

Environmental Good Practice Procedures

Pollution Prevention

POLLUTION PREVENTION

These procedures set out Rentokil Initial's proposals for pollution prevention.

They require the business to:

1

Identify all business activities that could give rise to significant environmental pollution.

2

Carry out risk assessments of these activities.

3

Include the relevant risk control measures in the Environmental Management System.



Environmental Benefits of Pollution Prevention

Water, atmospheric and land based pollutants can seriously damage ecosystems and harm human health. Polluted land and water is a loss of a valuable resource and air pollution by greenhouse gasses such as Carbon Dioxide contributes to global warming. Pollution prevention protects the environment and helps to conserve resources.



Financial Benefits of Pollution Prevention

Polluting substances can be expensive to clean up and increasingly the *polluter pays principle* is used to transfer the costs of clean up from the taxpayer to the polluter. It is not usually possible to insure against losses arising from gradual pollution. In addition companies causing pollution may face legal action with substantial financial costs and loss of reputation. Preventing pollution by identifying potential pollution risks and implementing appropriate control measures reduces the likelihood of incurring such costs.

The procedures to be adopted are as follows:

1

Identify all business activities that could give rise to significant environmental pollution.

- ☞ Identify and record all substances stored or used on the site, including materials arising from the process and the hazard to the environment that they represent.
- ☞ Record the quantities of materials and the manner in which they are stored and used on the site or released from the site.
- ☞ Specify the existing control measures that contain the materials and prevent or control their release into the environment.
- ☞ Identify and record the circumstances under which such substances could be released into the environment and the potential consequences of such a release.

2

Carry out risk assessments of these activities

- ☞ Evaluate the likelihood of the circumstances under which polluting substances could be released into the environment, taking into account the existing control measures and the way in which they are managed.
- ☞ Evaluate the potential environmental impact of such a release.
- ☞ Assess the level of risk to determine whether additional control measures are required or whether the existing controls should be more effectively managed. An example of a risk assessment matrix is given in Appendix I and an example of a completed risk assessment is given in Appendix II.
- ☞ Where risks require additional control include in a management programme the actions to be taken.

3

Include the relevant risk control measures in the Environmental Management System.

- ☞ Where management controls are required to prevent pollution, record in the Environmental Management System who is responsible for managing such controls; where the operational control measures are specified and how they are monitored, reported and reviewed.

APPENDIX I

ENVIRONMENTAL RISK MATRIX

	Small Impact	Medium Impact	Large Impact
Highly Unlikely	Trivial	Tolerable	Moderate
Unlikely	Tolerable	Moderate	Substantial
Likely	Moderate	Substantial	Intolerable

APPENDIX II

ENVIRONMENTAL RISK ASSESSMENT (Example)

Material	Mainstream Powder, Rexodan International (for use in Mat Room).
Hazard	Corrosive (0.5% solution pH 10.5 - 12.0)
Comments	The product is delivered in 25 kg bags, shrink wrapped on pallets. The pallet of bags is transferred to an area within the Mat Room which is <u>directly under a fire sprinkler</u> . The bags are manually carried to the mixing hopper which dilutes the powder with water. The diluted product is pumped through plastic pipes to the washing machines.
Storage Quantities:	Mix tank 1 x 1,000 litre Storage tanks 1 x 1,000 litre
Transfer	From Storage Tank: Via electric pumps and plastic pipes to each washing machine.
Controls	Storage Tank Float switch Transfer Lines No identification on any transfer lines
Potential	Spillage of powder if bags are damaged during transfer to storage or transfer to mixing vessel. If the fire sprinklers are activated the stored bags will be continually drenched whilst the sprinklers are in operation. At present the bags are made of plastic so only damaged bags would leak product. However, should the bags ever be made of paper the potential for the whole contents to leak out if the sprinklers are activated is much greater. Storage tank could overflow if the float switch fails. Any loss of product would go the drain leading to the Effluent Plant. Failure to correctly identify transfer lines during maintenance work/repairs or modifications could lead to an accident.
Likelihood	Unlikely
Impact	Medium
Risk Level	Moderate
Additional Control Measures	Check operation of float switch weekly. Inspect and confirm integrity of the mixing/storage tank and all transfer lines. Repeat at suitable intervals. Label all pipework. Write emergency spillage procedure for product and ensure all operators know the procedure and the location of the emergency equipment. There should also be a procedure for checking the continued availability and condition of the emergency equipment.