European Bank
for Reconstruction and Development

Sub-sectoral Environmental and Social Guidelines: Automotive Dealers/Retailers

PROCESS DESCRIPTION

Vehicle retail is typically environmentally benign. However, environmental impacts may be associated with secondary activities such as:

- Refuelling facilities and bulk storage of petroleum products;
- Wastewater generation through car washing and valeting;
- Solid waste generation from packaging materials and normal office activities.

Automotive dealers may also have ancillary facilities such as:

- General vehicle servicing, maintenance and repair facilities;
- Bulk storage of clean and used oils and other associated liquids, e.g. brake fluid;
- Paint and car body repair shops.

KEY ENVIRONMENTAL, HEALTH AND SAFETY RISK/LIABILITY ISSUES

Wastewater

Wastewater arising from car washing and valeting may contain oils, detergents and elevated concentrations of silt and grit. On many facilities wash water and storm water is not separated, and wastewater discharges may be large. Vehicle degreasing and cleaning should be carried out in a designated wash bay which is impermeable and isolated from the surrounding area by a raised kerb or "roll-over" bund where the waste water can be directed to the municipal sewage system or to a sealed sump (collection pit).

On-site wastewater treatment may be rudimentary, consisting of a multi-chambered tank (interceptor or oil water separator) designed to trap floating oils and allow suspended solids to settle. However, if detergents are present in the wastewater stream these can combine with the oil to form an emulsion so that the oil no longer floats on the surface thereby compromising the effectiveness of the interceptor in trapping oils.

Following treatment, wastewater is typically discharged to the local municipal sewer system. Such discharges usually require permitting and monitoring. On older or more remote facilities, wastewater discharge may be achieved via "soakaways", i.e. rubble filled pits designed to allow water to disperse into the surrounding soil and groundwater. Such discharges have the potential to contaminate soil and groundwater.

Fuel Storage and Handling

In most cases, dealerships have provision for the storage and dispensing of fuel. These facilities typically comprise at least two underground storage tanks (one for petroleum spirit and one for diesel) along with associated filling lines, suction lines, vent lines and dispensers. In most cases, fuel storage and dispensing is considered a minor part of the operation and therefore, the focus on equipment integrity and monitoring of fuel use is often much less stringent than would be expected on a facility primarily involved in fuel handling. Losses from storage tanks and their associated fuel lines can have a substantial impact on the local soil and groundwater. Accumulation of vapours associated with petroleum losses may have direct implications for human health and safety either through exposure to toxic materials or through explosive combustion. These aspects are covered in detail in the Petrol/Gasoline Retailing Guideline.

Fire and Explosion

Fires and explosions can be caused by careless handling of petrol during vehicle repair and maintenance. Petrol fires are always serious and often result in fatal or major injuries, as well as major property damage. A fuel retriever for draining tanks and lines should always be used, in particular following misfuelling diesel with petrol, and vice versa and recovered fuel should not be mixed with waste oil storage.

Waste Storage and Handling

The principle non-aqueous wastes generated by car dealerships are as follows:

- Packaging materials and temporary covers associated with new cars;
- Waste oils;
- Waste paints and solvents;
- Oil contaminated solids such as oily rags and oil filters;
- Solid wastes, such as batteries, tyres or belts;
- Office wastes principally waste paper.

Oils, paints and some solid wastes may be classified as hazardous wastes and thus require special disposal methodologies.

Wastes should be segregated into the different types to enable recycling where available. It should be stored in containers that are dry and covered to prevent entry of rainwater and watertight to prevent leakage.

Air Emissions

The principal atmospheric emissions issues associated with car dealerships are:

- Volatile organic compounds from fuel storage and dispensing;
- Solvents from paint shops;
- Vehicle exhausts;
- Dust from moving and storing materials.

Although prohibited in most countries, the burning of tyres may occur which will release extremely polluting compounds.

Hazardous Substances

Car dealerships will be handling and storing hazardous substances such as oils, paints, solvents, antifreeze, other coolant additives and brake fluids that if not handled correctly could contaminate surface water drains.

All storage tanks and drums should be located on an impermeable base with an oil-tight, contained area with no drainage point.

Leaks of these hazardous substances may also occur from vehicles while parked on the site or while undergoing maintenance. Any leaks and spills should be soaked up using absorbent material which is disposed of off-site as hazardous waste.

Car Transporters

Loading and unloading of car transporters can happen on the road outside the dealership or within an area within the dealership that may be filled with display vehicles. Transporter drivers often have to work around the vehicle and stand in the road and may be struck by passing vehicles.

Vehicles should only be loaded/unloaded in areas where the lighting is adequate. Where car transporters are fitted with loading lights, these should be positioned so that they do not dazzle drivers moving vehicles on/off or when tying down.

Falls

Falls from height are the cause of nearly 10%[1] of injuries in the motor vehicle repair business, including falling from ladders, falling into vehicle inspection pits, from the tops of high-sided vehicles and raised storage areas.

Falls from car transporters, often from the upper decks, can result in death or serious injuries. Serious accidents often involve people falling more than 2m. Lower falls occur, including through openings in the decking and from ladders, but these are less common and serious injuries are less likely.

Collision/Strike

"Struck by" accidents are the cause of about 20% of injuries in motor vehicle repair. This includes being struck by:

- Vehicles falling off inspection lifts;
- Materials falling from elevated storage areas or the raised forks on fork lift trucks;
- Tools and materials ejected from plant and equipment;
- Movement of vehicles under repair.

OTHER ENVIRONMENTAL, HEALTH AND SAFETY RISK/LIABILITY ISSUES

Permitting

Premises using more than 150kg per hour or 200 tonnes per year of organic solvents for surface treating (e.g. painting or cleaning) may be subject to national regulations for example, the Integrated Pollution Prevention and Control Directive (2008/1/EC). Businesses using smaller quantities of solvents, or unloading substantial quantities of fuel from tankers may also require a permit.

Polychlorinated Biphenyls (PCBs) & Asbestos

- PCBs are a group of substances which are good electrical insulators. Typically, PCBs may be present as constituents of hydraulic oils or dielectric fluids in electrical switchgear, transformers and fluorescent light starters;

- Asbestos has been used on a large scale for many years as a fire proofing and insulation material and may be encountered in a wide range of forms including asbestos cement boards, as fire retardant gaskets in pipework and as fire retardant insulation around boilers and furnaces. It may be found in brake linings.

Particular attention should be given to buildings constructed before the 1980s as these may contain PCBs and asbestos.

End of Life Vehicles (ELV)

Within the EU, under directive 2000/53/EC, vehicles that have reached the end of their useful life (i.e. having no or a negative, market value) must be delivered to an authorised treatment facility for recycling and recovery and a certificate of destruction provided to the relevant authorities on transfer.

Isocyanate Paint Exposure

Exposure to 2-pack isocyanate based paints during paint spraying can cause occupational asthma. Vehicle paint sprayers are 80 times

[1] UK HSE 2008

more likely to get asthma than the average worker. 1 in 10 workers in bodyshops who get asthma from isocyanates are not sprayers[2]. Direct contact may also cause irritation to skin and eyes. Suitable Personal Protective Equipment (PPE) should be provided and worn.

Manual Handling

Lifting, repetitive work and posture injuries occur as a result of lifting and carrying heavy or awkward shaped items such as vehicle parts. Repetitive tasks can lead to musculoskeletal injuries.

Sharp Edges and Machinery

Sharp tools and machinery are used in vehicle repair such as grinders, and cutting & welding tools. All equipment should have safety guarding and workers should be issued with appropriate PPE.

KEY SOCIAL, LABOUR AND COMMUNITY RISK/LIABILITY ISSUES

Vandalism and Arson

Tyres, old exhausts and other discarded car parts may be targets for theft, vandalism and arson.

OTHER SOCIAL, LABOUR AND COMMUNITY RISK/LIABILITY ISSUES

Nuisance

- Noise from vehicle movements;
- Vehicle movements and traffic congestion, particularly if the site is operating in a residential area and open outside normal business hours;
- Glare from lighting of car storage compounds.

FINANCIAL IMPLICATIONS

- If contamination affects neighbouring property, water supplies or public health, the regulatory authorities may require remediation of the contamination or financial compensation. The cost of clean up of contamination may be high, potentially exceeding the value of the site;
- Injuries may lead to increased payroll costs to replaced skilled workers;
- Fines, penalties and third party claims may be incurred for non-compliance with environment, health and safety regulations.
- Atmospheric emissions from spray booths may lead to environmental degradation resulting in the imposition of fines or prohibitions on the operating company;

IMPROVEMENTS

Environment, Health and Safety Improvements

- Consider colour coding gullies and manhole covers for surface water and foul drainage to prevent accidental discharge to wrong drainage system;
- Ensure discharges of contaminated water are directed to the foul sewer;

[2] UK HSE 2003

- In areas where maintenance, dismantling and refuelling activities are carried out, install an impermeable surface with a raised edge with drainage to a sealed sump or via an oil separator to the municipal sewage collection system. Particular care should be taken when cleaning such areas;

- Designate an area for vehicle washing and valeting that is on impermeable surface and isolated by a raised edge or bund. The water should be directed to municipal sewage collection but should not pass through an oil/water separator;

- Consider installing a washwater recycling system to reduce water use and associated costs;

- Install valves at the oil separator outlet to close it off during cleaning operations.

- Wastes should be collected separately in sealed or covered containers for recycling where facilities exist or disposal by authorised routes;

- Acid batteries should be stored intact and upright in an acid resistant contained compound or purpose built bin. These can be recycled where schemes exist.

- Ensure suitable materials and equipment are available to deal with spillages and train staff in their use;

- Carry out regular inspection and testing of tanks and pipelines.

- Consider installing leak detection.

- Hazardous chemicals should be stored in contained areas or cabinets as close to point of use as possible, but as far away from surface water drains as possible.

- Ensure all oil storage tanks and drums are located on an impermeable base within an oil tight bund wall.

- Carry out regular inspections of all containment facilities to prevent leakage;

- Provision of personal protective equipment (PPE) that is fit for the task to prevent injury and maintain hygiene standards. Staff should be trained in the correct selection, use and maintenance of PPE;

- Consider installation of ventilation equipment and spray boxes to minimise solvent emissions and inhalation of other hazardous substances such as isocyanates;

- Train workers in correct use of machinery and safety devices;

- Redesign manual processes to avoid heavy lifting/repetitive activities;

- Install mechanical lifting aids where possible and rotate work tasks to reduce repetitive activities and exposure to biological hazards;

- Consider installation of anti-slip surface in areas that are prone to be wet and greasy;

- Surfaces should be regularly checked for diesel, oil and lubricating grease;

- Use a proprietary fuel retriever/adaptor when draining petrol from tanks and lines;

- Install safe storage facilities for containers of flammable liquids;

- Use cold cutting and repair techniques rather than hot work to minimise the risk of fire and explosion.

- Mark edges of all openings in floors, fence or board them when not in use. Ensure good lighting levels and control customer access.

- Provide proper access equipment to any work at height and means to prevent persons from falling. Train employees in its safe use

- Where practicable, provide permanent access to raised storage areas, otherwise ladders should be secured. Provide guard rails around open edges;

Social, Labour and Community Improvements

- Ensure tyres, old exhausts and other discarded car parts are stored securely to prevent theft, vandalism and arson.

GUIDE TO INITIAL DUE DILIGENCE SITE VISITS

During the initial site visit, the issues will vary according to the size of fuel station, the range of other facilities provided on the site and on the level of environment, health and safety management already introduced. While visiting the site it is important to discuss and review the following:

Environment, Health and Safety

- Check the proximity of other property, particularly if in a residential area;

- Check the distance to the nearest watercourse. Is there evidence of a petrol sheen on the surface of the water?

- What is the standard of "house-keeping" on site? Do areas look clean and tidy? Look for evidence of old spills that have not been removed, leaking pipes, petrol sheen on puddles etc;

- Check signage around the site. Does it convey the health and safety risks?

- Is fire fighting, first aid and spill kit equipment readily available?

- Check whether the site has a system of product inventory control to monitor for system leaks?

- Check the age and condition of buildings, tanks, and equipment;

- Check whether the site has leak detection alarms;

- Check that there is a documented history of tank maintenance and testing;

- Check that waste storage areas are clear of debris and that containers are covered to prevent waste escaping, for example, check that waste containers have lids or are stored in an area with a roof;

- Check that waste disposal takes place on a regular basis;

- Check that wages and working hours are consistent with the average for the sector and national standards;

- Has the company any insurance and have there been any claims against these policies?

- Have there been any recent (within last three years) incidents on site such as injuries, fires/explosions, spills?
- Does the site have an emergency response plan for spills, fires etc? When was the last practice?
- Have the premises been inspected recently (within the past 2 years) by the regulatory authorities e.g. for fire safety and environment? What were their findings?
- Does the business plan have line items for Environment, Health and Safety improvements?
- Check the conditions and duration of validity for all permits.

Social, Labour and Community

- Check that labour standards, contracting and remuneration are in line with national law and are consistent with the average for the sector;
- Check that hours worked, including overtime, are recorded and staff should receive written details of hours worked and payment received;
- Check that wages and working hours are consistent with the average for the sector and national standards;
- Has the Company received inspections from the local labour inspectorate in the previous three years? Have these resulted in any penalties, fines, major recommendations or corrective action plans?
- Does the organisation have a grievance mechanism which allows employees to raise workplace concerns?
- Are employees free to form, or join, a worker's organisation of their choosing?
- Does the organisation have insurance in place to cover the recall of faulty products? Have there been any recent product recall incidents? What other insurances does the company have in place?

Take note/ask questions relating to any activities that address the improvements listed in the improvements section of this document.

ACTION PLANS

Dependent on the individual business, select appropriate improvements from the list above to include in the action plan. As a minimum, any business should be required to have the following in place:

- Operational procedures to manage environmental, health and safety risks;
- Monitoring programmes;
- Improvement objectives, targets and project plans;
- Training for personnel;
- Regular inspections, checks and audits with records to demonstrate achievement of the required level of performance against legal requirements and improvement action;
- Emergency plans for environment, health and safety accidents;

- Management review/demonstrated involvement in environment, health and safety management.

REFERENCES AND ADDITIONAL SOURCES

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