European Bank
for Reconstruction and Development

# Sub-sectoral Environmental and Social Guidelines: Vehicle Repair, Services and Parking

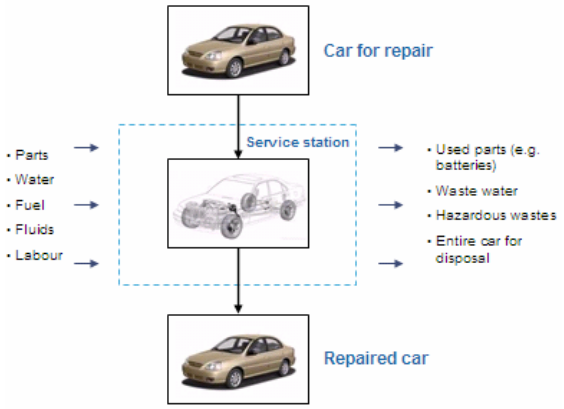
## *PROCESS DESCRIPTION*

This guideline covers activities concerned with the repair, servicing (including re-fuelling) and parking of vehicles. Repair and servicing operations would be carried out mainly at garages and vehicle dealers. Parking might occur at service stations, manufacturing facilities and parking lots.

This guideline does not cover the social and environmental issues associated with the construction of parking lots. For these issues please refer to the *Construction* sub-sector guideline.

Motor vehicle repair and associated industries cover activities such as maintenance and repair (including tyre, exhaust, windscreen etc. replacement); testing, body repair and refinishing; and the roadside recovery of motor vehicles. Parking facilities offer short and long term parking services to customers.

Service stations dispense diesel and petrol to motor vehicles. These fuels are usually stored in bulk storage tanks positioned underground. Repair and servicing would also require replacement parts such as engine components, tyres etc. and fluids such as antifreeze, brake fluids, motor oils and paints. The process involves the vehicle entering the service station for maintenance, repairs being carried out and the vehicle exiting the station. In extreme situations where the vehicle is too damaged to be roadworthy disposal of the entire vehicle might be necessary.




## *KEY ENVIRONMENTAL, HEALTH AND SAFETY RISKS/LIABILITY FACTORS*

### *Air emissions*

The main atmospheric emissions arising from service stations occur through evaporation of fuel. Petrol contains volatile organic compounds (VOC). VOCs lead to ozone creation at ground level which is known to play a major role in the foundation of photochemical smog and has been linked to respiratory disorders. VOC emissions which include carcinogenic compounds, such as benzene, are the subject of national and international environmental legislation. Evaporation of petrol can occur when bulk storage tanks and individual motor vehicles are being filled with petrol. The EU, and increasingly other jurisdictions, has legislation and proposals for legislation covering the capture of petrol vapour during the unloading and storage of petrol (Stage 1) and the dispensing of petrol (Stage 2).

Road transport is a major source of greenhouse gas emissions contributing 20% of carbon dioxide emissions in some markets. In addition, motor vehicles emit particulate matter and pollutants such as nitrogen oxides and carbon monoxide. Operators can offer cleaner fuel

options to their customers (such as unleaded fuel, biodiesels, Liquefied Natural Gas and Compressed Natural Gas). However, the market for 'greener' fuels is driven by customer requirements and legislation, and the degree to which service operators would offer alternative fuels would be region or country specific.

Another source of air pollution involves exhaust emissions when vehicles are being moved or parked, or when their engines are running under static conditions for testing purposes. Petrol or gas (liquefied petroleum gas – LPG) fuelled engine fumes contain up to 10% carbon monoxide, a poisonous gas. Prolonged exposure to diesel fumes, especially blue or black smoke, could lead to coughing, chest infections and breathlessness, and there is evidence that long term exposure may increase the risk of lung cancer.

Solvent emissions (volatile organic compounds) may also be generated by car paint spraying and respraying operations, which might be subject to controls under local legislation.

***Wastewater***

Discharge of pollutants to water may arise when fuels, oils, cleaners, paints and other fluids are washed away either through rainwater run-off or when vehicles, vehicle bays or parking lots are washed down. This may result in contamination of drainage systems and land. The operator of the facility will need to comply with local and national legislation. This might require an oil or grit separator for wastewater or a holding tank if the sewer line does not lead to a sewage treatment plant. The safe disposal of this sludge would then be required, at a cost.

***Soil and groundwater contamination***

Soil and groundwater contamination may occur during the transport, storage, use and disposal of chemicals, fuels and wastes. In particular the storage and use of fuel can lead to significant levels of contamination. This can occur during filling of the storage tanks, due to overfilling of storage tanks and due to leaking storage tanks and underground pipes. On-site storage, spillage or disposal of hazardous wastes such as paints, oils and brake fluids can also contaminate soil. This can impact soil fertility, pollute groundwater, affect flora and fauna, creating financial liabilities and impacting the value of the site.

***Waste management***

The motor vehicle repair industry generates hazardous and non-hazardous waste that needs to be disposed of responsibly and in compliance with local and national legislation. Wastes might include vehicles and vehicle parts, tyres and batteries, oils and paints. The collection and disposal of oil wastes will need to be undertaken by licensed operators. Legislation on batteries, tyres and specific chemicals may exist for the countries involved. For instance the EU Batteries Directive contains measures for establishing schemes aiming at a high level of collection and recycling of batteries with quantified collection and recycling targets. The EU Landfill Directive bans tyres from being sent to landfill except for bicycle tyres and tyres with an outer diameter greater than 1.4 metres. Other jurisdictions may not yet have such stringent legislation but these regulations might be indicative of future trends.

### *Occupational health and safety*

Workers in the motor repair and servicing industry face a number of health and safety hazards at the workplace. Issues include:

Physical harm – Workers could sustain injuries through: manual handling of heavy equipment or parts; movement of vehicles under repair (the vehicle is left in gear, the handbrake is not on, or the vehicle falls off a two-post vehicle lift); slips and trips; transport of vehicles around the site, and; use of machinery and tools.

Fires and explosions – These are the cause of most deaths and property damage in the motor vehicle repair sector. Petrol is highly flammable and presents a risk of fire/explosion. Most accidents involve the mishandling of petrol when draining fuel tanks and lines but incidents have also occurred during 'hot work' (any process which generates flames, sparks or heat) repairs on tanks or the inappropriate use of paints/thinners (e.g. to light rubbish fires).

Chemical exposure – Workers are exposed to emissions and chemicals that can negatively impact their health, causing dermatitis, headache, tiredness, nausea and dizziness, and asthma. Substances of concern might include: constituents of petrol such as benzene; used engine oil; asbestos in brakes; solvents; battery acid, and; cleaning and degreasing substances. Long term exposure to benzene can lead to serious blood disorders such as anaemia and leukaemia (a form of cancer). Used engine oil is also classed as carcinogenic in some jurisdictions. Safe systems of work, using appropriate personal protective equipment, high standards of personal hygiene, and ventilation and exhaust gas scavenger systems (systems to trap and release exhaust emissions safely) can help control health risks.

## *OTHER ENVIRONMENTAL, HEALTH AND SAFETY RISK/LIABILITY ISSUES*

### *Noise*

Excessive noise is a serious health hazard. It accelerates hearing loss and can cause stress. Body repair work, where pneumatic tools are commonly used, may expose operators and others to high noise levels. Personal protective equipment for the ears and the selection of quiet tools and equipment can help reduce these impacts. There are also wider noise impacts associated with the movement of vehicles, in particular heavy vehicles, into and out of service stations and parking lots. This could represent a high nuisance factor to not only employees of the service stations and parking lots but to communities and other stakeholders in the vicinity.

## *KEY SOCIAL, LABOUR AND COMMUNITY RISK/LIABILITY ISSUES*

### *Community engagement*

Community engagement is important to maintain good relations with the communities within which the company operates. From a risk perspective, the larger the size of the company's operations, the greater the potential impacts on the community and the greater the need to engage with the community in order to protect the reputation of the firm and its social "licence to operate". Consultation is especially important if the company plans to expand its operations or if its operations are adjacent to sensitive land (for instance, land of cultural or biological significance). New parking lot developments in particular might benefit from consultation with stakeholders regarding site selection.

Community health and safety – Depending on the type of vehicles and the scale of operations impacts on community health and safety could be significant. Problems associated with the operation of the business could include: pollution and health issues; congestion, and; impaired road safety / increased accident rates.

### *Fair treatment of customers*

Fair treatment of customers is a particular issue in this sector where customers can often be overcharged for vehicle repair and servicing. This might include an overestimation of the time or complexity associated with the work, or recommendations for unnecessary replacement of parts.

### *Labour standards*

Labour standards are rules that govern working conditions and industrial relations. They may be formal, such as national level regulation and international agreements, or informal, expressed through norms and values. In general, developed countries have more robust labour standards than developing countries where the associated risks are higher. The commonly accepted rights and principles enshrined in the International Labour Organization conventions are the right to collective bargaining, elimination of forced or compulsory labour, abolition of child labour and elimination of all forms of discrimination. In addition, fair wages, fair working hours and acceptable working conditions should be expected.

Labour standards should apply to the company's own employees as well as to all contractors and temporary/migrant labour.

Specific issues that might arise in this sector are: the use of immigrant or temporary labour at low rates of pay; unpleasant working and/or living conditions; long work shifts; freedom of association; and child or forced labour.

## *OTHER SOCIAL, LABOUR AND COMMUNITY RISK/LIABILITY ISSUES*

### *Ethics and bribery*

Strong governance structures and transparency in reporting are also important, particularly since corruption and bribery are illegal, and charges of misconduct can negatively impact a company's reputation and its ability to enter into business relations with partners. Companies may, for example, use unethical means (such as bribery) to gain planning permission or win contracts (for large service tenders for instance). The risks are higher in developing countries where institutional checks and enforcement are weaker.

## *FINANCIAL IMPLICATIONS*

### *Regulatory compliance*

Compliance with environmental standards and health and safety regulations may require capital investment and other expenditure. For example, control of petrol evaporation during the filling of storage tanks can be achieved by returning displaced vapours through a vapour-tight connection line to the tanker which is delivering the petrol. Control of emissions from paint spraying booths may also require additional investment. Disposal of hazardous wastes such as waste oils might require the services of certified waste management operators.

### *Land remediation*

Contamination of soil and groundwater could be caused by spillage or seepage of fuels, oils, brake fluids, paints and other chemical substances used

and stored on-site. In particular, leaking or damaged underground storage tanks and pipes can severely compromise soil and groundwater quality. This reduces the value of the land.

***Litigation and compensation***

The company could incur costs if legal action is taken against it. Action could be initiated by; employees over health and safety incidents, or accusations of discrimination; the government over non-compliance, or; local communities and government agencies over environmental contamination.

A fire or explosion at the service, repair or parking facility would not only destroy property but could also potentially damage customer vehicles parked on-site. Theft of vehicles is also a risk. Companies should protect themselves through insurance policies and exemption clauses in contracts and agreements.

***Reputational risk***

Damage to reputation (due to either environmental or social impacts or failures) could damage the company's brand and licence to operate. This could require long-running and costly efforts to mitigate damage and reassure stakeholders such as investors, customers and the public. For service stations this could occur through soil and groundwater contamination or improper disposal of wastes.

## *IMPROVEMENTS*

Companies can implement improvements to better manage the environmental and social aspects of their business. Examples of such improvements are given below.

***Environmental***

- Ensure that new tanks are double-skinned and have interstitial monitoring devices with automatic alarms.;
- Install oil-water separators and sediment traps;
- Switch from solvent-based to water-based paints;
- Use the least harmful cleaning substances (by comparing safety data sheets from suppliers);
- Use a vapour-tight connection line to control petrol evaporation while filling storage tanks;
- Use a fuel retriever (a device designed for draining vehicle fuel tanks) for draining tanks and lines, in particular following misfuelling diesel with petrol;
- Prevent spills from ever reaching the floor by using appropriate equipment; such as funnel drum covers and overhead fluid delivery systems;
- Use a certified waste management operator for disposal of hazardous wastes.

***Health and Safety***

- Develop a written health and safety management system, including policy, risk assessments and procedures;
- Train employees on proper health and safety procedures;
- Ensure the working areas are well ventilated and assess the need for local exhaust ventilation;

- Use appropriate mechanical aids for manual handling;
- Ensure adequate fire control and safety equipment is provided (fire extinguishers, first-aid kits);
- Connect an exhaust gas scavenger system to the vehicle tailpipe during static running;
- Provide marked gangways which are kept clear, and keep work areas tidy to prevent slips and trips;
- Ensure vehicles are driven slowly around the workplace, and that the need for reversing is reduced;
- Ensure the use of protective equipment, including eye protection, ear protection and appropriate gloves to protect hands and forearms, which should be cleaned or replaced regularly.

***Social, Labour and Community***

- Ensure fair working hours and a minimum age of workers;
- Ensure fair wages in line with national law and sector standards;
- Develop a policy covering labour practices for temporary and part-time workers;
- Develop a policy on fair billing practices;
- Develop a policy to engage with communities on issues of health and congestion.

## *GUIDE TO INITIAL DUE DILIGENCE SITE VISITS*

The issues and risks associated with a site will vary depending on factors including the type and size of the operation, site location, and the quality of management. Due diligence visits should consist of a tour of the entire site.

When visiting the sites of potential or existing borrowers, financial intermediaries may wish to use the following suggestions to guide the initial due diligence process. However, note that this does not represent an exhaustive list of issues for consideration.

During the initial site visit, it will be important to assess the following:

***Environmental, Health and Safety***

- Whether the company has a plan in place to phase out hazardous, toxic and environmentally unfriendly substances where appropriate alternatives exist?
- Whether the site has any outstanding fines, or a record of poor relationships with environmental regulators and other authorities;
- Whether there are signs of ground contamination from chemicals stored and used at the site; for example, look for stained earth/concrete, dead vegetation near storage containers and production areas, and the integrity, condition and age of storage tanks;
- Whether there have been any recent (within the last three years) incidents on site such as serious injuries, fires etc. Is there insurance cover in place for such incidents?

- Whether there is a high standard of housekeeping on-site? Look for evidence that the walking and working surfaces are kept clean and dry;
- Whether equipment is kept in good condition; look for signs of wear and tear, degradation, leaks and breaks;
- Whether general health and safety precautions are being taken. This would consider whether:
  - Staff are wearing appropriate personal protective equipment;
  - Appropriate signage is present around the site warning of health and safety dangers;
  - Staff have received appropriate training;
  - Fire extinguishers and first-aid kits are available.
- Whether the premises have been inspected recently (within the past 2 years) by the regulatory authorities for health, safety and environment?

***Social, Labour and Community***

- Whether labour standards, contracting and remuneration are in line with national law and are consistent with the average for the sector;
- Whether hours worked, including overtime, are recorded and that staff receive written details of hours worked and payment received;
- Whether the Company has 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?
- Whether the organisation has a grievance mechanism which allows employees to raise workplace concerns?
- Whether the employees are free to form, or join, a workers' organisation of their choosing?
- Whether the company has a policy or processes in place to ensure that customers are billed fairly?
- Whether the company has a policy covering consultation with the community over issues of public interest such as health and congestion?

## *ACTION PLANS*

Any lending or investment should take place within the context of Environmental and Social Action Plans, which should have clear timescales and roles and responsibilities established for each action point. Typically, plans should include:

***Environmental***

- Develop an environmental strategy to reduce the impacts of operations, supported by goals and targets;
- Communicate the company's environmental strategy and progress against commitments to stakeholders;

- Implement an environmental management system certified to a recognised standard such as ISO 14001;
- Develop a policy to reduce impacts associated with the waste stream (responsible hazardous waste disposal, increased recycling etc.);
- Implement a programme to replace chemicals (paints, cleaners, oils etc.) with more environmentally friendly options;
- Regularly test the integrity of fuel storage tanks and monitor tank levels.

***Health and Safety***

- Develop a formal Health and Safety policy;
- Consider implementing a Health and Safety management system, certified to a recognised standard, such as the Occupational Health and Safety Assessment Series OHSAS 18001 or the International Labour Office ILO-OSH 2001 system;
- Maintain a schedule to track training given to workers and managers on safety policy and procedures;
- Provide appropriate health and safety signage;
- Choose low noise tools and equipment;
- Schedule regular inspection/maintenance of machinery;
- Consider the risks before carrying out any 'hot work' on drums or containers that might contain vapours such as diesel, petrol, solvent paints etc.;
- Develop Key Performance Indicators (KPIs) for Health and Safety measures with monitoring, reporting and target setting.

***Social, Labour and Community***

- Design and communicate an appropriate code of business conduct;
- Implement best-practice labour standards (in line with ILO principles);
- Develop a policy to address the concerns of key stakeholders (such as the community within which the business operates).

## *REFERENCES AND ADDITIONAL SOURCES*

| Issue | Link |
|---|---|
| Labour standards | International Labour Organization declaration<br>http://www.ilo.org/declaration/thedeclaration/lang--en/index.htm |
| Waste disposal | EU Landfill Directive<br>http://ec.europa.eu/environment/waste/landfill_index.htm |
| Occupational health and safety | Health and Safety Issues in motor vehicle repair<br>http://www.hse.gov.uk/mvr/allmvr.htm |
| Wastewater management | Potential environmental impacts of shop wastewater<br>http://www.ct.gov/dep/lib/dep/p2/vehicle/shopwastewater.pdf |
| Hazardous substances | Control of Substances Hazardous to Health - COSHH<br>http://www.hse.gov.uk/coshh/ |
| Groundwater contamination | Department for Environment, Food and Rural Affairs (DEFRA), UK – Groundwater Protection Code - Petrol stations and other fuel dispensing facilities involving underground storage tanks<br>http://www.defra.gov.uk/environment/water/ground/petrol/pdf/groundwater_petrol.pdf |
| Impacts of underground storage tanks | Environment Agency – installation, decommissioning and removal of underground storage tanks<br>http://www.environment-agency.gov.uk/static/documents/Business/ppg27.pdf |