



Resource Efficiency Plan

**Resource Use, Waste Minimisation &
Recycling**



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Introduction

Harrison Preservation Ltd is committed to protecting the environment and supporting sustainable development by conducting its business in an environmentally responsible manner. As such the following resource efficiency plan has been drawn up.

Resource efficiency means using natural resources in the most effective way as many times as possible, while minimising the impact of their use on the environment. Resource efficiency is not just an environmental initiative; it is also an important business process. Waste costs money, typically up to 4% of business turnover, so by finding ways to reduce waste Harrison Preservation Ltd can become more profitable.

Resource efficiency is important for the environment, it helps ensure the best use of raw materials, reduces waste going to landfill and cuts CO2 emissions – current UK recycling is estimated to save more than 18 million tonnes of CO2 a year, the equivalent to taking 5 million cars off the road.

Resource efficiency also benefits the economy by stimulating jobs and growth and reducing the costs for individuals; as well as being good for business, it can cut costs and improve efficiency, secures supply of resources and meets customer demand for sustainable business practice.

Finally environmental legislation has become more prevalent in recent years and many companies face penalties for non-compliance. Legal compliance and the elimination of bad practice is an important aspect of any business planning.



OFFICE BASED RESOURCE EFFICIENCY

Paper

It's estimated that half of all office waste is paper-based and the production of virgin paper has a number of environmental impacts. It is therefore highly important for the environment that the level of paper wasted is reduced. In order to do this the following measures will be implemented:

- All photocopying and printing will be produced in double-sided format on recycled paper and individuals will question whether there is a need to produce copies at all.
- Junk mail and unwanted publications will be cancelled
- Electric communications will be used where possible to reduce printing and faxing. Staff will also be encouraged not to print out emails unless necessary; and
- Fax machines will be set so they do not produce unwanted header or report sheets.

Where it is not possible to avoid producing waste paper and effort will be made to reuse it; for example, paper printed on one side will be used as scrap paper or message pads. When it is not possible to reuse the waste paper it will be recycled rather than disposed of with the general office waste. To ensure that paper is recycled the following measures will be implemented:

- Paper recycling bins will be placed in all offices with one next to each photocopier and printer.
- Cleaning staff will be educated about the recycling scheme so they support it and will not empty the paper recycling bins into the general waste; and
- The scheme will be promoted to all members of staff and notices will be placed on the paper recycling bins explaining the types of paper that can be recycled.

As paper usage and therefore paper waste can not be eliminated completely from the office environment, green purchasing will be utilised to reduce the environmental impact of the paper that is used. Paper is a natural resource that can be recycled up to five times, substantially reducing its environmental impact; as such, wherever possible, locally produced recycled paper is to be purchased for all office environments. As a minimum, 100% recycled or Forest Stewardship Council (FSC)-accredited paper will be purchased by the company. If, for any reason, it is not possible to purchase recycled paper then virgin paper from sustainable forestry's and ISO14000 accredited mills is to be purchased instead.

Other Product Purchasing

It is not only important to collect materials for recycling, but also to purchase materials with a recycled content in order to close the recycling loop, e.g. stationery products, toilet paper, paper hand towels and kitchen roll. Before buying any product the following questions will be asked:

- Is it made from recycled materials?
- Is it made from marked and easily recycled material (e.g. paper, glass or wood)?
- Are its component materials easy to separate for recycling?
- Is its packaging easily recyclable?

Wherever possible all products purchased for the office environment must contain as much recycled materials as possible and/or be manufactured of readily recyclable materials in order to reduce the production of waste from the offices as well as boost the recycling market.

Water Use Reduction

Minimising the unnecessary use of water is one of the easiest ways of achieving cost savings, not only by reducing the amount of incoming water that is paid for, but also by reducing the amount of domestic sewage and trade effluent produced; energy costs can also be higher than necessary if water is being heated and then wasted. Within the office environments the following shall be considered:

- Check for leaks regularly and immediately repair any identified
- Use of cistern bags to reduce water used during WC flushing; consider installation of rainwater collection systems for WC flushing during any refurbishment/replacement;
- Educate all staff to ensure taps are turned off correctly after washing; consider installation of percussion or push taps during any refurbishment programme or as part of general maintenance;
- Educate all staff to only use and boil as much water as is needed in the kettle when making teas, coffees or heating water for other purposes;
- Avoid unnecessary cleaning and use of excessive water when cleaning.

Waste Minimisation

Waste minimisation is the application of a systematic approach to reducing the generation of waste at source. Within the office environments the following guidelines should be followed:

- Purchase and use refillable pens and markers where possible;
- Always return used but usable supplies, e.g. document wallets, folders, files and cardboard boxes, to storage so they can be used several times;
- Use durable, high-quality stationery supplies such as re-usable paper clips or treasury tags, rather than single-use staples wherever possible;
- Purchase remanufactured goods such as ink and toner cartridges as many distributors provide a produce guarantee and many claim the remanufactured good provide a better print quality and produce more prints than a normal cartridge.
- Turn off office equipment when not in use such as overnight, at weekends and during bank holidays.
- Turn off lights in empty rooms and replace bulbs with energy saving ones.
- Ask suppliers about take-back schemes for unused products in order to get money back, or at least a portion of the cost.
- Invest in efficient equipment when replacements are required in order to cut energy and water costs – government support for this is available through interest-free efficiency loans delivered through the Carbon Trust.
- Encourage all members of staff to develop and come forward with new suggestions for further waste minimisation and educate all staff about the need to follow the recommendations given above.

Changing the attitudes of office workers towards the creation of waste in the first place can have a major impact on waste production while introducing a positive attitude towards reuse and recycling materials can have similar benefits. Environmental education will form part of the company's continual development of staff competencies.



Recycling

Harrison Preservation Limited acknowledges that although recycling office waste such as paper is far better than sending it for disposal to landfill, recycling itself has environmental impacts and costs for transportation and energy use. Waste elimination and reduction, or the reuse of materials will be implemented first and recycling will only be considered after these other options.

Recycling will be considered for the following wastes:

- Office paper – white high grade paper
- Mixed paper – coloured paper, leaflets, envelopes, newspapers, magazines, etc
- Confidential papers
- Shredded paper
- Cardboard
- Printer cartridges and toners
- Plastic bottles
- Food and drinks cans
- Electrical equipment
- Batteries

As required by law, Harrison Preservation Limited will ensure that all reasonable care is taken to store all waste produced safely and securely and to prevent it from causing pollution or harming anyone. In particular a secure storage box will be provided for the collection of spent batteries so they can be recycled; wherever possible spent batteries will be returned to the supplier, where suppliers do not sell enough batteries to warrant implementation of a collection service an alternative recycling centre will be identified for waste batteries.



YARD & SITE BASED RESOURCE EFFICIENCY

Product and Material Purchasing

Before purchasing any materials or products the following questions will be asked:

- Is it made from recycled materials?
- Is it made from marked and easily recycled material (e.g. paper, glass or wood)?
- Are its component materials easy to separate for recycling?
- Is its packaging easily recyclable?

It is important that discussion is always attempted with any client to try to encourage them to accept recycled products and materials over new items. All wood and wooden materials are to be purchased from sustainably managed forests where recycled products are not available and/or approved for use by the client; similarly only recycled aggregates are to be used wherever possible.

Vehicles, plant and equipment

The type of vehicle, plant and equipment bought and used has a fundamental effect on transport and equipment related costs and environmental impact. Before purchasing any new or used items, the following questions will be asked:

- Is the item really needed?
- What is the 'whole life' cost of the vehicle / plant / equipment (this includes the initial cost of the item, its residual value as well as fuel, maintenance and insurance costs)
- Are alternative technologies available that have less environmental impact?
- Could alternative fuels be utilised?

To minimise the impact of vehicles, plant and equipment further all staff are to be educated about resource efficient usage of these items. Plant and equipment must not be left idling for prolonged periods of time and vehicles should not be used for unnecessary journeys – with good planning it is possible to combine errands into single journeys, while ensuring vehicles are packed with all necessary equipment and materials for the days work will eliminate return journeys to the yard.

Consideration can be given to providing fuel efficiency driver training to the main drivers within the company as this will also reduce fuel consumption and therefore reduce the environmental impact of the company vehicles.

Water Use Reduction

Water use is an area where businesses can have direct influence; this applies to work within the operational yards and on site, it is important that the following guidelines are adhered to:

- Check for leaks regularly and immediately repair any identified
- Avoid unnecessary cleaning and excessive use of water; sweep and brush off equipment rather than wash them down; use a bucket and sponge to clean vehicles rather than a hose pipe or pressure washer; wipe number plates, mirrors and lights with a clean (damp if necessary) cloth rather than use water where possible;
- Sweep debris from yards rather than use a hose;



- Spillages are not to be washed down surface drains, the spilt liquid must be contained and absorbed using a spill kit or absorbent material, the contaminated material is then to be gathered or shovelled up and disposed of correctly;
- Water supplies should be switch off when not needed.

Everyone is encouraged to identify obvious opportunities to reduce water use throughout the company and to bring any suggestions forward to their manager.

Waste Minimisation

Waste minimisation is about optimising all areas of the business to be more resource efficient and thus prevent, or at least minimise, the production of waste.

- Ensure wastes are segregated and reused wherever possible;
- Consider how raw materials are used, stored, handled and moved; ensure all of these activities are carried out in a manner that reduces the amount of waste created;
- Ensure all liquid materials such as petrol, oil and wood preservatives are used, stored, handled and moved in ways that minimise the risk of spillage; decanting of liquids should be avoided wherever possible with consideration given to alternative purchasing options if necessary; when decanting must be undertaken a funnel or other appropriate equipment should be utilised to minimise the risk of spillage;
- Do not mix more chemical than is likely to be used during a days work, this will reduce water usage as well as wastage of unused chemical.

All members of staff are encouraged to come forward with new suggestions for further waste minimisation.

Recycling

Recycling is an important part of minimising waste and the associated cost to the company. At all times on site consideration must be given to the possible reuse of any waste materials, where reuse is not possible all wastes are to be segregated and sent for recycling before disposal is considered; in particular:

- Empty chemical containers are to be triple rinsed (only if necessary) and returned to the supplier for recycling;
- Used oil and oil contaminated fabrics are to be kept in secure storage and sent away for recycling and oil recovery;
- Spent batteries, from vehicles, machinery and equipment, are to be stored in a secure location within a labelled container and either returned to the supplier when replacements are purchased or taken to an approved recycling depot.