

WASTE CONTROL AT MOTOR VEHICLE REPAIR AND SERVICE PREMISES - BEST PRACTICE ENVIRONMENTAL MANAGEMENT

Publication 462

July 1995

INTRODUCTION

The motor vehicle repair industry gives rise to a number of waste streams that can potentially affect the environment. EPA has encountered many pollution and waste handling problems associated with the motor vehicle repair and service industry.

This bulletin has been prepared to advise owners, managers and employees in this industry about best practice in handling such wastes.

EPA recommends the needs or uses of certain materials or equipment at your premises be assessed to help minimise waste generation.

Stockpiling or improperly disposing of wastes 'out the back' does not solve any problems, it helps create them.

WASTE OIL

Waste oils including used engine (sump) oil, gear oil, differential oil, automatic transmission fluid, brake fluid and other related products are prescribed industrial wastes and should be securely stored in good quality bulk tanks or 200 litre drums.

Tanks/drums of oil must be stored on an impervious concrete bunded area, preferably under a roof.

Transport contractors engaged to remove waste oil must use vehicles covered by a current waste transport permit issued by EPA. The oil must be taken to

premises licensed by EPA for disposal, refining or re-use.

EPA waste transport certificates must be completed by the waste generator, or an accredited agent, for each load taken from a premises.

Used oil filters should be stored in drums for collection in the same way as for oils.

- Waste oils must not be tipped down stormwater drains, sewers, onto soil or burnt.
- New oil and waste oil containers with residues, including oil filters, must not be burnt or placed in 'dry inert type waste bins' unless fully drained and cleaned.
- Oily/greasy rags and paper, oil soaked sawdust, plastics and rubber must not be burnt.

WARNING: The use of incinerators for the burning of industrial waste is not permitted, unless licensed or permitted by EPA to do so in modern pollution controlled facilities.

DEGREASING AND PARTS WASHING

Degreasing of engines and other large components may be done in either:

- ❑ a bunded area or sealed bay with a concrete pad graded to a sump. Washings should flow to a silt/rubbish collector. Liquids from the collector should be pumped to an effective oil/water separator designed for the wastes generated, the degreasers and temperatures employed. The separator discharges trade waste to sewer (authorised by your local sewerage authority); or
- ❑ a large caustic degreaser bath; or
- ❑ a small degreaser trough and irrigator can be used for small parts. Waste solvent in these units is usually collected for recycling by contractors. Waste solvents and sludges must be disposed of as prescribed wastes. See the attached flow chart for correct waste discharge.

WASHING VEHICLES

New vehicles and parts may need dewaxing. Most vehicles will need mud and grease cleaned off prior to repairing or servicing. When repaired vehicles are washed and rubbed-down, filler and paint particles are cleaned off. Depending on requirements, such operations may be carried out by:

- ❑ wiping the vehicle with a wet sponge or scratch resistant cloth and cleaning up the floor; or
- ❑ washing in a bunded or graded pavement area. Washings from this area should flow to an interceptor pit or separator which discharges to sewer (with approval from the water board); or
- ❑ washing occasionally (no more than two cars per day) on a fully grassed absorbent area in your premises, using at least twenty square metres per vehicle per day; or
- ❑ washing on a gently sloping smooth pavement where washings are collected and pumped by a suction tube boom to a portable interceptor tank. The advantage is that occupiers of leased premises do not pay for a permanent installation.

High pressure wash guns producing uncontrolled discharges must only be used where proper waste collection and disposal facilities are provided.

Storm water drains are for clean rain water. Wash water wastes and detergents must not flow to storm water drains in sewered areas. See attached flow chart.

RADIATOR FLUID

Radiator fluid coolants often contain ethylene glycol and corrosion inhibitors. These liquids must be discharged to sewer (with approval) or removed as prescribed waste.

BATTERIES

Used batteries should be stored under cover and in a spill tray. Batteries should be taken to metal recycling collection depots, or sales outlets.

Batteries may only be broken up or have their contents tipped out at appropriate facilities specialising in this work.

SPRAY PAINTING

Spray painting should be conducted in a proper booth which has an exhaust fan and a filtering or washing system.

Discharges pass out of the premises via a vertical, open topped stack. The stack should be at least three metres higher than the highest roof level within fifteen metres. The exhaust velocity must be at least ten to fifteen metres per second.

Filtering devices should be properly and regularly maintained. Spray painting is not permitted outdoors, nor are discharges allowed to flow outdoors via doorways and windows.

Two pack type paints shall only be used in water wash booths.

Accumulated sludge from water wash booths, waste paints and thinners/solvents must be disposed of as prescribed waste.

TYRES

Used tyres should be sent to a recycling plant or used for other appropriate re-use purposes. EPA has lists of used tyre collectors available.

Licensed landfills can accept tyres only if shredded into pieces no greater than 250 mm.

The storage of 600 tyres (about five tonnes) or more requires a high standard of storage to avoid pollution problems arising from fires.

Tyre storage should be minimised and any areas used it should be securely fenced.

Tyre piles of up to five tonnes, and other combustible or hazardous materials, should be separated by fire resistant walls or a thirty metre cleared area.

AIR CONDITIONER AND CFC REFRIGERANT GASES

Vehicle air conditioners containing chlorofluorocarbons (CFCs) must only be serviced by persons accredited by the Automotive Air Conditioning Registration Board. CFCs must be removed from air conditioners by use of a properly designed and operating recovery unit. Collected CFCs must be re-used or provided to authorised recyclers.

Accredited service persons must observe an industry code of practice designed to minimise the release of CFCs to the atmosphere. Written records must be kept of CFC purchases, giving the name of CFCs, quantities and the seller's name and address.

Note:

Advice concerning waste water control, fuel tank installations and soil contamination at service stations is covered by the *Industry Code of Practice AIP CP1-1992* and *AIP CP4 - 1993*.

For metropolitan enquiries about trade waste discharges to sewer, contact the Trade Waste Help Desk at South East Water (Ph: 9783 6677), Yarra Valley Water (Ph: 9874 2122) or City West Water (Ph: 9313 8422), or your local sewerage authority.

For further advice on where particular wastes may be taken and by whom, contact the Victorian Waste Management Association on 9699 8833.

If unsure about correct waste disposal methods or management, contact EPA's Dandenong office (Ph: 9794 0677) or Melbourne office (Ph: 9628 5622).

FAILURE TO OBSERVE ADVICE PROVIDED IN THIS INFORMATION BULLETIN MAY CAUSE ENVIRONMENTAL PROBLEMS AND RESULT IN SUBSTANTIAL COSTS BEING IMPOSED AS A RESULT OF EPA ENFORCEMENT ACTION, BY WAY OF NOTICES OR PROSECUTION.

REFERENCES

- *Environment Protection (Prescribed Waste) Regulations 1987*, as amended
- *Bunding Guidelines*
EPA publication 347
- *Environment Protection (Transport) Regulations*
- *Control of Wastewater from Service Station Vehicle Washes*
EPA Technical Guideline 201
- *Spray Booth Guidelines*
EPA Technical Guideline TG107/91
- *EPA Draft Information Bulletin on Tyre Storage*
- *Industrial Waste Management Policy (Control of Ozone Depleting Substances)*
No. IW-1B
- *Code of Practice - Design, Installation and Servicing of Vehicle Air Conditioners*
- *State Environment Protection Policy, The Waters of the Dandenong Valley*
No. W-28A
- *Code of Practice for Control of Water Effluents from Service Stations*
AIP CPI - 1992 Australian Institute of Petroleum Ltd
- *Environment Protection Act 1970*

OTHER EPA PUBLICATIONS

- *Summary of Industrial Waste Regulations*
Publication 387
- *Responsibilities for Industrial Waste Management*
Publication 388
- *Instructions to Complete Transport Certificates*
Publication 395

These guidelines have been documented to provide a summary of issues and assistance in understanding EPA requirements. They are for guidance only and are not intended to be either prescriptive or exhaustive. Each situation will be assessed by EPA according to its own merits.