1. Purpose

This manual sets out the arrangements of the company's environmental management system (EMS) which implements the requirements of standard ISO 14001:2015. The purpose of the EMS is to continually improve the suitability, adequacy and effectiveness of the EMS to enhance environmental performance.

2. Authority, document control, copyright of this manual

This manual may be revised by the General Manager, Managing Director or the EMS Manager.

Changes to the manual must be approved by a member of top management but not the author of the changes. Top management, for the purposes of the EMS, includes the EMS Manager.

The printed version of this manual is held by the EMS Manager and is the only controlled copy. Other printed versions must be checked for currency against the intranet system.

This manual is the copyright of Goodwin Steel Castings Limited and cannot be disclosed or reproduced by third parties in any form, either in part or in full, without the permission of GSC's top management.

3. Definitions and abbreviations

All definitions are as section 3 of the ISO 14001:2015.

Commonly used abbreviations are:-

- EMS Environmental management System
- ENV Environmental procedure
- QA Quality assurance
- QMS Quality management System
- HS Health and safety
- HSMS Health and safety management system
- GSC Goodwin Steel Castings Limited

4. Context of GSC

4.1 How GSC maintains an understanding of its context

Top management carry out an assessment of the external and internal issues relevant to its business as a ferrous foundry and which may affect the intended outcomes of this EMS. It includes the environmental conditions capable of affecting the organisation or capable of being affected by the organisation.

This assessment is carried out in the form of an analysis of the strengths, weaknesses, opportunities and threats.

The analysis sets its own review interval but the EMS Manager or top management shall ensure it is reviewed before that date where new issues or conditions come to light.

4.2 The needs and expectations of interested parties relevant to this EMS

The needs and expectations of interested parties are determined and analysed by discussions between top management and the EMS Manager in order to deliver the outcome required by clause 4.2 of ISO14001:2015. They are recorded in Appendix B to this manual. The EMS Manager ensures this document is updated and remains current at all times.

4.3 Scope of this EMS

Environmental Management System Manual

This EMS covers the:-

Foundry Site:	ferrous foundry process and associated activities and the entire site;		
Jubilee site :	associated / ancillary ferrous foundry processes carried out in the Jubilee Building		
	Unit 4 building: maintenance shop;		
	Car park areas;		
	Storage on Jubilee site and Melville St site.		
Products:	All products produced by the company from the above sites.		

Note the activities carried out in Units 1, 2 and 3 of the Jubilee site are carried out by other companies and are not within the scope of this EMS.

4.4 Environmental Management System

This manual and its associated procedures implement an EMS to meet ISO14001:2015. It is complemented by the company's other management processes.

5 Leadership

5.1 Leadership and commitment

Top management are responsible through the strategic direction and overall control of the day to day management of the business for demonstrating leadership and commitment to deliver the outcomes required by clause 5.1 of ISO14001:2015.

5.2 Environmental Policy

The environmental policy shall be stated and endorsed by top management and adopts clause 5.2 of ISO14001:2015 as its minimum requirements.

A copy is displayed on the company noticeboard and on the company intranet. It is available to any person on request.

5.3 Organisational roles, responsibilities and authorities

The EMS Manager is assigned the responsibility of ensuring the EMS implements ISO14001:2015 and the responsibility of reporting on the EMS and environmental performance to top management at appropriate intervals. This is typically done via the management review but day to day discussions and ad-hoc reports will be made as needed.

Where a role or responsibility specifically relevant to the EMS and its outcomes is assigned, this may be done verbally or in writing, as appropriate, by either the EMS Manager or top management. ENV013 further applies.

6. Planning

6.1.1 General EMS Planning

GSC plans its operations taking into account its assessment of environmental aspects. These aspect assessments include the risk and opportunities presented and take into account the potential for external environmental conditions to affect the organisation.

Potential emergency situations are fully addressed in the Environmental Emergency Plan (EP015).

6.1.2 Environmental Aspects

Environmental Management System Environmental Management System Manual

Procedure ENV002 details how aspects are assessed across the scope of the company, which includes the products and services it supplies, and how those that can or do have a significant environmental impact are identified. The outcome of the assessment is recorded on form ENV002 for each area or process assessed.

The EMS Manager shall ensure ENV002 is utilised so that any changes are assessed, such as planned or new development, new or modified activities, products and services.

The EMS Manager shall ensure the aspect assessments carried out accurately reflect the company's scope and are generally current at all times.

The outcome of routine aspect assessments are communicated on the intranet.

The outcome of one-off assessments of change are communicated to the relevant people at the time.

6.1.3 Compliance obligations: Compliance Register

The EMS Manager shall identify and maintain a register of compliance obligations relevant to the scope of the EMS These obligations are typically accessed and identified via:-

- Government websites for statutory obligations;
- Holding copies of permits (such as the environmental permit) and similar in the EMS Manager's office;
- Information contained on or referred to in other compliance requests (e.g. supplier questionnaires);
- Via membership of third party organisations, subscription to information services, inter-Group communications.

The "Compliance Register" lists how the obligations apply to GSC and outlines the systems in place to maintain compliance.

The EMS manager shall ensure the register is maintained up to date.

6.1.4 Planning action

Actions to address significant environmental aspects, including risks and opportunities, and compliance obligations:-

- are contained in the aspect assessment; and / or,
- are defined in additional procedures such as ENV005 (waste) and ENV019 (LA-PPC compliance document).

These actions are integrated and implemented as detailed in section 6.2, 7, 8 and 9.1 below.

6.2 Environmental objectives: planning and achievement

6.2.1 Environmental objectives

Objectives are discussed and agreed on at management review and shall be managed so as to meet clause 6.2.1 of ISO14001:2015. The EMS Manager and top management shall ensure the objectives are and remain relevant to the scope to the EMS.

6.2.2 Planning actions to achieve environmental objectives

The EMS Manager shall ensure for each environmental objective a document is maintained that lists:-

- what will be done;
- the resources needed;
- who is responsible;

- when it will be completed;
- how results will be valuated.

The EMS Manager is responsible for monitoring progress towards environmental objectives and taking action or reporting to top management when progress is insufficient or is blocked.

7 Support

7.1 Resources

Top management are committed to providing the necessary resources to deliver the required outcomes of the EMS. The resources needed are monitored and requested by the EMS Manager in conjunction with top management.

7.2 Competence

Procedure ENV014 implements the competency requirements of clause 7.2 of ISO14001:2015.

7.3 Awareness

Procedure ENV014 implements the awareness requirements of clause 7.3 of ISO14001:2015.

7.4 Communications including complaints

Procedure ENV001 implements the communication requirements of clause 7.4 of ISO14001:2015.

7.5 Documented information

Procedure ENV006 implements the documented information requirements of clause 7.5 of ISO14001:2015.

8. Operation

8.1 Operational planning and control

The processes, plant, equipment and substances that give rise to significant aspects are controlled to ensure they conform with the requirements of the company's policy, objectives and targets. This is done largely via the aspect identification and control process.

This operational control is exercised through the planning of operations, the maintenance of plant and equipment and the correct use and storage of substances and is documented in works procedures, instructions and safety rules.

As necessary this operational control is complemented by additional environmental procedures which the EMS Manager is responsible for drafting and implementing. Procedure ENV002 includes the requirement for the operational control of significant aspects (as defined in that procedure) and includes the course of action to be followed should operations deviate from these controls and in abnormal conditions.

Cast metal articles

Generally referred to as castings, these are produced to a combination of :-

- National standards
- International standards
- Customer requirements
- Internal quality controls which may include proprietary intellectual information or processes so as to achieve the specification as required

Environmental Management System Environmental Management System Manual

The purpose of this is to ensure the casting meets the customer's specification and is suitable for the service to which it will be put.

Castings are produced to customer design, specifications and inspection criteria. During the enquiry review consideration is given to the manufacturability of the casting and the suitability of and possibility of achieving the specified inspection criteria. Top management take general oversight of the enquiry review process and subject to the limitations of knowledge will advise the customer of any concerns as the performance and service life of the casting.

Castings are generally recyclable through long- and well-established mechanisms which recognise the inherent residual value of the metal.

Production process

This is planned by Production Staff under the control and oversight of a relevant Director with each line manager supervising their operations in line with this production plan. The production process is planned so as to make appropriate use of all resources to meet commercial needs, meet statutory environmental requirements and any other identified requirements of the EMS, including by consultation with the EMS or other relevantly competent person as required. Moulding and melting activities are routinely planned, typically weekly. Other areas are planned on a day-to-day basis by the relevant senior supervision.

Maintenance activities

The Maintenance Management and Supervision team are responsible for the day to day maintenance of plant. The Work's Engineering Manager (or an equivalent job function / role) is responsible for overseeing the company's maintenance functions and ensuring plant is fit and capable for its intended purpose. This definition of plant includes all machinery and devices that ensure the company's operations comply with statutory requirements and any other EMS requirements.

Statutory requirements for the maintenance of plant are detailed on relevant forms.

Jubilee site

Activities under the control of GSC are planned and supervised by a relevant Manager and / or Director to ensure site activities make appropriate use of resources to meet commercial needs in line with statutory requirements and other requirements as identified by the EMS. The EMS Manager shall ensure site staff are aware of such requirements and adequately trained in such.

Activities under the control of other Goodwin Group companies are not considered under the control of the GSC EMS. However the EMS Manager shall monthly inspect the site for activities that do or may not comply with statutory requirements and notify the relevant Goodwin group company of issue and the actions that may be needed to correct or prevent non-compliance.

Substances inc. wastes

The responsibility for the control of substances falls to several people, depending on the nature of the substance.

The Health and Safety Officer is responsible for COSHH (see SWP075), which ensures the safe use of hazardous substances (which broadly correlates with the aims of the EMS.)

Departmental Managers / Supervisors are responsible for carrying out any COSHH requirements within their department, and for any other environmentally safe storage and use requirements within their departments, as contained within operational procedures etc.. This also applies for substances that fall outside of the scope of COSHH.

The relevant Director and Departmental Managers / Supervisors, along with the EMS Manager, are responsible for the storage of waste in their departments in line with the company's waste procedure ENV005. ENV006 covers waste water.

Out-sourced processes - castings

Out-sourced processes are controlled via request for services which state the work to be done and the acceptance criteria, where such is applicable. These will be in line with the specification as discussed further above.

Other out-sourced processes

Other out-sourced processes are undertaken to a defined purchase requirement stipulated by the person placing the purchase order. The EMS Manager shall work closely with the Procurement Director (or similar) to ensure appropriate influence and control is exercised where such purchases can affect the performance of the EMS and its compliance obligations.

Suppliers and contractors

The EMS Manager shall work closely with the Procurement Director (or similar, or with others e.g. Maintenance, who may carry out their own purchasing) to ensure appropriate influence and control is exercised where such purchases can affect the performance of the EMS and its compliance obligations.

No supplier shall be used where it is known that the supplier has consistently broken compliance obligations. Single, isolated violations may be reviewed by the EMS Manager with the Procurement Director with a view to future use.

Significant works, changes to plant, or any contractual work undertaken that can affect the environmental aspects is evaluated by the EMS Manager as part of the proposal for new plant or works before the work is undertaken.

The EMS Manager has the authority to audit, vet or otherwise check suppliers and contractor by an appropriate means in order to satisfy the EMS's general requirements or meet compliance obligations. The EMS Manager has authority to suspend use of a supplier or contractor where an issues arises and must liaise with appropriate management as to the next actions to be taken.

Where suppliers or contractors require specific permits or licences to operate (e.g. waste contractors) the EMS Manager shall ensure only appropriately qualified contractors are used, for example, by requesting copies of licences, or checking public registers.

8.2 Emergency preparedness and response

The EMS Manager maintains a site environmental emergency plan and ensures appropriate resources are in place to implement the plan. The site emergency plan takes into account the aspect assessments carried out and the compliance obligations relevant to the site. In the context of the organisation it deals with:-

- Uncontrolled emissions to air
- Uncontrolled emissions to water
- Uncontrolled emissions to land

Other emergencies are identified within the H&S Emergency plans and which include the immediate responses to be taken in the event of fire.

Action taken during an environmental emergency is reviewed by the EMS Manager and any issues found are to be communicated and remedied.

The EMS Manager is responsible for ensuring appropriate action is taken post-emergency to mitigate or prevent environmental impact.

The plan is periodically reviewed and additionally reviewed after any particular environmental emergency by the EMS Manager.

Emergency plan requirements are communicated by toolbox talk. Desk-top exercises and walkthrough may also be carried out. Due to site configuration and activities it may not always be practicable or practice plans.

9. Performance evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

Identified significant aspects are monitored and measured accordingly as per procedure ENV007, which implements clause 9.1.1 of 14001:2015. A register of monitoring and measurement actions is maintained by the EMS Manager.

The performance and the effectiveness of the EMS shall be evaluated at management review.

9.1.2 Evaluation of compliance

The process of compliance evaluation shall be carried out annually by the EMS Manager, reporting to top management at management review. Compliance evaluation may be carried out more regularly and reported separately if it is deemed necessary by the management review.

The evaluation of compliance shall be based on the:-

- Results of internal audits
- Results of external audits
- Non-conformities and corrective actions raised
- Review of environmental objectives
- A specific compliance audit which uses the Compliance Register as a template and samples for evidence against it.

A compliance report shall be produced on form ENV 100 which details:-

- Date of evaluation
- Name of person carrying evaluation out;
- Details of the evidence seen
- Evaluation of compliance (see below)
- Any other comments
- Any compliance obligations identified but not listed on the Compliance Register.

The evaluation of compliance shall be

Compliant; or,

Environmental Management System Manual

Page 8 of 8

- Compliant but improvement needed; or,
- Insufficient evidence to prove compliance ;or,
- Non-compliant

Actions needed to ensure compliance shall be communicated and implemented as soon as they are identified and shall be summarised at management review.

9.3 Management review

Procedure QMP004 implements the requirements of ISO14001:2015. Notwithstanding this procedure, top management shall review the EMS in accordance with the requirements of this clause at an interval of not less than 2 years. The form of the review is the prerogative of top management.

10. Improvement

10.1 General

The results of monitoring and measurement actions and analysis and evaluation of said results shall inform the improvement of the EMS, notwithstanding any other opportunities that may present themselves.

10.2 Non-conformity and corrective action

Procedure ENV004 implements the requirements of clause 10.2 of ISO 14001: 2015

10.3 Continual improvement

The EMS provides the framework for the continual improvement of the environmental performance of the company, which includes the evolution of the EMS itself.

11. Revision history

Revision	Date	Details	Approved by
4	5 th January	Revised for ISO 14001:2015	Steve Birks
	2018		
5	21 st June 2021	Change of ownership and initial review of system	Tony Baker
6	18/04/2022	Change of document reference numbers	Lee Bowers