

## **RAPID HEAT SYSTEMS LTD**

# ENVIRONMENTAL MANAGEMENT SYSTEM



#### **Environmental Management System**

By the nature of its operations, Rapid Heat Systems Ltd has a minimal impact on the environment when compared with other industries. However, the company recognises its responsibilities and an Environmental Management System is in place, which is based on the requirements of BS EN ISO 14000. Impact Assessments are for such things as waste handling, noise pollution, emissions to air from plant and vehicles etc.

#### **Environmental Policy Statement**

### **Environmental Policy Statement**

Rapid Heat Systems Limited, headed by the Managing Director, is ultimately responsible for limiting environmental impact.

Rapid Heat Systems Limited is committed to comply with relevant environmental legislation and regulations.

The Managing Director is responsible for coordinating all environmental activities both inside and outside the company.

The company recognises that environmental objectives will only be achieved with total commitment and effort by all employees and will do everything possible to encourage them.

The company will maintain environmental awareness and identify and provide suitable awareness training as required.

#### **Energy and Waste Management**

Rapid Heat Systems Limited will continually strive to reduce energy consumption by processes through to the transport of its service to its customers.

Rapid Heat Systems Limited will strive to reduce waste from its processes, to promote recovery of waste where possible, and will be environmentally responsible for disposal of waste and the prevention of pollution.

#### **Suppliers**

Rapid Heat Systems Limited will work with suppliers and contractors to encourage them to recognise their environmental responsibilities in supplying goods and services.

#### **Services**

All services provided by Rapid Heat Systems Limited will be developed in accordance with the overriding company philosophy of maximising safety and quality while simultaneously limiting environmental impact.

#### Communications

All statements on the environment made by the company will emphasise its philosophy of limiting environmental impact.

The company will give open access to any environmental assessment and will continue to build an open relationship with its employees, customers, interest groups and the public with regard to its environmental efforts. It will publish an annual environmental performance report, which will be publicly available.

#### General

The company's environmental policy will be continuously monitored for relevance by the Managing Director.

Signed for and on behalf of Rapid Heat Systems Limited

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#### RAPID HEAT SYSTEMS

# Environmental Aspects Evaluation Sheet 001 Vehicle/Plant Fuels or Oils Spillage

#### 1.1 Aspect

Vehicle/Plant Fuels or Oils Spillage.

#### 1.2 Impact

Potential water pollution and/or land contamination from storage and handling.

#### 1.3 **Type**

Waste Stream.

## 2.0 Impact score: maximum score from relevant table/s. Based on the Aspect's current performance (score 0 no impact – 5 very significant impact)

Relevant Impact Table Heading	Score
Complaints	1
Ground Water/Land Contamination	1
Waste Management	1
Storage and Handling	3

The impact score is 3 as it is the maximum of the above

#### 3.0 Controls employed to minimise impact

Secure containers and fuel cans used.

Ensure that lids are securely fastened after use.

Use funnels when filling tanks.

Provide necessary equipment to deal with accidental spillages.

#### 4.0 Probability for failure of control (3 high, 2 medium, 1 low)

Score 2

Severity/consequence of failure (3 high, 2 medium, 1 low)

Score 2

#### 5.0 Risk Factor (probability x severity)

Score 4

#### 6.0 Environmental Impact Total Score (risk factor x impact score)

Score 12

#### 7.0 Priority for action

High

#### 8.0 Notes

Provide appropriate secure containers and funnels for transferring fuels and oils on site. Ensure that spill kits are available.



# Environmental Aspects Evaluation 002 Fumes from Diesel Generators and other Plant

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1	.1	Aspect	
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Fumes from Diesel Generators and other Plant

#### 1.2 Impact

Air pollution - Combustion gases contribute to global warming.

#### 1.3 Type

Air Emission

### 2.0 Impact score: maximum score from relevant table/s. Based on the Aspects current performance (score 0 no impact – 5 very significant impact)

Relevant Impact Table Heading Score
Legislation 1
Releases to air 3

The impact score is 3 as it is the maximum of the above

#### 3.0 Controls employed to minimise impact

Compressors and Plant regularly maintained to ensure maximum efficiency.

#### 4.0 Probability for failure of control (3 high, 2 medium, 1 low)

Score 1

Severity/consequence of failure (3 high, 2 medium, 1 low)

Score 2

#### 5.0 Risk Factor (probability x severity)

Score 2

#### 6.0 Environmental Impact Total Score (risk factor x impact score)

Score 6

#### 7.0 Priority for action

Low

#### 8.0 Notes

Planned maintenance system in place.

Ensure that any equipment hired in from suppliers come with QA package stating when routine servicing has taken place.



# Environmental Aspects Evaluation 003 Packing Materials



1.1	Aspect Packing Materials.		
1.2	Impact Potential loss of resource.		
1.3	Type Waste Stream.		
2.0	Impact score: maximum score from relevant table/s. Based on the Aspects current performance (score 0 no impact – 5 very significant impact)		
	Relevant Impact Table HeadingScoreInputs (non renewable resources)3Storage and Handling0		
	The impact score is 3 as it is the maximum of the above		
3.0	Controls employed to minimise impact Segregated into designated skips. Steel banding put into scrap metal skip for recycling. Use metal transit boxes wherever possible to minimise packing material.		
4.0	Probability for failure of control (3 high, 2 medium, 1 low) Score 2		
	Severity/consequence of failure (3 high, 2 medium, 1 low) Score 1		
5.0	Risk Factor (probability x severity) Score 2		
	6.0 Environmental Impact Total Score (risk factor x impact score) Score 6		
	7.0 Priority for action Low		
8.0	8.0 Notes		



### Environmental Aspects Evaluation 004 Noise



1.1	Aspect Noise.
1.2	Impact Nuisance.
1.3	Type General.
2.0	Impact score: maximum score from relevant table/s. Based on the Aspects current performance (score 0 no impact – 5 very significant impact)
	Relevant Impact Table Heading Score Complaints 2
	The impact score is 2 as it is the maximum of the above
3.0	Controls employed to minimise impact None.
4.0	Probability for failure of control (3 high, 2 medium, 1 low) Score 2
	Severity/consequence of failure (3 high, 2 medium, 1 low) Score 1
5.0	Risk Factor (probability x severity) Score 2
6.0	Environmental Impact Total Score (risk factor x impact score) Score 6
7.0	Priority for action Low
8.0	Notes  Noise generated by company operations is generally restricted to compressors, generators, vehicles and cranes.  There have not been any complaints to date from the public or any regulatory bodies.  Noise is therefore only a Health and Safety issue.



### Environmental Aspects Evaluation 005 Visual Amenity



1.1	Aspect Visual Amenity.
1.2	Impact Appearance.
1.3	Type General.
2.0	Impact score: maximum score from relevant table/s. Based on the Aspects current performance (score 0 no impact – 5 very significant impact)
	Relevant Impact Table Heading Score Complaints 1
	The impact score is 1 as it is the maximum of the above
3.0	Controls employed to minimise impact Good housekeeping.
4.0	Probability for failure of control (3 high, 2 medium, 1 low) Score 2
	Severity/consequence of failure (3 high, 2 medium, 1 low) Score 1
5.0	Risk Factor (probability x severity) Score 2
6.0	Environmental Impact Total Score (risk factor x impact score) Score 2
7.0	Priority for action Low
8.0	Notes Good housekeeping required on all sites.
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#### **Procedure for Evaluating Environmental Aspects**

#### Introduction 1.0

1.1 An environmental management system requires an investigation into the environmental aspects that the company can have. Most environmental aspects are of a qualitive nature. The following procedure attempts to quantify environmental impacts to make performance appraisal simpler. Aspects are selected for evaluation by Rapid Heat Systems Limited management personnel. These are to include direct and indirect impacts caused by the activities of the company. It should be noted that due to the nature of the company's activities there is not a great impact on the environment.

An 'Aspect' can be an input, output, area of site being worked on, an individual piece of plant or an activity carried out on site.

- 1.2 The environmental impacts of the 'aspect' are then determined using the following steps in the environmental aspects evaluation method.
  - a) Classification of Aspect using form
    - Allocate an aspect with reference number.
    - Identify the impact of the aspect. ii.
    - iii. Determine the type of aspect.
  - b) Evaluate the impact of each aspect using form
    - Determine impact score.
    - ii. Describe controls used to minimise the impact.
    - Assess the risk. iii.
    - Determine the total impact score. iv.
  - c) Determine the significance of the impact
    - i. Physical
    - Regulatory and Policy. ii.
    - iii. Cost
    - Perception of other parties. iv
  - d) Detail a proposed action plan if necessary.
- 1.3 Environmental impacts will be re-assessed once a year or when a significant change is made to operating procedures.
- 1.4 Completed forms are held on computer are are distributed to clients on each contract.

#### 2.0 **Aspect Analysis**

To provide a systematic approach to analysing the various aspects, the inputs and outputs of the activity are considered. These will include the following:

- i. Raw Materials.
- Energy from all sources. ii.
- Atmospheric emissions. iii.
- Waste products. iv.
- Others such as noise, odours, visual amenities.

If the person(s) carrying out the test does not have satisfactory knowledge of the aspect then an investigation into the environmental impacts of the aspect should be carried out.

### 2.1 Evaluation of Aspects

- a) Using form, enter the aspect, the perceived impact or impacts and the type. The type will be entered as one of the following:
- i. Air emission.
- ii. General.
- iii. Input.
- iv. Noise.
- v. Odour.
- vi. Output.
- vii. Transport.
- viii. Visual Amenity.
- ix. Waste Stream.

#### b) <u>Impact Score Determination</u>

Using the following tables score the aspect for each of the applicable headings, enter the individual score. The highest score, if there is more than one applicable heading, is recorded as the impact score. Scores are not influenced by each other. Headings may have identical scores.

SCORE	LEGISLATION
5	Above present legislative limits.
4	Above future legislative limits or conditions Europe/UK.
3	Subject to a legislative limit or condition, consent authorisation, licence.
2	No legislative control, but could be subject to legislation in the future.
1	No legislative control, not likely to be the subject of control now or in the future.
0	No impact from legislation.

SCORE	COMPLAINTS
5	More than five complaints a year.
4	More than three complaints in a year.
3	More than one complaint in a year.
2	No complaints to date.
1	No perceived reason for complaint from this aspect.

SCORE	GROUND WATER/LAND CONTAMINATION
5	Ground water/land contamination occurring now, or in the future, evidence of
	contamination present and causing harm.
4	Ground water/land contamination occurred in the past, evidence to show it, harm
	could occur, not yet proven.
3	Likely ground water/land contamination occurred in the past, no harm identified to
	date.
2	Possibility of ground water/land contamination could occur or could have occurred.
1	No ground water/land contamination to date recorded or expected.
0	No possibility of ground water/land contamination ever.

SCORE	WASTE MANAGEMENT
5	Breach of waste licence, unable to landfill, not recyclable.
4	Unable to landfill in the future, not being recycled
3	Requires a waste management licence, landfill or other, recycling being progressed
	in part.
2	Recycling of material in progress.
1	Slight.
0	No impact, not an issue.

SCORE	INPUTS (Non- renewable resources)
5	Use of rare, non-renewable resource, extraction will have a great impact on the
	environment in the future.
4	Use of a non-renewable resource of material, extraction affects the environment a
	lot.
3	Use of a resource produced by another industry using non-renewable material.
2	Renewable source of material, vast quantity available, little impact on environment
	to extract.
1	Impact on resources.
0	No impact at all, not an issue.

SCORE	STORAGE AND HANDLING
5	Storage or handling has resulted in unauthorised release into the environment.
4	Storage or handling has resulted in release to secondary containment.
3	Failure of storage or handling could result in release to the environment.
2	Failure of storage or handling could result in a release to secondary containment.
1	Little or no consequences resulting from failures in storage or handling.
0	No consequences resulting from failures in storage or handling, not an issue.

SCORE	RELEASES TO AIR
5	Release of substantial emission accepted to be producing adverse global or local impacts or above guidance note limits.
4	Release of modest emission accepted to be producing adverse global or local impacts.
3	Release of small emission accepted to be producing adverse global or local impacts.
2	Release of emission accepted to be causing adverse local impacts.
1	Release of emission thought to be causing adverse local impacts
0	No impact at all, not an issue.

#### c) Controls to Minimise Impact

A description of the measures/controls currently used to minimise impact should be entered.

#### d) Risk Analysis

This procedure requires that assessments should include consideration of impacts likely to arise from abnormal and emergency conditions. In assessing a risk two questions should be answered:

What is the probability of an adverse effect? How severe are the consequences of an adverse effect?

#### **Procedure**

i. A list of possible abnormal and emergency events regarding the aspect is drawn up.

ii. The probability of each event is then considered. This is scored using the following criteria. This is based on the frequency of the perceived event occurring.

#### **PROBABILITY RATING**

High 3 Occurs with high frequency, will inevitably happen.

Medium 2 Occurs only occasionally or is remotely possible.

Low 1 Has never happened and is not likely to happen.

This is noted on the Environmental Aspects Evaluation (EAV) form.

iii. The severity of each event is scored using the following criteria.

#### **SEVERITY RATING**

Major 3 Would cause serious environmental damage or result in adverse publicity.

Serious 2 Could result in environmental damage, possibly result in adverse publicity.

Slight 1 No damage to the environment.

This is noted on the Environmental Aspects Evaluation (EAV) form.

iv. A risk factor can now be calculated by multiplying the probability rating and the severity rating together. This is noted on the Environmental Aspects Evaluation (EAV) form.

#### e) <u>Environmental Impacts</u>

Once procedures have been carried out to investigate the aspect and assess potential environmental hazards, then the environmental impacts can be completed.

- The scores are recorded for environmental aspects during the analysis procedure and are transferred to the Environmental Aspects Evaluation form under the section headed Impact Score against the relevant heading. The maximum score of all the headings considered is entered as the impact score.
- ii. The score recorded for the risk factor of environmental incidents during the risk analysis procedure are entered under the column heading **Risk Factor**.
- iii. To produce a total **Environmental Impact Total Score** the **Impact** and **Risk Factor** are multiplied together. This is entered on the Environmental Aspects Evaluation form.
- iv. From the information gathered, the magnitude of the total impact can be assessed. Any aspect scoring over nine or having a risk factor of four or more will be considered significant impact requiring further investigation.

#### 2.2 Significant Environmental Aspects

The significant environmental aspects will be subject to further investigation and assessment under the following headings.

#### a) Significance

- i. Physical Specify the quantity, composition, and the known indirect impacts.
- ii. Regulatory and Policy List all the applicable policy statements and any legislative requirements.

- iii. Costs include cost or estimates if known.
- iv. Perceptions of other partiesInclude any concerns or observations of any third parties.
- b) Each significant aspect will be assessed for its suitability for inclusion in the Environmental Improvement Plan using all the data available.
- c) Each significant aspect will then be allocated a priority of High, Medium or Low.
  - i. High Essential must do, technology and funds available.
  - ii. Medium Technology available financial constraints.
  - iii. LowNo appropriate technology Entails excessive costs.
  - e) The significant aspects will be analysed and grouped to ensure that the primary significant aspect is dealt with. e.g. if a material appears to give problems in input, storage and waste handling, it would be more practical to examine alternative materials first. If a number of materials have storage aspect problems and they are all stored in the same place then the primary significant aspect is that storage area.

#### 2.3 Environmental Improvement Plans

The resulting action plan will be accepted by all as being necessary for the environmental improvement goal of the business.