

Roadstone Ltd.

Master List of Documents			Doc. No. EMS/02		
Ref No.	Document Title	Approval	Rev No.	Distribution	
				Electronically	
EMS/01	Master List of Documents	EO	01	EO	LM
EMS/02	Company Environmental Manual	EO	00	EO	LM
EMS/03	Annual Environmental Review	EO	00	EO	LM
EMS/04	Register of Aspects	EO	01	EO	LM
EMS/05	Assessing Impacts Procedure	EO	00	EO	LM
EMS/06	Summary of Assessments of Environmental Aspects	EO	00	EO	LM
EMS/07	Register of Legislation & Other Requirements Procedure	EO	00	EO	LM
EMS/08	Environmental Improvement Program	EO	00	EO	LM
EMS/09	Environmental Training Procedure & Plan	EO	01	EO	LM
EMS/10	Monitoring & Measurement Procedure	EO	02	EO	LM
EMS/11	Monitoring Matrix	EO	01	EO	LM
EMS/12	Archaeology, Ecology & Landscaping Procedure	EO	01	EO	LM
EMS/13	Dust Suppression Guidelines	EO	00	EO	LM
EMS/14	Noise Abatement Guidelines	EO	00	EO	LM
EMS/15	Receiving Oil, Fuel & Chemicals Procedure	EO	00	EO	LM
EMS/16	Maintenance of Bulk fuel Storage & Bund Procedure	EO	00	EO	LM
EMS/17	Environmental Emergency Response Procedure	EO	03	EO	LM
EMS/18	Transport Guidelines	EO	00	EO	LM
EMS/19	Energy Efficiency Guidelines	EO	00	EO	LM
EMS/20	Communications Procedure	EO	00	EO	LM
EMS/21	Waste Management Procedure	EO	01	EO	LM
EMS/22	Restoration/after-use Guidelines	EO	00	EO	LM
EMS/23	Sub-Contractors Green Guide	EO	00	EO	LM



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Environmental Manual

2014

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1. Scope and Distribution

1.1 Confidentiality Statement

This manual is the property of Roadstone Wood Limited and its issue is controlled. The information contained herein may not be disclosed, in whole or in part, either verbally or in writing without the prior consent of the Managing Director.

1.2 Distribution List

This Environmental Manual is available electronically to the following;

1. Managing Director.
2. Divisional Managers
 - 2.1 Operations Manager (North)
 - 2.2 Performance Manager (North)
 - 2.3 Operations manager (South)
 - 2.4 Performance Manager (South)
 - 2.5 Finance Director
 - 2.6 Transport Manager
3. Location & Plant Managers.
- 4.* Environmental Liaison Officer
5. Technical Manager

Further copies held for information and training purposes shall be marked "uncontrolled copy".

*This copy of the manual is deemed to be the master copy for audit purposes.



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1.3 Amendments

Page / Section Amended	Issue Date	Revision Number	Amendment Description / Initials
Table of Contents	1 st March 2002	0	Table of contents updated.
Amendments	1 st March 2002	0	To include amendment details
Section 4.2	1 st March 2002	0	Policy updated to include housekeeping and signature of senior management.
Section 4.3 page 3	1 st March 2002	0	To include the reference to Appendix D
Section 4.5 Page 1	1 st March 2002	0	To include a reference to the monitoring procedure and site maps.
Section 4.5 Page 2	1 st March 2002	0	To include a reference to NCR/3
All	April 2002	1	Complete review following NSAI preliminary ISO 14001 Audit.
Section 4.5.2	July 2002	2	Add ELO involvement
Section 4.2	March 2004	1	Added to policy to incorporate waste management
All	February 2005		Full review to comply with ISO 14001:2004
Section 1.2	January 2009	1	Distribution list altered to reflect new management
Section 4.3.2	January 2009	1	Register of Legislation has been replaced by an on-line register
Section 1.2	January 2011	1	Management structure was changed.



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1.4

Scope

This manual outlines the requirements for an environmental management system at Roadstone Limited. Reference: Company Quality Manual Section 3 for the company profile.

A series of initiatives have been taken in the past to improve environmental issues identified throughout the Company. In order to maintain and improve on the benefits of these initiatives the company has decided to implement the International Standard ISO 14001. This International Standard specifies requirements for an environmental management system, to enable an organization to formulate a policy and objectives taking into account legislative requirements and information about significant environmental impacts.

2.

Normative References

There are no normative references at present.

3.

Definitions:

The following definitions are referred to in this manual and are defined in Section three of ISO 14001.

- 3.1 Continual Improvement.
- 3.2 Environment.
- 3.3 Environmental Aspect.
- 3.4 Environmental Impact.
- 3.5 Environmental Management System.
- 3.6 Environmental Management System Audit.
- 3.7 Environmental Objective.
- 3.8 Environmental Performances.
- 3.9 Environmental Policy.
- 3.10 Environmental Target
- 3.11 Interested Party
- 3.12 Organization
- 3.13 Prevention of Pollution



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4. System Requirements

4.1 General Requirements

Roadstone Wood Ltd. has established and will maintain an environmental management system, the requirements of which are described in the whole of clause 4 and it's sub-clauses.

4.2 Environmental Policy



Environmental Policy

Roadstone Wood Ltd. is the leading producer and supplier of construction materials in Ireland. The company recognises that protection of the environment is an integral part of its business and therefore endeavors to undertake its activities in an environmentally responsible manner.

Our key objectives are:

- Compliance with all relevant legislation, regulations and operation to the International Standard ISO 14001.
- The continuous improvement of our environmental performance
- Maintaining good relationships with our neighbours at each of our locations
- Management of visual impact of our operations on the surrounding landscapes.
- Managing efficiently the generation and disposal of waste and ensuring the prevention of pollution on all our sites.

Policy implementation is achieved by:

- Setting and reviewing environmental objectives and targets as part of a company Environmental Management System.
- Management commitment to the objectives and provision of the necessary resources.

This Policy is communicated to all Roadstone Wood Ltd. employees and contractors. The company recognises that the successful implementation of its policy depends on the ongoing commitment of all those working in the organisation.


Jim Farrell

Managing Director.

March 2011



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4.3 Planning

4.3.1 Environmental Aspects

Roadstone Wood Ltd. has established and will maintain a procedure to identify the environmental aspects of its activities, products and services that it can control and over which it can be expected to have an influence, in order to determine those which may have significant impacts on the environment. The aspects related to these significant impacts are then considered in setting the environmental objectives.

Carrying out and documenting an initial environmental review at each of the Locations did this. The reviews identify any specific legislation relating to each site e.g. planning permissions, water licenses etc. Upon completion of each review an assessment was carried out for each environmental aspect to determine whether or not it has or can have a significant impact on the environment for that location. Where an aspect has been deemed to be causing or have potential to cause a significant impact, an improvement program will be required. All other aspects will require controls to ensure that they are managed properly. The controls and improvement programs are identified for each site using a site operational manual, contained in the EMS Folder for each location. In all cases, consideration is given to normal and abnormal operations within the organization, and to potential emergency conditions.

Environmental aspects will be reviewed on an ongoing basis but particularly at the end of each year, when a full review of the effectiveness of the environmental management system is carried out. This will be documented in the form of an annual environmental report for the Company.

The table in Appendix (C) shows all of the environmental aspects that have or can have a significant impact on the environment.

Reference to documentation:

- Procedure for assessing the environmental impacts. (EMS/05)
- Environmental reviews for each location. (EMS/03)
- Irish Concrete Federation Environmental Code
- Annual environmental report
- Individual environmental management system folder

Responsibility:

- The environmental management representative is responsible for ensuring that the environmental aspects are identified when setting up the system initially and also at the annual environmental reviews.



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Resources required:

- The environmental management representative, plus any external consultancy fees, including baseline-monitoring costs.

4.3.2

Legal and Other Requirements

Roadstone Wood Ltd. use the following methods to identify and have access to legal and other requirements to which the organization subscribes, that are applicable to the environmental aspects of its activities, products and services:

- All relevant legislation was identified at the initial environmental review for each location.
- The environmental management representative will maintain a listing of relevant environmental legislation.
- Further legislation will be identified using the on-line Environmental Legislation Register supplied by TMS Consultancy. Any changes to legal requirements will be identified and an e-mail alert will be received by the ELO.

Reference to documentation:


- TMS on-line register
- Annual environmental report
- Site annual Environmental Reviews.

Responsibility:

- The environmental management representative is responsible for identifying and ensuring there is access to legal and other requirements. He will maintain the master file of environmental legislation. He will also ensure that the individual environmental management system folders are updated with respect to legal and other requirements.
- Each location manager is responsible for keeping up to date with any changes in planning permissions, water licenses etc that are relevant to their site and updating their individual environmental management system folder.

Resources required:

- The environmental management representative.
- The services of TMS environmental services section for providing updates on changes to legislation.

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4.3.3 Objectives, Targets and Programmes

Where an environmental aspect is deemed to be causing or have potential to cause a significant environmental impact, then the Divisional Manager is responsible for ensuring environmental objectives and targets for improvement are established and measurable where practical. These will be set by consultation between the Location Manager / the Environmental Rep and the appropriate Divisional Manager. The process need not take place in all areas of the activity simultaneously, and generally the targets are spread over a five-year period and should be measurable where practical. The environmental management representative will keep a master list of all the objectives and targets.

The key objectives for Roadstone Wood Ltd are outlined in Appendix D of this manual.

Reference to documentation:


- Improvement Programmes for each site (EMS/08)

Responsibility:

- It is the responsibility of individual Location / Plant Managers to develop the objectives and targets in conjunction with the senior management team and the environmental management representative.
- The Operations Manager has overall responsibility in this area.

Resources required:

- The resources that are required for achieving the objectives and targets are identified under the relevant environmental management improvement programs.

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4.3.4

Environmental Management Programme(s)

Each Operations Manager is responsible for establishing and maintaining programmes for achieving its objectives and targets.

Each programme includes: -

- Designation of responsibility for achieving objectives and targets.
- The means and time frame by which they are to be achieved.

Each location manager is responsible for informing the environmental management representative of any new activities that may cause an impact on the environment. The environmental management representative is then responsible for ensuring that an environmental review is carried out of this new activity and brought into the EMS where relevant.

Reference to documentation:

- Individual site EMS folders
- Annual environmental reviews – which will identify changes to the activities with environmental impact.

Responsibility:

- The location manager is responsible for setting up the environmental programme relevant to their site and ensuring that it is maintained and implemented.
- Where a new activity that may cause environmental impact is introduced, the environmental management representative is responsible for assessing the impact and integrating it into the environmental management system.

Resources required:

- Environmental management representative.
- The resources that are required for achieving the objectives and targets are clearly identified under the relevant environmental management program.



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4.4 Implementation and Operation

4.4.1 Training, awareness and competence

Roles, responsibilities and authorities are defined and documented throughout this environmental manual. Individual duties and responsibilities are outlined in Appendix A.

The Managing Director has overall responsibility for fostering a sense of environmental awareness amongst both direct and indirect staff. The Managing Director (in conjunction with his management team) is responsible for ensuring that adequate resources are identified and made available for the effectiveness and improvement of this EMS. This includes the steps to be taken in the event of an emergency occurring at a location, which could adversely impact on the environment.

The Human Resources manager has overall responsibility for planning any environmental training that is to be carried out during the year.


The Environmental Officers have been appointed as the environmental management representatives.

The environmental management representative is responsible for

- Ensuring that the environmental management system requirements are established, implemented and maintained in accordance with ISO 14001.
- Reporting on the performance of the EMS to top management for review and as a basis for improvement – this will be done by including a section on the environmental management system on the monthly management meeting agenda.

Each location/plant manager's responsibilities are identified in the site operational manuals. It is their responsibility to ensure the resources identified for the effective implementation of the EMS are provided for their individual locations. All location/plant managers are responsible for ensuring excellent levels of housekeeping are maintained at their location.

All employees have a responsibility to comply with specified environmental procedures. They should also inform management of any issues of environmental significance that they notice e.g. spills of oils, leaky drums, faulty abatement systems etc.

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Reference to documentation:

- Site Operational manual (EMS/05)
- Quality Manual - organization chart
- Agenda for management team meetings
- Training records

Responsibility:

- The Managing Director, the senior management team, the plant/location managers, the environmental management representative and liaison officer have a shared responsibility for ensuring the effectiveness of the EMS

4.4.2

Training, Awareness and Competence


It is the responsibility of the environmental management representative to identify the training needs for the effective implementation of the EMS. This will be done at the start of each year. This will involve a meeting between the H/R manager and the Environmental management representative during which time a review of last years training will be carried out as well as an examination of future training needs. The result of this meeting ie. The Training plan for the coming year will be communicated to the relevant Location Manager.

The majority of environmental training will involve awareness training. This will inform employees and relevant contractors of:

- The importance of conformance with the environmental policy and procedures and with the requirements of the EMS
- The significant environmental impacts, actual or potential, of their work activities and the environment benefits of improved personal performance
- Their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirements of the EMS, including emergency preparedness and response requirements
- The potential consequences of departure from specified operating procedures.

Personnel performing the tasks, which can cause significant environmental impacts, shall be competent on the basis of appropriate education, training and/or experience.

All employees and relevant contractors are trained in environmental awareness.

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The relevant plant/location manager will maintain training records.

Reference to documentation:

- Current environmental training plan for Roadstone (EMS/08)
- Training records

Responsibility:

- It is the responsibility of the environmental management representative to identify the environmental training needs for the company, including relevant contractors whose work might have an impact on the environment.
- It is the responsibility of each plant/location manager to ensure that their staff and relevant contractors attend any training courses that have been set up and also to keep records as proof that this training has been completed satisfactorily.

Resources required:

- Environmental management representative and liaison officer.
- Training room and relevant equipment.
- Time to be made available for all staff and relevant contractors to be trained as per the training plan.

4.4.3

Communication

Effective handling of all communications with regard to environmental aspects and the EMS is essential.

Communication can be broken down to two levels:

- Internal communications between the various levels and functions of the organization and
- Receiving, documenting and responding to relevant communication from external interested parties.

Internal Communications:

Each person in a position of authority who has a P.C has access to the Environmental Shared Network. This holds all the relevant environmental Management System documentation as well as:

- The monthly management report.
- The visual/NSAI audits
- All environmental training



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A poster campaign will be held annually. Notice Boards are located throughout the site, which contain relevant environmental information. Minutes of EMS meetings are distributed, usually electronically. There are scheduled EMS training sessions for communicating EMS policy. Members of the company regularly attend Best Practice Meetings and Continual Improvement Meetings within the CRH group. This will often address issues of environmental relevance.

External Communications:

A register of all communications relevant to the EMS (including blasting and vibration communications, requests for donations to charities etc) is documented by the individual Plant/Location Manager. All complaints shall be recorded in accordance with the Environmental Communications Procedure. The Environmental Representative shall build up a profile of the types of communications being received. It is the responsibility of the environmental management representative to summarize these communications and the actions taken for senior management. Roadstone Wood Ltd. will prepare an annual environmental report, which for the present time, is for internal use only. This will summarize the performance of the company in compliance with legal and other requirements as identified in the environment reviews. A decision has been made not to the significant impacts of the company externally.

Reference to documentation:


- Records of communications
- Annual environmental report

Responsibility:

- It is the responsibility of each plant/location manager to document all communications relating to the EMS for their area of responsibility.
- It is the responsibility of the environmental management representative to summarize and include them in the annual environmental report.

Resources required:

- Environmental management representative
- Plant/location manager's time for handling the communications.

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4.4.4

Environmental Management System Documentation

The following documentation relates to the EMS:

Environmental Manual

This describes the core elements of the management system and their interaction and also provides direction to related documentation.

Plant/ Location Manager's individual EMS Site Folder

This contains all of the information relevant to that location's EMS, including specific legal and other requirements e.g. planning permission conditions etc. The contents of this folder are clearly outlined at the start of each folder.

Reference to documentation:

- Annual Environmental Review (EMS/03)
- Plant/location managers individual EMS folder
- Associated environmental records

Responsibility:

The environmental management representative has responsibility for establishing the documentation for the EMS.

Each plant/location manager has responsibility for maintaining his or her own documentation once it has been established.

Resources required:

- Plant/locations managers time to work on the EMS documentation.
- Environmental management representative.



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4.4.5 Document Control

Control of documents as per Quality Manual Procedure Section 4.2

Document of external origin that are necessary for the planning and operation of the EMS may be identified by the Environmental Manager Representative and distributed to the location/plant managers. These documents will be controlled as per Quality Manual Procedure Section 4.2.

4.4.6 Operational Control

Documented procedures are in place for the significant environmental aspects to ensure that everyone working in the relevant area is clear on what to do.

The significant environmental aspects and operational controls for each location are identified in the annual environmental review.

All the items, which require to be maintained under the environmental management system, will be listed under the current maintenance program for each site

Responsibility:


- It is the responsibility of the environmental management representative to identify the operational controls required to manage the operations and activities associated with the identified significant environmental aspects. This will be done in conjunction with the plant/location manager.

Resources required:

The various resources required are identified under the controls in the operational manuals.

4.4.7 Emergency Preparedness and Response

Possible emergencies have been identified for each location and a documented procedure written.

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Responsibility:

- It is the responsibility of the Company Safety Officer to develop an emergency plan for each location. This includes the management and filing of MSDS sheets.
- It is the responsibility of each plant/location manager to practice this emergency plan at least once per year and ensure the plan is complied with in the event of a real emergency.

Resources required:

- Adequate bunding for all above ground storage tanks.
- Training for all staff on how to handle spills etc in an emergency
- Documented procedures to be located at all high-risk locations i.e., where handling oils, drums etc. EMS/17
- Emergency spill kits to be located at high-risk locations.

4.5

**Checking and Corrective Action
Monitoring and Measurement**


4.5.1

The significant environmental aspects of each location are identified in the site operational manuals. In addition, there is a matrix, which identifies the monitoring and measurement requirements for that location on a weekly, monthly, etc basis. These locations will be identified on an appropriate map and maintained in the plant /location managers file. Monitoring equipment, which needs to be calibrated and maintained, will come under the ISO 9002 calibration procedure.

Compliance with relevant environmental legislation will be evaluated using this matrix. This will be specific to the legislative requirements for the location as identified in the environmental review. Compliance with legislation will also be assessed during internal audits, the monthly reporting from the various locations to the environmental management representative and finally the preparation of the annual environmental report.

Reference to documentation:

- Locations managers individual EMS folder
- Monitoring procedure Ref. No. EMS/14
- Environmental audit reports
- Annual environmental report

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Responsibility:


- It is the responsibility of each location manager to carry out the required monitoring and measurement as identified in the matrix for his or her location, and to report to the environmental management representative and any other interested party (e.g. Local Authority as required by planning permission, licenses etc) as defined.
- It is the responsibility of the environmental management representative to summarize the findings from the various locations for the senior management team and to prepare the annual environmental report.

Resources required:

- Time for location managers to prepare their monitoring and measurement reports for the various agencies.
- External monitoring companies
- Environmental management representative

Compliance with relevant environment legislation and regulations is carried out on an annual basis in the management review

The management review deals with any update to the register of legislation as well as any non-conformances highlighted in the annual environmental report.

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4.5.2

Non-Conformance and Corrective and Preventive Action

It is the responsibility of the Environmental Officers to ensure non-conformances are investigated and that action is taken to mitigate any impacts caused. The Quality & Technical Manager records any changes in the documented procedures resulting from corrective and preventive actions.

Reference: Non-conformance and corrective and preventive action procedure, document no.: NCR/3

Monitoring results, which are outside the legal or other requirements are deemed non-conformances with the EMS. It is the responsibility of the Location Manager to handle and investigate non-conformances in their area. In conjunction with the Environmental Management Representative, the Location Manager is responsible for taking appropriate action to mitigate any impacts caused and for initiating and completing corrective and preventive action.

Note: Any corrective or preventive action taken to eliminate the causes of actual and potential nonconformance shall be appropriate to the magnitude of problems and commensurate with the environmental impact encountered.

Details of the non-conformance shall be recorded in the monthly reporting to the environmental management representative or the ELO.

Where there is a serious and persistent non-compliance with the requirements of the system, then this will be reported to the Managing Director for resolution.

Reference to documentation:

- Monitoring and measurement procedure (EMS/10)
- Waste Management Procedure (EMS/21)
- Annual environmental report
- Company quality manual section 14

Responsibility:

- It is the responsibility of the location managers to report any complaints and nonconformances to the environmental management representative.
- It is the responsibility of the location managers to maintain the Environmental Records Folder.



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- It is the responsibility of the environmental management representative to ensure that adequate corrective action has been taken for serious non-conformances to the EMS.

Resources required:

Time for the location managers to complete their monthly EMS report

- Environmental management representative.
- Any other resources as may be identified to resolve a non-conformance to the EMS.

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4.5.3 Records

The following environmental records needs to be maintained at Roadstone Ltd.:

	Where	Retained
• Company Environmental manual.	Server	Current
• Environmental procedures.	Server	Current
• Training records.	Location	5 yrs
• Environmental audits.	Server	2 yrs
• Environmental reviews.	Server	5 yrs
• Baseline monitoring results.	Head Office	5 yrs
• All communications in relation to the EMS.	Location	5 yrs
• All reports on emergencies relating to the EMS.	Location	5 yrs
• Monitoring Results	Head Office / Location	5 yrs
• Calibration	Head Office	2 yrs
• Details on waste	Head Office	5 yrs
• History of Improvement Programmes	Head Office	5 yrs
• Annual Environmental Reports	Server	5 yrs
• Management Reviews	Head Office	5 yrs

It is the responsibility of the environmental management representative to ensure that all of the records maintained at the head office are legible, identifiable and traceable to the activity, product or services involved. These environmental records must be stored and maintained in such a way that they are readily retrievable and protected against damage, deterioration or loss. All environmental records must be maintained for the period indicated above.

The above responsibilities also apply to the location managers in relation to all in the information in the individual EMS folder.

- Adequate storage space (electronic and physical) to store the environmental records.



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4.5.5 Environmental Management System Audit

The EMS audit procedure is similar to the quality audit programme. A schedule has been established, which ensures that the company is audited to the ISO 14001 standard. A team of specially trained environmental auditors is used for this purpose. An Environmental Report (AER) will be prepared upon completion of the initial audit programme.

Reference:

- EMS audit schedule, located in the Company Internal Audit Folder, which is held by the Environmental Management Representative.

Internal EMS Audit Policy

- The Quality & Technical Manager schedules a yearly audit to be carried out using trained auditors not directly responsible for the area being audited.
- The audits will be carried out based on the relevant Environmental Manual and supporting Procedures.
- The audit is used to check for areas of deficiency in the system, which are noted with the appropriate actions required to be taken, and the date by which corrective action will be implemented.
- Previous action points are checked to confirm that the appropriate corrective action has been taken.
- The audit is also used to examine the system to see if any improvements can be made. If any are found they are documented and reported in the audit reports.
- The auditor shall record on the Audit Trail Form the specific areas examined during the audit. Details of records and documentation examined shall be noted.
- A separate document control audit shall be carried out, and details of documents/manuals examined shall be entered on Form DOC.1.
- A copy of the audit report is submitted to the Quality & Technical Manager
- In the event of any non-conformance(s) of the System, the Location/ Plant Manager will be responsible for ensuring any action required is undertaken.



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4.6 Management Review

On an annual basis, senior management will review this Environmental Management System to ensure that adequate resources are being provided for the smooth running of the system. Complaints will also be reviewed. There will be minutes documented of this review and adequate follow-up of all findings. Environmental issues will be discussed at Divisional Meetings.

Reference:

- Annual Environmental Report.
- Minutes of EMS management review meeting and follow-up actions.
- Minutes of Divisional Meetings.

There will be annual environmental report produced for the Roadstone Company, which will provide a summary of the performance of the EMS for the senior management team (and other internal personnel). This annual environmental report will address the following:

- An introduction to the operation
- Any major changes to the processes since the last environmental report.
- A summary of non-compliances with requirements.
- A complaints summary.
- A summary of communications from interested parties in relation to EMS
- Monitoring performance summary for each location.
- Summary of the status of the improvement programs, highlighting any problems that were incurred.
- Outline of any resources issues that may have been identified during the year, in relation to the EMS.
- Details of any legal implications arising from environmental issues.
- Any other details of relevance to the EMS

Reference to documentation:

- Annual environmental report
- Monthly EMS monitoring report
- Location managers EMS folder

Responsibility:

It is the responsibility of the environmental management representative to complete the annual environmental report. It is the responsibility of the senior management team to address any areas of concern identified in the annual environmental report in relation to resources etc.

Resources required:

Time for the environmental management representative to prepare the AER.



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Appendix A

Duties and Responsibilities.

Listing of specific roles, responsibilities and authorities for the EMS

Managing Director

- Ensure that the environmental policy is documented and implemented
- Lead by example; be seen to be supportive of the EMS on a regular basis.
- Foster a sense of environmental awareness amongst employees and subcontractors.
- Provide resources essential to the implementation and control of the EMS. Resources including human resources and specialized skills, technology and financial resources.
- Ensure that environmental issues are discussed on a regular basis at senior management level
- Ensure that a specific management representative(s) is appointed to ensure that the established EMS is maintained.
- Ensure that there is a high standard of housekeeping maintained at each location.
- Ensure that all emergencies are handled according to the relevant procedures.
- Ensure that regular management reviews of the EMS take place, which minutes are recorded of this and all action items followed up on.

Environmental Management Representative

- Ensure that the EMS requirements are established, implemented and maintained in accordance with the Internal Standards ISO 14001.
- Report on the performance of the EMS to top management for review and as a basis for improvement of the EMS.
- Working with the various managers ensures that a training plan is developed and implemented for all relevant people.
- Ensure that all complaints and queries related to the EMS are dealt with according to procedures.
- Foster a sense of environmental awareness amongst all employees
- Establish an audit system.

Production Management

- Ensure that the environmental programmes for the area: emissions to atmosphere, visual impact, housekeeping, public safety and energy are implemented on time.
- Ensure that there is a high standard of housekeeping maintained at the location.
- Ensure that all emergencies are handled according to the relevant procedures.
- Develop a training plan for the relevant people in this area and ensure that it is implemented.



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- Lead by example, be environmentally aware yourself.
- Ensure that all waste is handled properly and try to reduce the amount of waste generated.

Management for Transport

- Ensure that all drivers comply with the procedure for transport i.e. cleaning trucks prior to exiting, sheeting where necessary and ensure that spillages on the public roads are avoided.
- Ensure that there is a high standard of housekeeping maintained at the site (garage).
- Ensure that all emergencies are handled according to the relevant procedures.
- Develop a training plan for the relevant people in this area and ensure that it is implemented.
- Lead by example, be environmentally aware yourself.
- Ensure that all waste is handled properly and try to reduce the amount of waste generated.

Management for Administration / Sales

- Work with the customers to try to avoid waste being generated through over-ordering.
- Encourage employees to reduce the amount of paper waste that is generated
- Develop recycling programmes for waste that can be recycled e.g. paper.
- Ensure that there is a high standard of housekeeping maintained in the office.
- Ensure that all emergencies are handled according to the relevant procedures.
- Develop a training plan for the relevant people in this area and ensure that it is implemented.
- Lead by example, be environmental aware yourself.
- Ensure that all waste is handled properly and try to reduce the amount of waste generated.

Environmental Liaison Officer

- Ensure that all of the EMS documentation control is managed.
- Ensure that the monitoring results are promptly given to the Environmental Management Representative.
- Ensure that all environmental complaints/queries are dealt with promptly.
- Ensure that all external auditors are facilitated when they visit the location.
- Ensure that all non-conformances and corrective actions are followed up as soon as reasonably possible.
- Highlight housekeeping performance to Managers.
- Ensure that all emergencies are handled according to the relevant procedures.
- Lead by example, be environmental aware yourself.
- Ensure that all waste is handled properly and try to reduce the amount of waste generated.
- Establish all records are adequately maintained.



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Safety Officer

- Ensure that all hazards are identified and assessed for public safety within the site.
- Ensure that all accidents and near misses are recorded and responded to within a reasonable time frame
- Ensure that the quarterly safety committee meeting take place and that all action items are promptly followed up.
- Ensure that all emergencies are handled according to the relevant procedures

All other Employees

- Comply with the requirements of the EMS
- Report any non-conformances to the EMS to management

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Appendix B Master List of Environmental Management System Documents

Ref No.	Document Title	Approval	Rev No.	Distribution		
				Electronically		
EMS/01	Master List of Documents	EO	00	EO	LM	NSM
<u>EMS/02</u>	Company Environmental Manual	EO	00	EO	LM	NSM
<u>EMS/03</u>	Annual Environmental Review	EO	00	EO	LM	NSM
<u>EMS/04</u>	Register of Aspects	EO	00	EO	LM	NSM
<u>EMS/05</u>	Assessing Impacts Procedure	EO	00	EO	LM	NSM
<u>EMS/06</u>	Summary of Assessments of Environmental Aspects	EO	00	EO	LM	NSM
<u>EMS/07</u>	Register of Legislation & Other Requirements Procedure	EO	00	EO	LM	NSM
<u>EMS/08</u>	Environmental Improvement Program	EO	00	EO	LM	NSM
<u>EMS/09</u>	Environmental Training Procedure & Plan	EO	00	EO	LM	NSM
<u>EMS/10</u>	Monitoring & Measurement Procedure	EO	00	EO	LM	NSM
<u>EMS/11</u>	Monitoring Matrix	EO	00	EO	LM	NSM
<u>EMS/12</u>	Archaeology & Ecology Procedure	EO	00	EO	LM	NSM
<u>EMS/13</u>	Dust Suppression Guidelines	EO	00	EO	LM	NSM
<u>EMS/14</u>	Noise Abatement Guidelines	EO	00	EO	LM	NSM
<u>EMS/15</u>	Receiving Oil, Fuel & Chemicals Procedure	EO	00	EO	LM	NSM
<u>EMS/16</u>	Maintenance of Bulk fuel Storage & Bund Procedure	EO	00	EO	LM	NSM



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Ref No.	Document Title	Approval	Rev No.	Distribution		
<u>EMS/17</u>	Environmental Emergency Response Procedure	EO	00	EO	LM	NSM
<u>EMS/18</u>	Transport Guidelines	EO	00	EO	LM	NSM
<u>EMS/19</u>	Energy Efficiency Guidelines	EO	00	EO	LM	NSM
-						
<u>EMS/20</u>	Communications Procedure	EO	00	EO	LM	NSM
<u>EMS/21</u>	Waste Management Procedure	EO	00	EO	LM	NSM
-						
<u>EMS/22</u>	Restoration/after-use Guidelines	EO	00	EO	LM	NSM
-						
<u>EMS/23</u>	Sub-Contractors Green Guide	EO	00	EO	LM	NSM
-						
<u>EMS/24</u>	Screening for New Chemicals	EO	00	EO	LM	NSM
-						
<u>EMS/25</u>	Plant Decommissioning Procedure	EO	00	EO	LM	NSM
-						
<u>EMS/26</u>	Maintenance of settlement tanks	EO	00	EO	LM	NSM
-						
<u>EMS 27</u>	Control of Documents Procedure	EO	00	EO	LM	NSM
-						
<u>EMS 28</u>	Procedure for Non-Conformances	EO	00	EO	LM	NSM
-						
<u>F/01</u>	Waste Register	EO	00	EO	LM	NSM
-						
<u>F/02</u>	Environmental Monthly Report	EO	00	EO	LM	NSM
-						
<u>F/03</u>	Bund Integrity	EO	00	EO	LM	NSM
-						
<u>F/04</u>	Audit Trail	EO	00	EO	LM	NSM
-						



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Appendix C

List of Environmental Aspects for Roadstone sites

(X = Significant impact)

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Appendix D List of Key Objectives

It has been decided, based on the findings from the environmental review and assessment, that the following significant impacts should be prioritized for improvement. All of the environmental objectives are to be achieved by detailed environmental improvement programs. This is a five-year plan, starting in the year 2000.

Dust	Water	Waste	Visual Impact	Community Relations	Energy
It is the objective of Roadstone Ltd.; to reduce all dust emissions from current levels to 150 mg/m ² /day as measured by dust deposition monitoring.	It is the objective of Roadstone Ltd., to comply with all of the trade effluent licenses that have been issued at each site. It is also the objective of this company to assess the impact of the activities on groundwater.	It is the objective of Roadstone Ltd., to manage the entire waste stream associated with this activity. All waste will be disposed of according to legislation. Furthermore, a waste reduction programme will be established and implemented.	It is the objective of Roadstone Ltd., to manage the visual impact of the operations on the surrounding landscapes. Each site will identify and implement a visual improvement programme.	It is the objective of Roadstone Ltd., to maintain communication and good relationships with neighbors at each location. Each site will identify and implement a programme for improving and managing community relations	It is the objective of Roadstone Ltd., to minimize energy use at each location.

Roadstone Ltd.

Master List of Documents			Doc. No. EMS/02		
Ref No.	Document Title	Approval	Rev No.	Distribution	
				Electronically	
EMS/24	Screening for New Chemicals	EO	01	EO	LM
EMS/25	Plant Decommissioning Procedure	EO	00	EO	LM
EMS/26	Maintenance of settlement tanks	EO	00	EO	LM
EMS 27	Control of Documents Procedure	EO	00	EO	LM
EMS 28	Procedure for Non-Conformances	EO	00	EO	LM
EMS 29	Calibration Matrix	EO	01	EO	LM
EMS 30	Blacktop Plant Procedure for the control of emissions	EO	00	EO	LM
EMS 31	Spill Kit Register	EO	00	EO	LM
EMS 32	Management Review Procedure	EO	00	EO	LM
EMS 33	Environmental Toolbox talks	EO	00	EO	LM
F/01	Waste Register	EO	00	EO	LM
F/02	Environmental Monthly Report	EO	00	EO	LM
F/03	Bund Integrity	EO	01	EO	LM
F/04	Audit Trail	EO	00	EO	LM
F/05	Incident Report Form	EO	00	EO	LM
F/06	Audit Report	EO	02	EO	LM
F/07	Register of incoming program	EO	00	EO	LM
F/08	Improvement Programme	EO	02	EO	LM
F/09	Trainign Records	EO	00	EO	LM
F/10	Minutes of Meetings	EO	00	EO	LM
F/12	Monthly Environmental Form	EO	01	EO	LM

Note

EO = Environmental Officer

LM = Location Manager