

Guidance Note

Motor Vehicle and Boat Repair Services

Introduction

This note provides an explanation of the environmental conditions applicable to the Motor Vehicle/Boat Repair Services, as set out in GBR No. 9. The conditions are aimed at improving the environmental performance of small scale enterprises and are part of a new comprehensive approach to environmental protection based on EU legislation, but with an emphasis on those issues of most relevance to our densely populated island. They should also serve to reduce the amount of local nuisance which often arise from the proximity of commercial activities to residences.

If you are uncertain about any of the conditions of a GBR you should seek clarification from the Environmental Permitting Team in MEPA (phone 2290 0000). Further advice is available in the MEPA General Guidance Note for Small Enterprises. The final section of this note contains a listing of websites where additional information may be obtained.

Individual small enterprises do not normally cause a significant environmental impact. As a group however, small enterprises in Malta have a very considerable potential for cumulative adverse impact. This is a consequence of their numbers: in Malta micro and small enterprises employ about 82,000 (in approx. 30,000 enterprises), about 70% of total employment in enterprises in this country.

The environmental conditions in the GBR represent minimum requirements only and every enterprise should endeavor to act in a more environmentally sensitive manner so as to be a good neighbour and to contribute to a better quality environment. Improved environmental performance can often be achieved at little cost and can create business advantages and a better environment for citizens and tourists.

NOTE:

- This guidance note does not deal in detail with issues of energy conservation, water use and noise as MEPA is not the competent authority for those issues at enterprise level

- The guidance in this note is advisory only and is not mandatory. In case of any inconsistency between the advice and a GBR condition, the latter has priority
- Compliance with the law, whether with a GBR or other legal requirement, remains the responsibility of the user
- Guidance Notes are to be updated from time to time: Make sure you have the latest versions available on the MEPA website (www.mepa.org.mt)

Location – a Key Factor

It is considered that a combination of proper site location, an appropriate building and the application of the GBR conditions will ensure good environmental performance and minimal local nuisance.

Repair workshops and garages are a common cause of complaints from nearby residents to MEPA inspectors. Not all local nuisance problems can be resolved by available, affordable technology. Prevention is the best solution and the choice of location for a new or expanding enterprise is critical in this regard. For example, noise from small workshops can be a considerable nuisance to neighbours, particularly in the evenings and at weekends. The location of the premises in terms of the proximity of local residences is the key factor, though some operational issues (e.g. working hours, closing of doors, location/muffling of fans and other outdoor equipment) can also be critical.

New commercial activities should be located in zones appropriate to that activity, with similar or compatible enterprises as neighbours, or at such a distance from residences, important habitats and landscapes that complaints should not arise. Planning policies developed by MEPA, and local area plans, will prove useful in identifying suitable locations. The establishment of new activities in close proximity to residences (even where these are family owned) can result in ongoing disputes with neighbours in respect of issues such as noise, odour and traffic. Apart from legal costs, such local disputes can affect operational activities (e.g. through reduced hours of operation) and sap management energy. Broadly similar issues also arise wherever operations are located in or near relatively pristine environments and landscapes, where conservation and public amenity are important concerns. It makes business sense to avoid such issues through good initial site selection, even though the capital cost may be somewhat greater.

For the same reason, established enterprises which are in such close proximity to residences that disputes have arisen in the past should consider the long term business advantages of relocation to a more appropriate site. Be aware that the building you may purchase or construct in a new location should be suitable for the intended purpose and should allow you to meet the requirements of the GBR. Some industrial/commercial units currently on sale

in Malta may be in a suitable location but may not incorporate practical options for vents or stacks or for discharge of effluent or storage of wastes.

Main Environmental Issues

The most important environmental issues arising at garages and repair facilities in Malta are as follows:

- Site tidiness and litter/scrap
- Waste management
- Nuisance from odours and fumes
- Nuisance from noise

Site Tidiness, Litter and Waste Management

Site untidiness and uncontained storage of waste is a widespread problem in Malta with drums, old equipment, scrap metal and wood commonly to be seen near car and boat repair facilities. Litter control and proper disposal of wastes is particularly important near coastal promenades and harbours and in the countryside. Litter in the water and waste at the side of the road are common sights which detract from the beauty of our coastline and countryside, affect public amenity and devalue the holiday for many tourists. The uncontrolled disposal of waste oil and batteries can be a threat to the environment and hazard to curious children. Site tidiness is an important business issue as customers give preference to enterprises where organization and order is apparent. A casual approach to site appearance and waste disposal may suggest to the client that the services on offer are also disorganized. This is not so much a cost issue for the enterprise as an attitude to responsible behavior. Surveys in Malta have repeatedly shown that the modern tourist places a high premium on quality of the environment and that this factor is increasingly influential in the choice of selection of a holiday destination. Thus increased attention to site tidiness and waste management will contribute to additional business at enterprise level, an improved economic performance at national level and a better environment for citizens and tourists alike.

Malta (with EU support) is investing heavily in new facilities for the recycling and disposal of a range of wastes and these will soon be available to enterprises in Malta. Enterprises should ensure that their own on-site arrangements for waste collection, segregation, storage and transport are also to a high standard. The new facilities include civic amenity sites which provide reception facilities for a wide range of wastes including tyres, batteries, waste engine oil and electronic waste. There are five such centres throughout Malta (Maghtab, Mriehel, Hal Far and Hal Luqa) and Gozo (Xewkija) and are available for the receipt of small quantities of waste brought to the site. Information on the location of these sites, the types of waste acceptable and other operational details are available from Wasteserv at Freephone 800 72200, www.wasteservmalta.com.

Enterprises with significant quantities of these types of wastes cannot use these civic amenity facilities and must make their own arrangements for recycling or disposal, usually based on the use of authorised waste carriers or waste brokers. The names of contractors authorised for collection and/or recycling or disposal of wastes can be found on the National Waste Management section of the MEPA website. Operators located in industrial units or other multi-operator complexes should investigate whether the management of the complex can establish shared waste management arrangements.

Because of charges at authorized waste facilities there may be a temptation for some waste carriers/brokers to dispose of waste in an illegal manner. Operators should note that the waste remains the responsibility of the generator until it reaches its final recycling or disposal facility. It is important therefore that you make use of reputable companies that are in possession of the correct permit for the transport and final disposal of the waste.

New enforcement initiatives (such as the employment of additional MEPA inspectors), supported by heavy fines, are designed to discourage low standards and to ensure proper use of the new collection, recycling and disposal facilities. Small businesses can play an important role by segregating waste at source, storing it in labeled containers in secure locations and in ensuring its disposal only at an authorized facility.

Batteries: Car batteries present a hazard because they contain a strong acid and lead – a toxic metal. Over 50,000 batteries are imported into Malta each year and many are ultimately disposed of in a casual and unsatisfactory manner. Small numbers of waste batteries can be disposed of in special bins at civic amenity sites. These batteries are collected by Wasteserv for subsequent recycling. For disposal of larger quantities there are a number of private contractors who will collect batteries from garages for subsequent recycling. The names of the contractors authorised for collection of batteries can be found on the MEPA website.

Waste Oil: Small quantities of waste oil can be disposed of at the Civic Amenity Sites. At least one private contractor is currently involved in the collection and recycling of waste oil. The names of the contractors authorised for collection of waste oil can be found on the MEPA website.

End of life vehicles: Each year in Malta over 10,000 vehicles are scrapped. The arrangements for disposal and recycling are currently (May 2007) under development in response to the requirements of an EC directive. It is envisaged that new comprehensive arrangements will be put in place to ensure that all end of life vehicles will be brought to approved facilities for removal of hazardous components and recycling of metal, plastic and other important components. Used parts of cars can be disposed of at scrap yards authorized by MEPA for that purpose.

Hazardous wastes: A large range of hazardous wastes can arise at workshops and garages, typically in small quantities. The materials include paints, solvents, oily wastes, asbestos, neon tubes etc. New arrangements and new regulatory control measures are currently being developed in Malta to give effect to EC directives.

Stack Height and Treatment of Emissions

Odour nuisance from spray painting is a common cause of complaint to MEPA inspectors. The major factors determining the severity of the nuisance are:

- The quantity and composition of paint used
- The location and design of the exhaust vent
- The extent of treatment.

Solvent vapours from paints and cleaners and dust from sanding can pose a risk to worker's health as well as being a potential nuisance to neighbours. The cleanliness of the area and the nature of the extraction used for spray painting are important to your customers, your employees and your neighbours. Spray painting of whole vehicles should take place in a spray booth incorporating a filter for removal of particulates. The spray painting of smaller parts should take place in a dedicated indoor area with suitable air extraction and venting arrangements. Care should be taken to select paints with the lowest level of odorous and hazardous solvents in line with the requirements as per LN. 78 of 2006.

There can be a trade off between treatment of emissions and stack emission location, particularly when visual issues from high stacks and noise from fans must also be taken into account. In certain examples, such as old buildings with adjacent sensitive residences, a high degree of treatment, incorporating, for instance, carbon adsorption might be desirable. However the equipment available for abatement of odours can be expensive and difficult to maintain and may not always be efficient enough to prevent a nuisance. Consequently some locations may never be suitable for spray painting.

MEPA's Policy and Design Guidance of 2007 sets out its policy in regard to stack height requirements for Flues and Fume extraction from Class 6 activities – Food and Drink, (see Annex 1). The MEPA policy does not include any guidance in regard to flues on industrial and commercial enterprises, other than the above. However it is useful to read this policy section as it will clearly influence consideration of stack heights for an emission from other classes of activity. It is not possible to make simple rules in regard to stack heights as the appropriate height depends on such variables as the specific nature and concentration of the chemical in the emission, the degree of treatment provided, the height and design of the roof and adjoining roofs, and the sensitivity of the local neighbourhood.

In regard to existing buildings, the stack should discharge at a suitable point (generally 3 m or more) above the highest point of the roof or adjoining building. In cases where this is neither necessary, practical nor sensible, the discharge stack should be located so as to minimise local nuisance. In these circumstances the height and location of the stack shall be agreed in advance with MEPA.

Other minor sources of odours such as low level exhaust fans and open doors and windows should also receive attention. Such low level vents should normally discharge above head height and be directed upwards. When necessary, proper filtration systems should also be installed.

In situations where there are a number of distinct emissions it is preferable that each emission have its own stack. The joining of emissions with different characteristics (such as from a boiler and a spray booth) in a common stack may cause problems in one or both exhaust systems. The selection of the most appropriate equipment such as filter and extraction fan, source of make-up air and stack exhaust location can be complex and warrants detailed attention. It is best to consult an engineer or other qualified person with specific experience in this area.

How MEPA will deal with an Odour nuisance

Where an emission to air from an existing enterprise is not causing a local odour nuisance, then little or no action is required. However, when, in the opinion of MEPA, a significant local nuisance does arise, the operator must

- Identify the source of the odour
- Examine the options for elimination or minimization of the nuisance
- Propose an action plan to MEPA for minimisation of nuisance

It is the responsibility of MEPA to decide whether the options considered by the operator and the actions to be undertaken represent the best that can be done under the circumstances. If MEPA regards the operator's response as inadequate then it will require the operator to consider further options. In the event of inaction or inadequate proposals by the operator, then a prosecution on nuisance grounds may follow.

The options which must be considered and documented by the operator will depend on the specific local circumstances. In some cases the relocation of the vent to another position may contribute to a solution of the problem. In others, the possibility of an additional treatment step for point source odours must be examined. The type of paint used is a major factor and paints with reduced levels of odorous solvents should be considered. The paint supplier should be able to provide advice on this matter. A recent EC directive on Paints, Varnishes and Vehicle Refinishing Products (2004/42/EC)

(implemented in Malta through Legal Note 78 of 2006) makes mandatory the use of lower solvent based paints including water based paints and the sale of high solvent based paints for spray painting of vehicles will be prohibited.

Moreover the EU Solvents Directive (1999/13/EC) is designed to prevent or reduce the effects of emissions of solvents on the environment and human health. This directive places controls on the amount of solvents emitted by specific industry sectors which include certain manufacturing, painting and coating activities. For each such activity a threshold is set and specified emission limits apply. The operator can conform to the requirements by installing equipment to reduce emissions or by introducing a reduction scheme to arrive at an equivalent emission level. This could be achieved for example, by replacing conventional products with low solvent or solvent free products. This directive has been implemented in Malta through Legal Notice 225 of 2001. MEPA staff can be contacted to provide advice on the applicability of this legislation to your activity

Where the nuisance arises from the burning of fuels the option of replacement of the fuel should be considered. Other aspects to be examined include operational issues such as regular cleaning of equipment and waste storage areas, proper maintenance of equipment and closing of doors and windows. Consideration should be given to the general exhaust from the building. This exhaust is commonly vented through a low level grill in a side wall. The relocation or elimination of this and other small exhaust vents may help reduce local odour nuisance. On the basis of the examination the operator should make a proposal in writing to MEPA on the plans for addressing the odour nuisance.

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Emissions from VOC solvents

The limitation of emissions of volatile organic compounds resulting from the use of organic solvents in certain activities and installations has been given particular attention in EU legislation. The EU directive 1999/13/EC has been transposed into Maltese legislation through L.N 225 of 2001 as amended in L.N 151 of 2007. The coating activities that fall within scope of this legal notice include:

- coating of new cars;
- coating of truck cabins;
- coating of vans and trucks;
- coating of buses;
- coating of trailers;
- coating of metallic and plastic surfaces;

A full, detailed list of the activities contributing to VOC emissions is given in ANNEX 1 of L.N 225 of 2001. A copy of the legal notice may be available on MEPA website (www.mepa.org.mt).

The solvent consumption thresholds for the respective activities are listed in Annex 2 (A) of this Guidance Note. A detailed table of the thresholds and emission limit values is available in ANNEX 2A of L.N 225 of 2001. A copy of the legal notice may be available on MEPA website (www.mepa.org.mt).

In case the coating activities carried out at the installation are solely restricted to vehicle refinishing and maintenance, then the paints used for spray painting activities do not fall within scope of L.N 225 of 2001 and hence should comply with the requirements of L.N 78 of 2006, Limitation of Emissions of Volatile Organic Compounds (Paints, Varnishes and Vehicle Refinishing Products). A list of limit values for VOC content in vehicle refinishing products can be reviewed in Annex 2 (B) of this Guidance Note. A copy of the legal notice may be available on MEPA website (www.mepa.org.mt).

Discharge of Effluent

Malta is in the process of commissioning 3 modern wastewater treatment facilities which will cater for effluent from household, industrial and commercial sources. The upgraded facilities (one each for north and south Malta, the other on Gozo) will ensure that effluent will receive a high level of treatment so that coastal bathing waters will comply with the strictest EU standards. The Water Services Corporation is responsible for the satisfactory operation of the new treatment facilities. The need to consistently meet the high effluent discharge standards set in EU legislation will necessitate a greater degree of control by the WSC on the nature and characteristics of emissions to sewer from enterprises. The development of a new permitting system to control discharges to sewer is currently under discussion. The permitting system is expected to set out requirements for pre-treatment such as screens and traps so that material discharged to sewer does not cause blockages or pose a danger to sewer workers.

Enterprises have a role to play by ensuring that:

- All effluent streams are discharged to the foul sewer
- Rainwater does not reach the foul sewer in significant quantities
- Raw materials and wastes are stored so as to prevent accidental escape
- Any pre-treatment steps as required by the Water Services Corporation (such as an oil interceptor) are adequately sized and operated
- Liquid wastes, such as waste oil, are not disposed to drain.

The preparation of plans and sections including schematic drawings showing the layout of drains for your premises will help ensure proper segregation of

foul water drains from storm water. The accuracy of the drainage map can be checked by using a running water hose. In some cases the use of a food dye in the water will help.

The installation of an oil interceptor is sometimes necessary to protect the drainage system from escape of oil to sewer. This interceptor works best at low flow rates so it should be located only to receive effluents from potentially contaminated areas. Effluent from toilets and surface drains should not pass through the interceptor.

Storage

The proper storage of raw materials and wastes is an important factor in the maintenance of a tidy site and in the prevention of pollution of groundwater. All materials should be stored in a secure area away from sensitive areas and drains.

Abandoned wastes and equipment are a common eyesore throughout our country. Wastes should be taken off-site for disposal on a regular basis and should not be allowed to accumulate around the site. If you are ceasing business on your site you should ensure that all wastes and unwanted equipment are removed. You should never store wastes outside your site, unless it is non-hazardous waste awaiting same day collection.

Storage of drums and small containers should be in areas where they are not easily disturbed by accident or vandalism and where any escaping liquid cannot escape to land or surface water drains. Care should also be taken in regard to preventing drips of oil falling from the vehicle or oily parts onto the garage floor during servicing or repair work. Oily parts should be stored on drip trays and waste oily cloths and rags placed in leak-proof containers.

Oil is the most common pollutant and good practice incorporates attention to the siting and integrity of the storage container and to the secondary containment system (bund). Containers for bulk storage of fuel should be of robust construction and should be located, labeled, banded and maintained so as to prevent accidental spillage. For bulk storage the bund should have a capacity for 110% of the tank capacity (or of the largest tank within the bund) with filling and off-take points within the bund. Below ground tanks pose a high risk of undetected leakage and are generally not acceptable. The UK Environment Agency has published Guidance Note (see PPG2 in www.netregs.gov.uk) which sets out current Best Practice for oil storage in regard to the prevention and early detection of oil leakage.

Areas used for maintenance and servicing where spillages of oils, lubricating fluids, etc. are envisaged should be rendered impermeable and constructed in such a manner where any washwaters are routed to an oil water separator/interceptor/sump prior to eventual discharge. As in previous sections, cleaning and maintenance regimes are important so as ensure effectiveness of this abatement equipment.

Useful Web Sites

A considerable body of information in regard to good environmental practices in garages and similar operations is available on the following English language websites:

- Malta Environment and Planning Authority
www.mepa.org.mt
- WasteServ Malta Ltd
www.wasteservmalta.com
- Environment Agency of England and Wales
www.environment-agency.gov.uk
- Guiding small business through environmental regulations
www.netregs.gov.uk
- New South Wales Environment Protection Agency
www.epa.nsw.gov.au

Draft for Public Consultation

MEPA Policy and Design Guidance

Flues and Fume Extraction

Cooking smells from restaurants, cafes, snack bars, take-aways and other Class 6 uses can provide a source of nuisance, especially where these uses are located under or adjoining dwellings. Adequate filtering and fume extraction is therefore important, but it must be located and designed so that the fumes are filtered and vented away from overlooking windows. In particular, venting into a shaft shared with dwellings is not acceptable, nor is venting at roof level close to the windows of overlooking dwellings. It may of course be possible to utilise a form of filtering which does not require external venting and the Authority will encourage this. Control on the environmental effects of the development and its operation will also be operated through the (separate but related) environmental permitting process.

All proposals for development falling within Class 6 of the Development Planning (Use Classes) Order 1994, where hot food is prepared and cooked, shall provide for the extraction of cooking fumes and smells, which shall:

- (a) Not vent to, or terminate in a shaft or yard which serves residential properties;
- (b) In the case of flues, terminate at least 3 m above the roof of the building to which flue is attached and of any immediately adjacent buildings;
- (c) Not be so located or positioned on the roof of a building that it terminates within 4 metres of the windows of any residential property overlooking or adjoining the roof;
- (d) Not be so located that it intrudes into the outlook from any adjoining residential properties;
- (e) Be fitted with the appropriate filters and of sufficient capacity to deal adequately with the fumes produced; and
- (f) Be so designed, located, dimensioned and coloured that it does not detract from the visual quality of the area nor from the appearance of the building to which it is attached (so that locations on the front façade of a building or on other facades visible from a public space will not normally be permitted).

Annex 2

MEPA Policy and Design Guidance, 2007

Emissions from VOC solvents

A. Solvent consumption thresholds

The solvent consumption threshold values for the respective activities (mentioned in section 3.3) are listed in the table below. The table has been retrieved from Annex 2A of L.N 225 of 2001 as amended by L.N 151 of 2001.

Activity	Solvent Consumption Threshold (tonnes VOC/year)
Vehicle Coating ¹	>0.5
Coating of metal and plastic	>5

B. Maximum VOC Content Limit Values for Vehicle Refinishing Products

Product Subcategory	Coatings	VOC (g/l)
Preparatory	Preparatory	850
Cleaning	Pre-cleaner	200
Bodyfiller/stopper	All types	250
Primer	Surface/filler and general (metal) primer	540
Primer	Wash primer	780
Topcoat	All types	420
Special Finishes	All types	840

¹ Refers to coating activities of new cars, vans and trucks, buses, trailers and metallic surfaces