Guidelines – Dubai Cars and Automotive Zone (DUCAMZ) Environmental Guidelines

Issued by: Inspection Department – Operations Section

1.0 Introduction

Jebel Ali Free Zone Authority (JAFZA) manages DUCAMZ providing quality service to its customers at all time. DUCAMZ continues to invest in State-of-the Art Technology and Information Management Systems, together with skilled personnel to run them, as attested by ISO 9002 Certification that they have achieved.

DUCAMZ was established with the objective of re-exporting cars to the Asian and African region where the demand exists and continues to grow. This zone comprises one million square meters of bonded area. The location has easy access to all airports and seaports in the region and from here; the automobile is reloaded onto feeder vessels, or on to trucks which travel throughout the region on a modern network of highways, linking all the neighboring countries in the Middle East and beyond.

The Workshop and Maintenance areas of DUCAMZ need to be upgraded to meet EHS guidelines in line with the standard operating practices of PCFC.

2.0 General Guidelines

- Substitute a less toxic raw material.
- Switch to non-chlorinated compounds, such as citrus based solvent for parts cleaning.
- Always ask for and keep MSDS of any product used in the facility.
- Always use funnels or pumps to dispense chemicals.
- Collect leaking or dripping fluids in designated drip pans or containers.
- Keep a designated drip pan under the pan when unclipping hoses, unscrewing filters or removing other parts.
- Immediately transfer used fluids to proper containers. Never leave drip pans or other open containers unattended.
- Keep all chemicals in sealed containers with tight fitting lids.

- Storage and disposal areas for liquid materials should be located in or near repair and maintenance areas, undercover, protected from runoff, with berms or secondary containment, and away from flood areas and fire hazards.
- Store minimal quantities of hazardous materials.
- Provide clearly labeled, separate containers for the disposal of waste oils, fuels, and other liquid wastes.
- All fluids should be drained and replaced in areas where there are no connections to storm drains or sewers.
- Keep lids on all solvent containers when not in use.
- Seal all floor drains to prevent ground contamination.
- Use dirty solvents first when cleaning parts and use a filter on parts washer to extend life of solvent.
- Consider switching to water based cleaner instead of chlorinated spray cans of brake/ carburetor cleaner.
- Use alternative liquid materials where practical.
- Recycle liquid materials where possible.
- Prepare a hazardous materials spill recovery plan and update it as necessary.
- Keep adequate spill response equipment where liquid materials are stored.
- Contact a PCFC approved contractor for recycling of used solvent.
- Contact a PCFC approved transporter for disposal of used hazardous wastes.
- Consider installation of an on-site distillation unit to recycle spent solvents.
- Dirty floor washings should be routed with other industrial waste water (effluent) to a proper holding tank for suitable disposals.

3.0 Antifreeze

- Use antifreeze and coolants that are less toxic to the environment.
- When good antifreeze must be removed for repairs only, save it and return it to the system after repairs have been completed.

- You can reclaim used antifreeze in a closed loop system, connected by piping, and return it to the vehicle from which it came. Closed loop antifreeze recycling systems are available that connect directly to the radiator, filter the antifreeze and put it directly back into the vehicle. Because these systems are considered closed loops, they avoid the waste characterization process for the reclaimed antifreeze.

- Any filters in the recycling equipment do need to be characterized as hazardous or nonhazardous when replaced.

- Handle filters and other recycling by-products as hazardous wastes.

- Separate spent antifreeze from other wastes.

- Consider keeping antifreeze in two separate, closed containers: one marked waste anti-freeze for those that cannot be reused, and on marked usable antifreeze only for anti-freeze that can be reused.

- Do not collect antifreeze in containers that have been used to hold other substances (e.g., gasoline) unless the containers have been thoroughly cleaned. Antifreeze can leach substances from the walls of a container.

- Antifreeze in covered containers should be stored away from animals that are often attracted to its sweet flavor.

- If on-site recycling is not feasible, recycle your antifreeze through an authorized recycling service or dispose as per PCFC procedures.

- If you recycle antifreeze on the premises, filters and other recycling products may be hazardous. You need to make a waste determination.

- Consider purchasing equipment to recycle antifreeze on-site. Check before putting recycled antifreeze into any vehicle.

- Don’t mix waste antifreeze with any other waste. Keep it separate.

- Don’t mix propylene glycol & ethylene glycol – it’s harder to recycle.

- Don’t ever dispose of antifreeze in a storm drain, septic tank, or dry well.

- Don’t ever pour antifreeze on the ground/sewer system.

4.0 Brake Fluid

- Collect brake fluid in a separate, marked, closed container and identify a contractor that will recycle it. Disposals shall be done as per PCFC procedures.

- Don't put brake fluid into your used oil container.
- Don't pour brake fluid down any drain or on the ground.
- Don't spray brake cleaner around brake fluid.

5.0 Carburetor Cleaner (Cold Tank)

- Consider eliminating chlorinated carburetor cleaner and switching to a less hazardous, non – chlorinated cleaner.
- Keep the carburetor cleaner container closed when not in use to avoid evaporation.
- When carburetor cleaner is spent, contact a company to recycle it or properly dispose of it at a permitted hazardous waste disposal facility.
- Don't pour carburetor cleaner down any storm drain, or into a septic system, dry well, or sewer.
- Don't put sludge from your cold tank into the skip or on the ground.

6.0 Floor Cleaning Washwater

- Keep your floors as clean as possible at all times. Catch leaks before they spill on floor and dispose the residue in the appropriate waste container.
- Clean small, non-chlorinated spills immediately with absorbent material and save for reuse until absorbing ability is gone. It can then be placed in a waste container for suitable disposal. It is recommended to connect all industrial wastewater sources to a holding tank.
- Use absorbent pads to collect floor cleaning wash water and wring out the pads into appropriate waste container when saturated.
- Do not dispose into sewerage system. Use holding tanks.
- Receive permission from PCFC for disposal.
- Don't dispose of absorbents contaminated with chlorinated solvents in a skip. These are hazardous.
- Don't allow floor cleaning wastewater to flow into a storm drain (inside or outside) or sewerage system.

7.0 Freon (CFCs)

- Freon (if imported) should be registered with the Federal Environmental Agency (FEA).
- Keep records of the dates and quantities of Freon recovered and recycled.
- Don't evaporate or vent Freon to the atmosphere.

8.0 Hot Tank Solution

- Consider alternative cleaning methods such as detergent-based cleaning liquids.
- Accumulate all sludge from hot tanks in a closed, marked, plastic container.
- Determine through testing if sludge is hazardous, and dispose accordingly.
- Don't dispose of spent hot tank solution down any drain or on ground.
- Don't dispose of hot tank sludge in a skip or on the ground.

9.0 Lead Acid Batteries

- Properly dispose of batteries by delivering them to:
  - ⇒ A wholesaler or retailer from whom you purchased the batteries;
  - ⇒ A permitted secondary lead smelter;
  - ⇒ A facility that recycles the batteries by extracting the lead; or
  - ⇒ A collection center that sends batteries to a smelter or recycler.
- Dispose/recycle batteries at least every six months with approvals from PCFC.
- Store batteries upright in a secure, leak resistant, covered location. Store them on an open rack or in a watertight secondary containment unit to prevent leaks.
- Check regularly for leaks and cracks, if leaking dispose as hazardous waste.
- Avoid skin contact with leaking or damaged batteries.
- Neutralize acid spills and dispose off the resulting waste as hazardous if it still exhibits a characteristic of a hazardous waste.
- Place batteries on pallets and label by battery type.

- Don't store batteries outside.
- Don't dispose batteries in the garbage or skip.
- Don't take lead acid batteries to an un-secure landfill.
- Don't burn/incinerate batteries.
- Don't pour acid down the drains.

10.0 Paint Waste

- Use paints with no heavy metals as far as possible.
- Use water based paints wherever feasible.
- Re-use thinner until capability is exhausted.
- Spray paint systems should be controlled to mitigate over-spray. Use proper paint booths approved by PCFC.
- Keep lids tight on all cans of solvent or paint.
- Vent paint emissions only through suitable extraction/filtration systems
- Dispose paint residues, filters, wastewater through PCFC as per approved procedures.
- Don't dispose any waste paint to ground, sewer etc.
- Don't evaporate paint waste.
- Don't buy/store more paint than required.

11.0 Pressurized Spray Cans

- Consider phasing out spray cans in your shop and switch to non-aerosol.
- Consider using refillable canisters that use compressed air, portable parts washers or pump sprayers.
- Make sure spray cans are empty prior to disposal.
- If a spray can malfunctions, handle as hazardous waste, don't dispose as general waste.

- Recycle empty metal cans.

12.0 Shop Towels

- Minimize use of shop towels by preventing spills/leaks.
- Use cloth towels that can be cleaned/reused.
- When possible, use less hazardous cleaning solvents.
- Keep soiled shop towels in a closed container marked separately for disposal or cleaning.
- Minimize disposable paper towels or rags.
- Don't dispose dirty towels in your skip.
- Don't saturate the towels, if you do, wring them out and reuse the liquid.
- Don't dispose solvents by pouring them into containers of used shop towels.

13.0 Solvents and Solvent Tanks

- Consider using less hazardous solvents.
- Install a filter on the solvent sink and dispose filters as hazardous waste.
- Make sure a solvent is dirty before using a new solvent.
- Remember that sludge, filters etc. are hazardous and should be handled, disposed as such.
- Keep different types of solvents in separate, clearly labeled, closed containers.
- Don't dispose spent solvents by pouring them on the ground/floor drains or by evaporating.
- Don't mix solvents with other wastes or used oil.

14.0 Spray Cabinet Wash Water

- Skim off oil from wash water and store separately for disposal.
- Contact PCFC for disposal of wash water.
- Accumulate paint sludge in closed containers for disposal as per standard procedures.

- Close of all drains that lead to storm sewers, septic tanks etc.
- Check with PCFC for disposal of any wastes from this unit.
- Don't dispose paint sludge or any hazardous waste in the domestic skip.

15.0 Sump Sludges

- Have sludge segregated/tested/analyzed prior to disposal. Keep all records of disposal.
- Don't put hazardous sludge in the skip or ground.
- Don't use a domestic tanker service for sludge disposal.
- Obtain relevant forms from PCFC for disposal to DM facilities.

16.0 Transmission Filters

- Remove oil by draining for minimum 24 hours.
- Keep filters in a container marked separately for "Transmission Filters".
- Try & locate a waste recycling facility for these filters.
- Put transmission fluid drained from filters in your "Used Oil" Container.
- Don't discard any filters in the trash skip.

17.0 Transmission Fluid

- Catch the Automatic Transmission fluid (ATF) in containers when removed/drained from the vehicle.
- Designate a proper area in the workshop to help consolidate/arrange wastes.
- Keep used oil in a properly marked container (Used Oil Only).
- Use a specially designated Mop and bucket (or sponge) to collect spills and transfer to a used ATF container.
- Make sure that your container for wastes is placed in a secure area and train your workers.
- Don't dispose used ATF in a sewer, septic tank, drainage system.
- Don't mix brake or carburetor cleaners/fluids with ATF.

- Dispose ATF in accordance with PCFC procedures.
- Use only approved transporters to collect/dispose the wastes.

18.0 Used Oil

- Change engine oil using non spill vacuum-type systems to perform spill-proof oil changes or to suction oily water from bilges.
- Prevent spills by using containment around used oil containers.
- Keep floor drains closed when oil is being drained.
- Catch oil dripping from parts, transfer funnels, leaking vehicles etc. in a drip pan.
- Don't rinse the residual oil from the container down the drain.
- Keep used oil in a properly marked container (Used Oil Only). Never use containers that held chemicals such as bleach.
- Never temporarily store used oil in any container that once held food, beverages or chemicals
- Make sure that your container for wastes is placed in a secure area and train your workers.
- Use only approved transporters to collect/dispose the wastes.
- Know where the waste oil goes from your facility. Keep all disposal /recycling records.
- Don't pour used oil on the ground, storm drains, floor drains, septic tank etc.
- Don't mix incompatible wastes like brake fluid, used antifreeze, solvent cleaners, paint etc. with used oils.
- Try and identify used oil recycling companies instead of disposal.

19.0 Used Oil Filters

- If necessary, use a filter wrench to loosen the old oil filter and carefully removed it. Special handling is required to properly drain an oil filter.
- Remove oil by puncturing filter and collect after draining for minimum 24 hours at an approximate temperature of 60°F. *(The time required to effectively remove the used oil will take longer than 12 hours.)*

- Turn the filter upside down in a used oil collection container, such as drip pan. Drain as much oil as possible from the filter.
- Keep used drained/un-drained filters in separate marked containers.
- Keep used oil from filters in a properly marked container (Used Oil Only).
- Whether you recycle or dispose of your used oil filter, it must be drained of used oil.
- Use only approved transporters to collect/dispose the wastes.
- Dispose filters in accordance with PCFC procedures.
- Don't put filters in your waste skip.

20.0 Underground Storage Tanks

- Get your underground storage tanks approved by the authority (PCFC).
- Ensure that the tanks are in compliance with leak detection requirements of PCFC
- Don't remove/dispose contents of the storage tanks without PCFC approvals.

21.0 Tires

- Disposal of waste tires should be as per standard PCFC procedures.
- Identify rethreading companies to recycle the tires.
- Store the tires in accordance with PCFC requirements.
- Don't accumulate large number of tires. It is a fire hazard.
- Don't illegally dispose or burn tires.