for each operation. This will minimize the number of waste streams and increase the recycling potential of the spent solvent.
- Replace solvent cleaners with less hazardous substitutes. Consider water-based cleaners or water-soluble cutting fluids, or install a pressure wash system if feasible. Ask your supplier about suitable substitutes.
- Extend the life of solvent baths. Some ways to do this are by pre-cleaning parts with rags before placing them in the bath (then having the rags cleaned for reuse) or by using old solvent as a pre-soak to remove most of the dirt or grease before introducing the parts into the fresh bath.

- Minimize the amount of cleaning solvent lost during drainage of cleaned parts. Remove parts from the bath slowly to prevent spillage; install drip trays or racks near the bath for draining cleaned parts; return the drainage to the bath.
- Use on-site recovery techniques to make solvents reusable.

Consider leasing or purchasing solvent recovery equipment. Common methods of recovery are:

- **Decanting**--drawing off liquids from the settled sludge. Alternatively, the bottom sludge may be drained out.
- **Filtration**--passing solvent through a porous medium to remove the solids.
- **Distillation**--separation liquids from each other by taking advantage of their different boiling points.
- If the solvents cannot be made reusable, try to find a way to recycle them. One possibility for accomplishing this is to purchase solvents from a company that will pick up and recycle the spent solvent.

Oils

Used oil is a valuable resource. Handled improperly, though, it can cause serious environmental problems and result in significant financial liability for the generator of the waste oil. Here are some tips to help you avoid such problems:

- Use drip pans to catch lube oils for reuse. Handle oils carefully to avoid spillage.
- Contract with a reputable recycler to collect your used oil.

Other Wastes

- Substitute detergent-based solution for caustic cleaning solution.
- Clean parts mechanically, rather than chemically, whenever possible.
- Use paints with higher solids content, or water-based paints with no solvent, whenever possible.

Recycling Fleet Management Wastes

Many of the wastes generated by transportation companies can be recycled. It may take a little work to find reliable, reputable recyclers for some materials, but the effort will usually pay off in the long run by reducing the company’s disposal costs and future liabilities.

Getting Quick Results at Little or No Cost

Improving certain inventory control methods and operating procedures can begin to pay off almost immediately in terms of reducing waste and conserving resources. Make these practices a part of the normal routine.

- Keep storage and work areas well organized and as clean as possible, and keep all containers properly labeled.
- Inspect materials upon delivery, and immediately return unacceptable materials to the supplier.
- Keep accurate records of materials usage so that you can measure reductions in use. Mark the purchase date on each container and adopt a “first in, first out” policy so that older materials are used up before new ones are opened; assign someone to distribute and keep track of the materials.

- Locate and repair all leaks to prevent loss of materials. Practice preventive maintenance to avoid future losses.
- Keep all containers covered to prevent evaporation and spillage.
- Keep waste streams separate to increase their potential for reuse, recycling, or treatment. Don't allow nonhazardous materials, to become contaminated with hazardous materials, as this will result in all of the waste needing to be treated as hazardous waste.
- Install flow meters, flow control devices, and shut-off nozzles to cut down on water usage.

Essential Elements of a Successful Program

You can increase your company's chances of having a successful waste reduction program by following these recommendations:

- Make a commitment to pollution prevention. This commitment must start at the top, with the owner or manager of the company, and extend to every employee.
- Involve the employees in designing and implementing pollution prevention measures.
- Provide training in waste reduction techniques and practices. Don't let this be a one-shot effort--periodic "refresher courses" will help to increase employees' awareness of the importance of waste reduction.
- Establish incentives to encourage workers to use waste reduction techniques and to suggest changes in design or operating procedures that would further reduce waste generation.
- Assess the business's waste. Identify sources, types, and amounts of waste being produced. This will make it easier to pinpoint areas where waste reduction techniques can be applied and to measure the success of your efforts.
- Follow up. Reassess the vehicle maintenance shop's operation and waste handling practices periodically. A successful waste reduction program requires diligence so as to avoid the temptation of slipping back into old, more wasteful ways of doing things and to identify additional waste reduction possibilities.
- Stay alert for new developments. As long as wastes are being produced, there is the potential for waste reduction. Less-polluting materials, equipment, and procedures are constantly being developed, so that wastes that are difficult or costly to control today may be easily eliminated tomorrow.

This Fact Sheet is not intended to be a comprehensive list of all the techniques that could be used to reduce waste in the fleet management business. As each company is unique, with its own combination of wastes and its own individual way of doing business, so will each waste reduction program be different from all others.

For More Information, Contact:

Division of Solid & Hazardous Waste - (801) 538-6170
Environmental Hotline - 1 (800) 458-0145
Pollution Prevention Coordinator - (801) 536-4477
Division of Water Quality - (801) 538-6146