Appendix 2-1 Construction and Environment Management Plan

Chapter 2 Jan 2024



# CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Proposed Replacement of Renewable Energy Plant Redmondstown, Clonmel, Co. Tipperary Prepared for: Medite Europe DAC:

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# **1.0 Introduction**

This Construction and Environmental Management Plan (CEMP) has been developed by SLR Consulting Ireland (SLR) on behalf of Medite DAC, who intend to apply to An Bord Pleanála for planning permission, as part of the Strategic Infrastructure Development process, to replace existing aging thermal energy systems with 2 new renewable energy plants. The CEMP has been prepared in conjunction with the Environmental Impact Assessment Report (EIAR) which will accompany the planning application for the proposed development to be submitted to An Bord Pleanála.

Should the project secure planning permission, the CEMP will be updated, in line with all conditions and obligations which apply to any grant of permission. The CEMP should be read in conjunction with the EIAR and planning drawings. The CEMP will also require updating by the selected contractor to identify, assess and satisfy the contract performance criteria as set out by the various stakeholders. The CEMP due to its structure and nature will also require constant updating and revision throughout the construction period as set out below. Therefore, this is a working document and will be developed further prior to and during construction.

Triggers for amendments to the CEMP will include:

- When there is a perceived need to improve performance in an area of environmental impact.
- As a result of changes in environmental legislation applicable and relevant to the project.
- Where the outcomes from auditing establish a need for change.
- Where Work Method Statements identify changes to a construction methodology to address high environmental risk; and
- As a result of an incident or complaint occurring that necessitates an amendment.

This report provides the environmental management framework to be adhered to during the precommencement, construction and operational phases of the proposed development and it incorporates the mitigating principles to ensure that the work is carried out in a way that minimises the potential for any environmental impacts to occur. This report has been prepared in accordance with the mitigation measures and commitments made in the EIAR and other planning documents for the development.

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## 1.1 Scope of Construction and Environmental Management Plan

This report is presented as a guidance document for the construction of the proposed renewable energy plants. Where the term 'site' is used in the CEMP it refers to all works associated within the development of the factory. The CEMP outlines clearly the mitigation measures and monitoring proposals that are required to be adhered to in order to complete the works in an appropriate manner.

The report is divided into nine sections, as outlined below.

- Section 1 provides a brief introduction as to the scope of the report
- Section 2 outlines the Site and Project details, detailing the targets and objectives of this plan along with providing an overview of construction methodologies that will be adopted throughout the project.
- Section 3 sets out details of the environmental controls on site which looks at noise and dust controls. Water management and a waste management plan are also included in this section.
- Section 4 sets out a fully detailed implementation plan for the environmental management of the project outlining the roles and responsibilities of the project team.

- Section 5 outlines the Emergency Response Procedure to be adopted in the event of an emergency in terms of site health and safety and environmental protection.
- Section 6 outlines the proposals for reviewing compliance with the provisions of this report.
- Section 7 sets out a programme for the timing of the works.
- Section 8 concludes the report.

# **2.0** Site and Project Details

## 2.1 Site Location and Context

The lands of the subject site comprise a total area of 62 hectares and are that of a long-established industrial facility at Medite, located in Redmondstown, Clonmel, Co. Tipperary (Refer to Figure 1 below and Drawing D01). Initial site works and construction of the MDF plant were completed in the period between 1981 and 1983 and therefore the development has been in situ for over 40 years. Over the intervening years, additional works have taken place on the site as the operations expanded and over this period over 21 planning applications having been made and granted.

The site is situated in what can be predominantly characterised as a peri urban area, located approximately 4 km east of the centre of Clonmel town and approximately 0.9 km north of the N24. The area to the north of the site is largely rural or agricultural in nature with low density housing development. The area to the south is characterised by built development including the Bulmers Manufacturing facility.

The site is accessed through a local road that connects to the N24. The subject site is well screened and the existing buildings within the industrial facility are situated 50 m back from the local access road and are largely obscured from view due to the presence of abundant shrub and tree plantations at the site boundaries.

### Figure 1: Site Context Map highlighting the Medite Europe DAC Facility by a Red Star

(Source: Google Maps)



## 2.2 Site Description and Land Ownership

The proposed development site has an area of 29.7ha which is part of the overall Medite Europe DAC landholding of 69ha. The land in the area of the subject site slopes in a south-easterly direction towards the River Anner, with an elevation range of 20m to 35mOD.

The site is composed of the main production plant building and materials storage areas. All areas associated with the facility's operations are located on hardstanding. A number of landscaped areas and bunds are located along the perimeter of the site.



*Figure 2: Approximate Site Boundary of the Medite Europe DAC Landholding* (Source: Google Maps)

### **2.3** Site Access

The existing manufacturing plant and application site is accessed via a local access road off the N24. The existing buildings in the Medite facility are situated approximately 50m back from this local access road.

### 2.4 Surrounding Land Use

The lands surrounding the manufacturing plant and application site to the north are characterised as rural, predominantly low density residential and agricultural. Local fields comprise a mix of grassland and tillage, forestry plantation and an equine industry facility to the east of the River Anner.

The River Anner flows to the east of the site and connects as a tributary to the River Suir (it is part of the Lower River Suir SAC). Rossmore Bay is located immediately south of the site. An industrial area is also located south of the site. There are no Special Protected Areas (SPAs) within 25 km of the application site.

Following a desk-based review of the National Inventory of Architectural Heritage, the National Monuments Service and the Record of Monuments and Places, it is concluded that no protected structures or recorded monuments are located within the application site. However, it should be noted that there is a feature near the application site, which is east of application area and west of the local road. This feature recorded under record number TS083-010 is classified as a Ringfort – rath.

### 2.5 Development and Operation Overview

The proposed development will replace the existing aging thermal energy systems serving both of Medite's two production lines, specifically;

- The two wood biomass fired boilers (18MW each) serving Production Line 1.
- The wood biomass fired Thermal Fluid Heater (19MW) serving Production Line 2.

These systems will be replaced with 2 new renewable energy plants. These renewable energy plants will have rated thermal input capacity of up to 60 MW for the system serving Production Line 1 and 30 MW for the system serving Production Line 2. The new 60MW system to serve Line 1 will also generate the thermal energy currently be provided to Line 1 by a natural gas-fired Thermal Fluid Heater (TFH) (6MW), which will be maintained for backup purposes. The plants will take the form of wood biomass fired Thermal Fluid Heaters. The new renewable energy plants will provide thermal energy to the manufacturing process in following ways:

• Treated flue gases from each of the new plants will be ducted to the existing Dryers in both production lines.

- Heated thermal fluid will be sent to the existing Presses.
- Heated thermal fluid will be sent to new Steam Generators that will form part of the development.
- Steam (generated by the new Steam Generators) will be sent to the existing refining equipment in both production lines.

The proposed development will include pipes/ducts and associated supporting infrastructure to transfer the thermal energy to the various heat users within each of the production lines, including the necessary modifications to the Line 1 Dryers to take all required heat in the form of flue gas, rather than the current combination of flue gas and steam.

The pipes and ducts will run from the energy plants to the heat consumers within the existing Medite plant buildings and along the corridors formed by the existing roadways.

## 2.6 Targets and Objectives

In so far as they have been completed to date, or are to be further completed in future, the construction phase works are designed to approved standards, which include specified materials, standards, specifications and codes of practice. The design of the project has considered environmental issues, and this is enhanced by the works proposals. The key site targets are as follows:

- Zero pollution incidents;
- Minimise disruption to residents (and their complaints);
- Reduce / avoid impacts on biodiversity;
- Minimise waste sent to offsite licensed facilities.

# **3.0 Environmental Management**

## 3.1 Introduction

In developing this CEMP with respect to environmental management, the following aspects are considered relevant to the construction phase:

- The location of the Site in context of the surrounding area;
- The local road network;
- Local residences and businesses;
- The location of the Site in context of the on-site surface water and closest water bodies;
- An increase in air and noise emissions during the construction stage; and
- The biodiversity value of the Site and its surrounding habitats.

Additionally, the following detailed Site-specific plans will be completed by the appointed Principal Contractor and incorporated into site works:

- Construction Stage Method Statement, and,
- Final Construction Environmental Management Plan (CEMP

## 3.2 Potential nuisance towards the Public

A potential hazard could arise towards the public due to out of hours activities. As a result of this, normal construction hours will be restricted to 07:00 to 19:00 Monday to Friday and 08:00 to 14:00 on Saturdays. No work will occur on Sundays or Public Holidays. No surface water runoff will be discharged onto public roads, foul sewers or adjacent property.

# 3.3 Traffic

In order to manage the effects of traffic:

- Best practice measures and a Construction Traffic Management Plan will be implemented. Access to the Site for HGVs will be via the existing Site entrance
- Parking will be made available at the existing car park facility for construction workers.
- Spill kits to be available onsite and used in the unlikely event of a spill.
- Soiling of the access road will be avoided in so far as is possible, through the use of the existinga wheel wash facility.
- Adequate signage shall be provided on the public network.

### 3.4 Water Management

### 3.4.1 Water Quality - Suspension Solids

Issues may arise from suspended solids due to run-off from construction areas entering the nearby watercourses causing potential detriment to water quality. In order to manage the potential effects:

- All surface water runoff from the Proposed Development will be diverted to the existing drainage system onsite.
- The Contractor shall ensure that sediment / silt control measures are regularly maintained during the construction phase.
- Weather conditions will be considered when planning construction activities to minimise risk of run off from site.

- An Environmental Clerk of Works shall be engaged to periodically inspect all elements of the works for their entire duration.
- Emergency response procedures will be put in place.

### 3.4.2 Water Quality - Pollutants

Pollutants from construction activities entering the nearby watercourses such as wash down waters, fuels, oils, lubricants, hydraulic fluids, bitumen, sealants and waste from welfare facilities. In order to manage the potential effects:

- All materials shall be stored in a secure area and transported to the works zone immediately prior to construction.
- Weather conditions will be considered when planning construction activities to minimise risk of runoff from site.
- Fuels, lubricants and hydraulic fluids for equipment used in the construction site will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment according to current best practice.
- Prior to any works commencing, all construction equipment will be checked to ensure that they are mechanically sound, to avoid leaks of oil, fuel, hydraulic fluids and grease.
- Adequate stocks of absorbent materials, such as sand or commercially available spill kits shall be accessible.
- The Appointed Contractor shall ensure that all personnel working on-site are trained in pollution incident control response.
- In the unlikely scenario, any sediments impacted by contamination will be excavated and stored in appropriate sealed containers for disposal offsite in accordance with all relevant waste management legislation.

### 3.4.3 Water Quality - Oil

Oil pollution is known to cause significant damage to intertidal and sub-tidal communities and loss of bulk stored oil or oil from construction vehicles will likely have an adverse impact on the aquatic environment. To manage the potential impact of oil spill:

- The Appointed Contactor will put in place a specific, step-by-step refuelling procedure which will be communicated to all relevant employees on-site.
- Vehicle or equipment maintenance work will be carried out in a designated area on the Site. In the event that refuelling is required outside this area a spill tray will be employed during the refuelling operation.

### 3.4.4 Water Quality - Cement

In order to manage the potential effects of Cement and Concrete entering waters resulting in water pollution and contamination to the environment:

- Pouring of concrete will only be carried out in dry weather and carefully planned to avoid any impacts.
- Any spillage of cementitious materials will be cleaned-up immediately.
- Where concrete is to be placed by means of a skip, the opening gate of the delivery chute will be securely fastened to prevent accidental opening.
- Where possible, concrete skips, pumps and machine buckets will be prevented from slewing over water when placing concrete.
- Concrete washout of trucks and larger plant should not occur on site.
- Concrete washing from smaller equipment will be collected and disposed of off-site, not to ground or the nearby drainage system.

• Surplus concrete will be returned to batch plant or off-site concrete wash facility after completion of a pour.

# 3.5 Tree Felling

Within an area of circa 0.42 hectares, there will be a requirement for tree removal in advance of ground preparation works and construction. An area of 0.42 hectares of planting to compensate for the mature tree felling will be carried out at the northern boundary of the Proposed Development Site. Please refer to 'Figure 13-7 – Vegetation to be removed' in Chapter 13 of the EIAR for an indication of the trees to be removed, to facilitate the proposed development.

# 3.6 Dust Control

The Generation of dust / dirt causing loss of amenity at residential area or community areas has a minor consequence and medium likelihood of occurring. In order to mitigate the effects it will be necessary to:

- Avoid roughening of concrete surfaces;
- Ensure sand and other aggregates are stored in bunded/enclosed areas and prevented from drying out,
- Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent the escape of material and overfilling during deliver,
- For smaller supplies of fine powder materials ensure bags are sealed after use and stored in an appropriate place to prevent dust emissions;
- Avoid dry sweeping of large areas;
- Keep them damped down with a water bowser or other such mechanism capable of reaching all parts of the route;
- Utilise existing wheel washing system where possible; and
- A Site Representative will be appointed to receive and respond to dust complaints and enquiries during construction by local residents, the Local Authority and any other regulatory body. Relevant details will be provided to the Local Authority prior to construction, and will be made available to third parties, including local residences,
- An adequate water supply capable of reaching all parts of the Site should be available onsite at all times;
- Minimise drop heights from handling equipment should be implemented across all activities.
- Ensure vehicles entering and leaving the Site are covered to prevent the escape of materials during transport.

# 3.7 Noise Control

With regards to noise, the generation of noise will result in minor loss of amenity to the local area and causing medium disruption to the local species and in order to be manged it will be crucial to:

- Construction will be limited to working hours in order to minimise adverse effects on nocturnal fauna;
- All plant where possible shall be low noise rated;
- Where necessary the use of enclosures and noise screens shall be used to control noise from plant;
- Positioning of the Site Compound to minimise noise transmission;
- On-site policy for all plant and equipment, including Site delivery vehicles, to power off rather than to be left with idling engines;
- All plant and vehicles on the Site will be in a fit condition for use, to prevent the addition of noise from maintenance issues;
- All noisy plant should be placed as far as practicable from noise sensitive locations

- Working Method Statements will be developed for the Site Construction Personnel to ensure optimal working procedures are employed;
- A Site Representative will be appointed to receive and respond to noise complaints and enquiries during construction by local residents, the Local Authority and any other regulatory body. Relevant details will be provided to the Local Authority prior to construction, and will be made available to third parties, including local residences;
- In advance of works, all site personnel will receive a Site induction or toolbox talk which will include reference to measures detailed in the CEMP;
- All plant items will comply with the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations 1996; and,
- Measures will be taken to reduce the noise levels on-site in accordance with BS5228:2:2009 Code of Practice for Noise and Vibration Control on Construction Sites.

With the inclusion of all the conveyors as belt conveyors with sound power of 77dB(A) no mitigation is required. The conveyors have been included in the noise model with the following parameters. With this embedded mitigation in place no further mitigation with a residual assessment is

Further measures are also detailed in Appendix 01 of Chapter 10 of the EIAR. These mitigation measures can be implemented as appropriate to further reduce construction noise levels

## 3.8 Invasive Species Management

The spread of alien and invasive species will be managed through:

- Vehicles, machinery and any other equipment used for the works will be washed prior to its use at the Site to prevent the import of plant material or seeds.
- Before machinery or equipment is unloaded at the Site, equipment will be visually inspected to ensure that all adherent material and debris has been removed.
- Any vehicles and machinery that are not clean will not be permitted entry to the Site.
- All materials to be imported to the Site including additional planting will be sourced from a reputable supplier and records of all material and supplies will be maintained.
- Measures outlined in Section 3.1 of C744 (Invasive non-native species) will be considered.

### 3.9 Waste Management

### 3.9.1 Minimisation, Reuse and Recycling of C&D Waste

Minimisation, Reuse and Recycling of C&D Waste Construction and Demolition (C&D) waste will be minimal arising mainly from the removal of a small portion of made ground to allow for the installation fuel storage bays, ash storage, route widening. It is expected that while there will be unavoidable construction waste, material surpluses, and damaged materials that will need to be disposed of, the Site Manager shall ensure that materials are ordered so that the quantity delivered; and the storage is not conducive to the creation of unnecessary waste.

The construction phase may generate plastic wrapping, strips, containers, polystyrene and wooden pallets etc. associated with the components of the Telestack, roller door and dust suppression equipment. These wastes will be collected and segregated onsite before being removed off-site and recycled or disposed of at a suitably licensed waste facility.

### **3.9.2** Assignment of responsibilities

The Site Foreman appointed by the Contractor will be the designated C & D Waste Manager and have overall responsibility for the implementation of the Project C & D Waste Management Plan. The C & D Waste Manager will be assigned the authority to instruct all site personnel to comply with the specific provisions of the Plan. At

the operational level, the Site Foreman from each sub-contractor on the Site shall be assigned the direct responsibility to ensure that the discrete operations stated in the Project C&D Waste Management Plan are performed on an on-going basis.

### 3.9.3 Training

Copies of the Project C&D Waste Management Plan will be made available to all relevant personnel on site and included as part of the Site induction information. All site personnel and sub-contractors will be instructed about the objectives of the Project C&D Waste Management Plan and informed of the responsibilities which fall upon them as a consequence of its provisions. Where source segregation and material reuse techniques apply, each member of staff will be given instructions on how to comply with the Project C&D Waste Management Plan.

### 3.9.4 Waste Documentation

Main Contractor will manage the development and the implementation of the Construction Environmental and Waste Management Plan and monitoring/mitigation measures. The C&D Waste Manager shall arrange for full details of all movements and treatment of construction and demolition waste discards to be recorded during the construction stage of the Project. Each consignment of C&D waste taken from the Site will be subject to documentation, which will conform to the requirements of Table 7-1 and ensure full traceability of the material to its destination.

# 4.0 Environmental Management Implementation

# 4.1 Roles and Responsibilities

The Appointed Project Manager will be responsible for developing an updated site-specific CEMP prior to commencement of Site works. The Project Manager will be responsible for ensuring compliance with the CEMP with Ecological support provided by the Ecological Clerk of Works (ECoW) as required. Each sub-contractor will be responsible for appointing a point of contact for matters related to environmental protection.

Copies of the CEMP will be made available to all personnel on-site. All Site personnel and sub-contractors will be instructed about the objectives of the CEMP and informed of the responsibilities which fall upon them as a consequence of its provisions. All staff will be required to have the appropriate training and certification to undertake their specific roles. All staff will receive environmental awareness training as part of their Site induction to ensure they are aware of their responsibilities under the CEMP. This will include:

- Site induction, including relevant environmental issues;
- Environmental posters and site notices;
- Method statement and risk assessment briefings;
- Toolbox talks, including instruction on incident response procedures; and,
- Key project specific environmental issues briefings.

The CEMP will be reviewed on an as needed basis if the scope of works changes significantly or if the need is identified following a site audit.

## 4.2 Environmental Awareness and Training

Site personnel shall be trained appropriately to ensure they are competent to perform tasks that have the potential to cause a significant environmental impact as part of the proposed development. Competence is defined in terms of appropriate education, training and experience.

All managers and supervisors will be briefed on the CEMP Method Statements will be prepared for specific activities prior to the works commencing and will include environmental management / best practice measures and emergency preparedness appropriate to the activity covered. The Appointed Project Manager will review key Method Statements prior to their issue. Method Statement briefings will be given before personnel carry out key activities for the first time.

# 5.0 Emergency Response Plan

## 5.1 Emergency Response Procedure

Although the Site will be managed, there remains a low risk from unexpected occurrences, such as accidental spillages on-site that may result in environmental pollution. Incidents on-site will follow a similar emergency response template. The Medite facility has a number of emergency response procedures implemented as part of the environmental management systems at the Site which are accredited to ISO 14001 Standard. These procedures include the following:

- Accident Prevention Policy;
- Environmental Hazard to Surface Water Emissions Incident Prevention;
- Environmental Hazard to Surface Water Emissions Emergency Response;
- Environmental Hazard to Air Emissions Incident Prevention (Fire);
- Environmental Hazard to Air Emissions Emergency Response (Fire);
- Environmental Hazard to Air Emissions Incident Prevention (Equipment Failure);
- Environmental Hazard to Air Emissions Emergency Response (Equipment Failure);
- Environment Hazard to Land and Groundwater Incident Prevention;

Environment Hazard to Land and Groundwater - Emergency Response; and Incident notification. The Medite facility has an Emergency Plan developed to provide an organised response to any incident that occurs at the facility. An emergency response team (ERT) is on site 24/7, who are trained in advanced techniques such as fire-fighting, spillage clean up, and search/rescue. In addition, there is an emergency response room located within the car park area of the Site which contains stocks of firefighting equipment, PPE, emergency first aid equipment and rescue equipment.

### 5.2 Incident Response

Where an environmental incident is identified then it will be reported to the on-duty Project Manager and thereafter the Health and Safety Officer. Each incident will have the following information gathered and reported:

- Location of the incident,
- Time and date;
- Scale of the incident;
- Nature of the incident, including any specific environmental dangers;
- Remediation actions taken;
- Name of personnel noting the incident, and who they work for; and,
- Any other relevant details.

Works in the vicinity of the incident must be stopped until the incident is resolved and an all clear is issued by the Health and Safety Officer. All personnel in the immediate area of the release/spill shall be alerted to the circumstances and any dangers to them (Health and Safety) and to the environment. The Project Manager will ensure, where required, that the incident details are communicated to the relevant regulatory authorities.

# 6.0 Monitoring Proposals

### 6.1 Complaints, Comments and Enquiries

Any complaint related to the Site will be dealt with by the Project Manager. The source of the complaint will be investigated immediately. If possible, the source of the complaint will be stopped, moved or modified immediately. All complaints must be recorded including details of the complaint and any required corrective actions.

# 6.2 Site Visits and Evaluation of Compliance

A pre-construction Site walkover by the project CoW will take place followed by additional Site visits a required. The aim of these visits will be to ensure compliance with procedures set out in the CEMP and environmental conditions established under planning. This will be done by means of a Site inspection and the auditing of different aspects of the works including documentation. Checklists for compliance will be drawn up, corrective actions will be required for any non-compliances identified and follow-up surveys will be scheduled to ensure compliance.

All monitoring results and reports detailing the compliance or otherwise of the works will be maintained at the Site office. In the event of an incident, an incident report will be completed and that will document both the cause of the incident and the corrective action taken to address the incident. These incident forms will be available for inspection within the Site office.

## 6.3 Control of Records

Environmental records, including waste management records, will be maintained in accordance with the respective company procedure and legal requirements. The records are to be maintained, in either hard copy or electronic format as required by the individual procedure that the records relate to, in such a way that they are readily identifiable, retrievable and protected against damage, deterioration or loss. The procedure that the records relate to also specifies the retention time for the records and who has the authority to dispose of them.

# 7.0 Programme of Works

Medite intend to commence construction works on Phase 1 (works in Development Area 1 and Development Area 2) in Q1 2025. It is envisaged that all works will be complete within a 12month period. Construction works will be limited to the following times:

- Monday Friday 07:00 hours 19:00 hours
- Saturday 08:00 hours 14:00 hours
- Sundays and Public Holidays Closed

Phase 2 works (development area 3) are provisionally planned for 2032 and are also likely to take 12 months to complete.

The construction schedule and construction phase details will be updated by the Appointed Project Manager within the CEMP and throughout the duration of the Site works. An ecological clerk of works (EoW will inspect the Sites in advance of works commencing and will undertake Site inspections as required during the works, to ensure that they are completed in line with the mitigation measures detailed within the CEMP.

# 8.0 Conclusions

This CEMP document outlines the management procedures to enable the Appointed Project Manager to respond to potential environmental risks from construction activities on-site. The final CEMP will cover all aspects of the construction development. In assessing risks on-site, full cognisance has been taken of best practice guidance including:

- C532 Control of Water Pollution from Construction, Guidance for Consultants and Contractors [1];
- C741- Environmental Good Practice on Site (4 edition) [2];
- C784 Coastal and Marine Environmental Site Guide for Protection of Water Quality (Second Edition) [3];
- Guidance for the Treatment of Otters Prior to the Construction of National Road Schemes [4];
- All works will be undertaken in accordance with the 'Requirements for the Protection of Fisheries Habitat during Construction and Development' [5];
- The recommendations included within the NRA Guidelines for the Crossing of Watercourses (6]; and,
- BS 5228-1 + A1:2014: Code of Practice for noise and vibration control on construction and open sites-Part 1: Noise [7] and Part 2 Vibration [8];

The Appointed Contractor will be required to develop an updated CEMP prior to the commencement of any construction works and this will be submitted to Tipperary County Council and An Bord Pleanala for approval. The implementation of all the environmental management measures outlined in this CEMP will ensure that the construction program will be completed without significant adverse effects on the surrounding environment.

# 9.0 References

[1] CIRIA, "CIRIA C532 Control of Water Pollution from Construction, Guidance for Consultants and Contractors," CIRIA, 2001.

[2] CIRIA, "C741 - Environmental Good Practice on Site (4th edition)." 2015.

[3] CIRIA, "Coastal and marine environmental site guide (second edition) (C744)," CIRIA, 2015.

[4] NRA, "Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes," National Roads Authority, 2006.

[5] IFI, "Guidance and Protection of Fisheries during Construction Works in an Adjacent to Water," IFI, Dublin, 2016.

[6] NRA, "Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes," National Roads Authority, Dublin, 2005.

[7] BSI, "Code of practice for noise and vibration control on construction and open sites - Part 1:Noise," BSI, London, 2009.

[8] BSI, "Code of practice for noise and vibration control on construction and open sites

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Appendix 2-2 Environmental Management System Manual

Chapter 2 Jan 2024





# ENVIRONMENTAL MANAGEMENT System Manual



ENVIRONMENTAL MANAGEMENT SYSTEM

Embracing the Environment

# **ISO 14001: 2015**

# PUBLIC INFORMATION CONTACT FOR ENVIRONMENTAL ISSUES

# **ENVIRONMENTAL MANAGER**

# Environmental Manual Circulation List

- 1.1 The contents of this Manual are confidential.
- 1.2 This Manual must not be removed from the company or extracts from it must not be given to other companies, outside MEDITE Europe DAC, or persons without the written permission of the Operations Manager or Environmental Manager.
- 1.3 Although this document is controlled, it is available to all employees who wish to review it.
- 1.4 Controlled copies of this manual are distributed as follows:

Manual No:	Held by:
E1	Environmental Department

# **Contents of ISO14001 Manual**

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8.1	Operational Planning and Control
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9.2	Internal Audit 9.2.1 General 9.2.2 Internal Audit Programme
9.3	Management review
10.0	Improvement
10.1	General
10.2	Non-conformity and Corrective Action
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Appendix A:	Cross reference between Environmental Manual and Associated documents
Appendix B:	Environmental Policy

# Section 4: Context of the Organisation 4.1 Understanding the Organisation and its Context

Doc. Ref. No: EM4.1	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 6 of 67

### **Purpose:**

To gain a high-level understanding of all relevant internal and external issues that impact or have the potential to impact, positively or negatively, the ability of the EMS to achieve its intended outcomes.

### Scope:

This applies to all issues that may impact the ability of the EMS to achieve its intended outcomes.

### **Responsibility:**

Understanding the organisation, its context and the potential for its context to impact upon the EMS is the ultimate responsibility of the Operations Manager.

### **Documented Information:**

MEDITE Europe DAC Context Statement

#### **Procedure:**

Understanding the organisation's context involves the review and definition of the environmental conditions capable of affecting or being affected by the organisation's operations. This review consists of:

- Determining the external issues that could affect or be affected by the organisation's products throughout their life-cycle. Determining the external issues is carried out through analysis of all Political, Economic, Social, Technological, Environmental and Legal issues as a minimum.
- Defining the internal characteristics of the organisation that could affect the ability of the EMS to achieve its intended outcomes. Determining the internal issues is carried out through analysis of the organisation's strategic direction, products, services, processes, activities, culture and capabilities and any other internal issues deemed relevant.
- Developing a list of opportunities based on these issues which are to be included in the setting of objectives and targets.
- Delivering a Context Statement which addresses the above parameters and details the above analyses and criteria.
- > The Context Statement is reviewed as part of the annual management review.

# Section 4: Context of the Organisation 4.2 Understanding the needs and expectation of interested parties

Doc. Ref. No: EM4.2	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 7 of 67

### **Purpose:**

To identify, document and review the interested parties to the EMS and to gain a general (i.e. high-level, not detailed) understanding of their needs and expectations.

To determine which of these needs and expectations should become compliance obligations for site's EMS.

#### Scope:

This applies to all operations of the organisation that may affect, positively or negatively, the needs and expectations (i.e. requirements) of all interested parties.

### **Responsibility**:

Understanding the requirements of interested parties relevant to MEDITE Europe's Environmental Management System is the ultimate responsibility of the Operations Manager.

### **Documented Information:**

Company Context Statement

### **Procedure:**

- Consultation with employees, shareholder/owners, customers, visitors, neighbours, authoritative bodies/regulators, parent company, suppliers and partners, insurers, business groups, emergency services and as necessary to identify their requirements.
- Determining the nature of the requirements of each i.e. is it a regulatory requirement, a voluntary agreement, an expressed view of a customer or neighbour, etc.
- The relevant requirements of interested parties are incorporated into the Context Statement, which is reviewed as part of the annual management review.

# Section 4: Context of the Organisation 4.3 Scope of the Environmental Management System

Doc. Ref. No: EM4.3	Created By:	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By:	Page 8 of 67

### **Purpose:**

To define the physical and organisational boundaries to which the EMS applies.

### **Responsibility**:

Definition of the scope of the EMS is the ultimate responsibility of the Operations Manager.

The Environmental Manager is responsible for the implementation of this procedure.

### **Reviews and Audits:**

- The scope of the EMS is reviewed as part of the annual management review to ensure its continued adequacy and effectiveness.
- The Annual Management Review takes account of the organisation's context, compliance obligations, spatial and organisational boundaries, activities, products.
- Each on-site process and ISO 14001 clause is audited annually by appointed internal auditors.

### Scope of the Environmental Management System:

- > The scope of the EMS is the activities and products of the company.
- The scope of the EMS is also the external processes associated with the company over which it can exert a degree of control or influence.
- These processes/activities are:
  - Raw Material Inwards and Storage
  - Debarker and chipper
  - o Refiner
  - o Dryer
  - o Fibre handling
  - o Press
  - Sander, Saw, Packaging, Dispatch
  - o Boilers
  - o Yard, Chemical Storage, Waste Storage Area, Waste Transport
  - Air Conditioning Units
  - Engineering and maintenance activities
  - Offices, Canteens, Toilets.
- > The spatial boundaries are as per the site boundaries of the Facility.
- The organisational personnel structures are as per EM 5.3 Organisational roles, responsibilities and authorities of the Environmental Manual.
- > This scope of the EMS is available to interested parties on request.

# Section 4: Context of the Organisation 4.4 Environmental Management System

Doc. Ref. No: EM4.4	Created By: Environmental Manager	Issue Date: 07/07/2020
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### **Purpose:**

To establish, implement, maintain and continually improve the Environmental Management System, including the processes needed and their interactions, in accordance with the requirements of ISO14001:2015 and considering the Context of the Organisation.

This is in line with the overall goal of providing a sound basis for effective and responsible management of the environment and to provide a safe and healthy workplace for employees, neighbours, contractors and visitors.

### Scope:

See list of documented information below.

### **Responsibility**:

The Operations Manager is ultimately responsible for the effective implementation of the Environmental Management System.

### **Documented Information:**

- 1. Environmental Manual.
- 2. Company Context Statement
- 3. EM 4.3 Scope of the Environmental Management System
- 4. Environmental Policy
- 5. EM 5.3 Organisational roles, responsibilities and authorities.
- 6. Register of Aspects.
- 7. Environmental Objectives, targets and opportunities Master Schedule
- 8. Training matrix.
- 9. Communications Log
- 10. Environmental Procedures Manual.
- 11. Master Documents: Environmental Forms and Records.
- 12. Evaluation of Legislation Compliance.
- 13. Environmental Audit Schedule and audit reports.
- 14. Environmental meeting.
- 15. Management Review.

### **Procedure:**

- 1.1 The master copy of all documents is held in the office of the Environmental Manager.
- 1.2 Management reviews and internal environmental audits form part of the Environmental Management System to ensure its continuing suitability and effectiveness.
- 1.3 EMS objectives are aligned with those of business functions wherever possible.

Section 5: Leadership 5.1 Leadership and Commitment				
Doc. Ref. No: EM5.1	Created By: Environmental Manager	Issue Date: 07/07/2020		
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### **Purpose:**

This procedure defines the responsibilities and expectations of top management with respect to the EMS.

To demonstrate that Top Management Team at MEDITE Europe DAC take accountability for the effectiveness of the Site's EMS.

### Scope:

This applies to all top-level managers within the organisation. This list covers all main responsibilities of Top management with regard to the EMS.

### **Responsibility:**

The Operations Manager is responsible for the overall implementation of this procedure.

### **Documented Information:**

Site Environmental Policy. EM 5.3 – Organisational roles, responsibilities and authorities. Annual Management Reviews of EMS Environmental meetings

### **Procedure:**

The organisation will need to ensure that it can demonstrate leadership for the environmental management system at the most senior level within the organisation covered by the current scope of registration.

Duties/responsibilities of top management in relation to the EMS:

- > Accountable for the effectiveness of the EMS, by:
  - Attending regular EMS meetings and Annual Management Review Meetings at which the Environmental Objectives are set and agreed.
  - Setting, agreeing and reviewing environmental objectives and targets.
  - Communicating environmental objectives to employees and contractors.
  - Being present for external EMS audits, opening and closing meetings.
  - During external audits, the auditor may request some time with top management to discuss their understanding of the environmental management system, the current performance of the system, their level of interaction with the system and examples where leadership and support for the system can be demonstrated.
- Ensure the Environmental Policy and environmental objectives are in place and are compatible with the organisation's context and strategic direction.

# Section 5: Leadership 5.1 Leadership and Commitment

Doc. Ref. No: EM5.1	Created By: Environmental Manager	Issue Date: 07/07/2020
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- > Ensure EMS requirements are integrated into the organisation's business processes, where possible.
- Considering environmental issues in the change management process for example when moving into new markets, new product development etc.
- Ensure sufficient resources, including support and training are available to effectively implement the EMS.
- Communicate the importance of effective environmental management and of conforming to the EMS requirements.
- > Ensure the EMS achieves its intended outcomes and objectives.
- Directs and supports management and employees as necessary to contribute to the effectiveness of the EMS.
- Promote continual improvement.
- Where the above tasks are delegated, top management remains accountable for ensuring they are performed.

## Section 5: Leadership 5.2 Environmental Policy

Doc. Ref. No: EM5.2	Created By: Environmental Manager	Issue Date: 07/07/2020
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### **Purpose:**

To provide a framework appropriate to the purpose and context of the organisation in the form of a set of commitments for all of the organisation's operations to be carried out in an environmentally friendly manner.

To state the long-term direction of the organisation in relation to the environment and to demonstrate its commitment to enhancing its environmental performance

### Scope:

This procedure applies to all activities carried out at MEDITE Europe DAC, which is a subsidiary of the Coillte Group.

It also applies to stages of MEDITE Europe DAC's Site product life cycle over which it can exert an influence.

### **Responsibility:**

The Operations Manager has ultimate responsibility for the approval and implementation of the Environmental Policy.

### **Documented information:**

Environmental Policy Statement,

#### Implementation:

- 1. The Environmental policy is displayed at reception and on the environmental notice boards within the site.
- 2. Copies of the Environmental Policy are available to interested parties on request.
- 3. The policy is reviewed by top management at least annually at the Environmental Management Review Meeting. Any proposed modifications to the policy are forwarded to the Environmental Manager for consideration.
- **4.** The Environmental Policy is communicated to all employees working for the organization.
- 5. Top Management ensures the Environmental Policy conforms to the requirements of ISO14001:2015 as follows:

	Section 5: Leadership 5.2 Environmental Policy	
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- Is appropriate to the purpose and context of the organisation, including the nature, scale and environmental impacts of its activities, products and services.
- Provides a framework for setting environmental objectives.
- > Includes at least the following commitments:
  - To protect the environment, including a commitment to prevent pollution and other commitments specific to the context of the organisation. Commitments may also address broader opportunities (e.g related to climate change mitigation and adaption or preservation of biodiversity and ecosystems).
    - $\circ~$  To conform to all compliance obligations.
    - To aim to continually improve the EMS to enhance the organisation's environmental performance.
- ➢ Is maintained as documented information.
- Is communicated within the organisation, including to persons doing work under the organisation's control.
- ➤ Is readily available to interested parties.
- > Is aligned with the organisation's business objectives and targets where possible.
# Section 5: Leadership 5.3 Organisation Roles, Responsibilities and Authorities

Doc. Ref. No: EM5.3	Created By: Environmental Manager	Issue Date: 07/07/2020
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#### **Purpose:**

This procedure defines the responsibilities related to Environmental management for the various roles at MEDITE Europe DAC's Site. It covers all main responsibilities but is not to be considered exhaustive. The roles designate responsibility for ensuring the EMS conforms to the requirements of ISO14001:2015 and for reporting the performance of the EMS to top management.

#### Scope:

This procedure applies to all relevant employees and the resources available for the EMS and its activities within the business.

The Organisation Chart is communicated to all personnel within the Site and to contractors as relevant.

#### **Responsibility:**

Top management, to include the Operations Manager, is responsible for the overall implementation of the Environmental Management System.

#### **Documented information:**

Company Organisation chart.

#### **Definition of responsibilities:**

Those assigned responsibilities and authorities should understand these in the context of what the EMS is trying to achieve.

#### **Operations Manager**

- Has overall responsibility for the effect that the site operation has on the environment.
- To ensure that the EMS conforms to the requirements of ISO 14001:2015.
- To provide adequate resources and support for the effective implementation of the company's environmental management system and policy.
- Responsibility for the general welfare and safety of the workforce.
- To ensure that environmental legislation identified is implemented and monitored through periodic auditing.
- To ensure that the environmental objectives relating to production are agreed and met.
- To perform his tasks in relation to the environmental management system in compliance with the requirement as stated in the environmental manuals.

# Section 5: Leadership 5.3 Organisation Roles, Responsibilities and Authorities

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• To run production on a day to day basis and to ensure, that all work is performed to the stated procedures.

## **Technical Manager**

- To perform his/her tasks in relation to the environmental management system in compliance with the requirements as stated in the environmental manual.
- To ensure that the product customer requirements and that they are processed in the most economical and environmental friendly way.

## **Environmental Manager**

- To ensure the site complies with environmental licences and permits.
- To manage and supervise the implementation of the environmental policy within the site.
- Act as the site environmental representative.
- To implement, maintain and monitor the environmental management system in accordance with I.S. EN ISO 14001: 2015.
- Report the performance of the environmental management system to top management for review and as a basis for improvement.
- To ensure that each department's responsibility for environmental issues is adequately documented and records are maintained to demonstrate conformity.
- To initiate action as needed and verify that it has taken place.
- To communicate with internal and external bodies and organisations.
- Take appropriate action to deal with an environmental emergency.

## **Environmental Auditor**

- To perform internal environmental audits in accordance with the agreed program
- Provide support to other group Environmental auditors as required
- Notify Environmental Manager if there will be difficulties completing audits to program in time to allow contingencies to be implemented

#### Site Engineering Manager

- To ensure that plant and equipment are maintained and controlled under the preventive maintenance system.
- To ensure that the environmental objectives relating to engineering are met.

## **Production Managers/Shift Supervisors**

- To ensure all work is performed in line with stated procedures.
- To ensure that safety equipment is used and instructions followed.

# Section 5: Leadership 5.3 Organisation Roles, Responsibilities and Authorities

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• To ensure that the environmental objectives relating to their areas are met.

# **Team Members**

- To perform their tasks in accordance with stated procedures.
- To ensure that safety equipment is used and instructions followed.
- To ensure that the environmental objectives relating to their areas are met.

Section 6: Planning		
6.1 Actions to address Risks and Opportunities 6.1.1 General		
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- To plan, implement and maintain a process to meet the requirements of 6.1 considering the context of the organisation and scope of the EMS.
- > To determine the risks and opportunities associated with environmental aspects, compliance obligations and the context of MEDITE Europe DAC Site.
- > To give assurance that the EMS can achieve its intended outcomes.
- > To prevent or reduce undesired effects, including the potential for external environmental conditions to affect the organisation.

#### Scope:

This procedure applies to:

- > Activities carried out on site by and on behalf of MEDITE Europe DAC.
- Products provided by the organisation
- > External processes associated with the facility over which it can exert influence.

#### **Responsibility:**

Planning the implementation of the EMS is the ultimate responsibility of the Operations Manager.

The Environmental Manager has been designated the role for the implementation of this procedure.

#### **Documented Information:**

- Site Context Statement
- $\blacktriangleright$  EM 4.3 Scope of the EMS
- Register of Aspects
- Environmental Objectives
- Annual Management Review meeting.
- Environmental Procedures Manual
- Master Documents: Environmental Forms and Records Manual

#### **Procedure:**

- The EMS is planned with regard to the Context of the organisation and scope of the EMS.
- During annual review of the register of aspects and impacts, the organisation considers the reviewed context statement – this may result in reclassifying some aspects and impacts due to changing issues or requirements of interested parties identified within the context.
- > Risks and opportunities are determined with regard to:
  - Environmental aspects, including emergency situations;

Section 6: Planning		
6.1 Actions to address Risks and Opportunities 6.1.1 General		
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- Compliance obligations;
- Any other issues and requirements identified in the Site Context Statement.
- From this, a list of risks and opportunities is established.
- Past impacts and incidents should be considered when establishing aspects.
- Future aspects should also be considered, such as an extension, new production line, new effluent treatment plant etc.
- ➢ From this list, EMS objectives and targets are set accordingly along with processes and timeframes outlining how and when they will be achieved.
- The Annual Management Review assesses the performance of the EMS against its agreed objectives for the previous year.
- Relevant personnel are then informed of their duties to ensure the EMS achieves these objectives.

Section 6: Planning		
6.1 Actions to address Risks and Opportunities 6.1.2 Environmental Aspects		
Doc. Ref. No: EM6.1.2	Created By: Environmental Manager	Issue Date: 07/07/2020
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To identify, quantify, document and review Environmental Aspects of the organisation's activities and products that it can influence and their associated environmental impacts considering a life-cycle perspective.

A procedure for communication of significant environmental aspects among the various levels and functions of the organisation is also outlined.

#### Scope:

This procedure applies to all activities carried out at MEDITE Europe DAC Site, including abnormal operations and potential emergency situations It also applies to stages of Site product life cycle over which it can exert an influence.

#### **Responsibility:**

Planning the implementation of the EMS is the ultimate responsibility of the Operations Manager.

The Environmental Manager has been designated the role for the implementation of this procedure.

#### **Documented Information:**

- Site Context Statement
- Register of Aspects

#### **Procedure:**

#### 1. Identification of Environmental Aspects

- 1.1 Environmental aspects and possible environmental impacts are determined by the Environmental Management Team in combination with Top Management, to include the Operations Manager. This is carried by examination of the inputs and outputs of the existing activities from a life-cycle perspective. Involved is:
  - An examination of legislative and regulatory requirements.
  - Physical inspection of the activity.
  - Studying and monitoring data of inputs/outputs (e.g. chemical analysis, water and energy usage, yields).
  - Consultation with employees, authorities, industry experts,
  - Examination of any complaints, corrective action requests, nonconformances and observations raised as a result of internal and external audits.
  - Any other suitable method.

Section 6: Planning		
6.1 Actions to address Risks and Opportunities 6.1.2 Environmental Aspects		
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- 1.2 The possible aspects and impacts of new activities are examined during the planning phase of that activity, with consideration of the life-cycle stages which can be influenced by the organisation. In the case of a major activity, an environmental impact assessment may be required.
- 1.3 Where an existing activity is modified to such an extent that inputs/outputs will change significantly, the aspects and impacts of that activity must be examined prior to the activity being modified. Environmental Objectives are modified accordingly if any new impact is considered significant.
- 1.4 Abnormal conditions and reasonably foreseeable emergency situations are also taken into account.

## 2. Determining Significance of Environmental Aspects

The significance of the identified environment aspects is determined by considering the frequency, likelihood and severity of impacts arising from the aspects.

- 2.1 For each aspect, a rank order is assigned in respect of:
  - Frequency of occurrence (F)
  - Likelihood of loss of control (L)
  - Severity of consequence (S)
  - Legislative requirements (M)
- 2.2 The terms are amplified as follows:

These are multiplied to obtain an overall significance rating factor (C):

 $\mathbf{C} = \mathbf{F} \mathbf{x} \mathbf{L} \mathbf{x} \mathbf{S} \mathbf{x} \mathbf{M}$ 

Frequency of occurrence (F) 1 = very rare 5 = continuous

Likelihood of control loss (L) 1 = very unlikely 5 = highly likely

Severity of consequence (S) 1 = very limited, localised impact 5 = extensive and severe damage

Legislative requirements (M) 1 = aspect is not covered by legalisation 5 = Aspect is covered by legalisation

Section 6: Planning		
6.1 Actions to address Risks and Opportunities 6.1.2 Environmental Aspects		
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# 2.3 Frequency:

Frequency will be considered high if:

• The aspect is occurring on a continuous basis.

Frequency will be considered medium if:

• The aspect is occurring on an intermittent basis.

Frequency will be considered low if:

• The aspect is occurring on a rare basis.

# 2.4 Likelihood:

Likelihood will be considered high if:

- An impact is already known to have occurred.
- There are no or little engineering and/or management controls to prevent impacts occurring.

Likelihood will be considered medium if:

- No impacts are known to have occurred.
- There are some engineering and/or management controls to prevent impacts occurring.

Likelihood will be considered low if:

- No impacts are known to have occurred.
- There are comprehensive engineering and/or management controls to prevent impacts occurring

# 2.5 Consequence:

Consequence will be considered high if:

- The receiving environment is known to be sensitive.
- The impact is known to be long-lived.
- The impact is large.
- Insufficient knowledge of impact is available.
- A breach of license conditions results.
- Significant business disruption occurs.

Consequence will be considered medium if:

- The receiving environment is known to be sensitive.
- The impact is short-lived.
- The impact is small.
- No breach of license condition results.
- Some business disruption occurs.

Consequence will be considered low if:

- The receiving environment is not sensitive.
- The impact is short-lived.
- The impact is small.
- No license conditions are breached.
- No disruption of business occurs.

Section 6: Planning		
6.1 Actions to address Risks and Opportunities 6.1.2 Environmental Aspects		
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- 2.6 These quantified risks form the Register of Aspects.
- 2.7 If the overall significance rating value of factor C, is above 50, the aspect is considered as significant.
- 2.8 All rating factors are explained in the register of environmental aspects appendix.

## 3. Direct/Indirect Aspects

A distinction is made between direct and indirect aspects.

3.1 Direct aspects

These are associated with the company's activities, products, and site emissions.

3.2 Indirect aspects

These are identified as:

- Supplier and contractors' activities.
- Raw material extraction, processing and transporting prior to purchase and the impacts associated with these.
- The further use and /or disposal of products after they have been delivered to the customer.

## 4. Communicating Significant Environmental Aspects

Employees carrying out activities associated with significant environmental aspects are informed of their role in ensuring compliance and how to ensure compliance (ie through following the environmental procedure). They are also informed of any changes to procedures and of the outcomes of Annual Management Review meetings.

## 5. Documenting Aspects

A Register of Aspects is developed from the analysis conducted by top management and the Environmental Management Team. All environmental aspects and consequent impacts arising from Site's activities are documented in the Register of Aspects.

Significant aspects are considered when setting Environmental Objectives and Targets.

Documented information includes:

- Criteria used to determine significant environmental aspects (outlined in section 2 of EM 6.1.2);
- Register of Aspects

Section 6: Planning		
6.1 Actions to address Risks and Opportunities 6.1.2 Environmental Aspects		
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## 6. Review

Each significant aspect is reviewed at least annually as part of the annual Management Review.

# 7. Responsibility/Authority

The Environmental Manager is responsible for approving the Register of Aspects. The implementation of the EMS is the ultimate responsibility of the Operations Manager.

#### 8. New / Second Hand Equipment

As per the site procurement guidelines, all new or second hand equipment is risk assessed for environmental impacts before installation on site.

Section 6: Planning		
6.1 Actions to address Risks and Opportunities 6.1.3 Compliance Obligations		
Doc. Ref. No: EM6.1.3	Created By: Environmental Manager	Issue Date: 07/07/2020
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- To determine at a detailed level and have access to the compliance obligations identified in 4.2 that is applicable to the environmental aspects and determines how they apply to the organisation.
- To account for these compliance obligations when establishing, implementing, maintaining and continually improving Site's EMS.
- To identify and outline a procedure for communicating relevant requirements to appropriate personnel.

#### Scope:

- ➤ This procedure applies to legal and other mandatory obligations that the organisation is required to comply with as well as obligations over which the organisation has discretion over whether or not to adopt.
- It applies to the sourcing, recording and review of environmental legislation, regulations and licences.
- This clause is implemented in combination with the Context Statement and Register of Aspects (which detail and quantify the risks and opportunities to the EMS) and the Register of Legislation, which details Site's compliance status with relevant legislation.

#### **Responsibility:**

Planning the implementation of the EMS is the ultimate responsibility of the General Manager.

The Environmental Manager has been designated the role for the implementation of this procedure.

#### **Documented information:**

Site Context Statement Register of Aspects Register of Legislation Environmental Industrial Emissions Licence GHG Permit

Section 6: Planning		
6.1 Actions to address Risks and Opportunities 6.1.3 Compliance Obligations		
Doc. Ref. No: EM6.1.3	Created By: Environmental Manager	Issue Date: 07/07/2020
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#### Implementation:

The following interested parties identified in EM 4.2 have been deemed as having requirements to compliance obligations within the EMS:

- ➢ Employees
- Owners of the business
- Local Authorities, County Council
- Environment Protection Agency
- ➢ NGOs
- ➢ Local Authority
- Local Community
- > Suppliers
- Contractors, sub-contractors
- Society as a whole
- ➢ Insurers
- Emergency Services

Compliance with these interested parties' requirements is via procedures outlined in the Environmental procedures manual.

Section 6: Planning		
6.1 Actions to address Risks and Opportunities 6.1.4 Planning Action		
Doc. Ref. No: EM6.1.4	Created By: Environmental Manager	Issue Date: 07/07/2020
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To take actions to satisfactorily address:

- Significant environmental aspects;
- Compliance obligations;
- Risks and opportunities;
  - and:
- > To ensure the actions are integrated into the EMS processes and business processes where possible;
- > To evaluate the effectiveness of these actions;

#### Scope:

This procedure applies to all activities across the Site as detailed in EM - 4.3.

#### **Responsibility:**

Planning the implementation of the EMS is the ultimate responsibility of the Operations Manager.

The Environmental Manager has been designated the role for the implementation of this procedure.

#### **Documented information:**

Company Context Statement Environmental Procedures Manual Environmental Forms and Records Environmental Objectives Register of Aspects Register of Legislation

#### 1. Significant Environmental Aspects

Significant Environmental Impacts (significant risks) as identified in the Register of Aspects have an Environmental Objective dedicated to the continual improvement of that impact.

This is facilitated through the Management Review meetings and also through the adherence to procedures outlined in the Environmental Procedures Manual. Operational activities have specific concerns and controls identified on the SOP.

External environmental conditions such as floods, storms, snow, etc which have the capacity to affect environmental impact negatively are planned for accordingly.

Section 6: Planning			
6.1 Actions to address Risks and Opportunities 6.1.4 Planning Action			
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# 2. Opportunities

All opportunities as identified in the Context Statement have an Environmental Objective/Strategy dedicated to the investigation / implementation of that opportunity.

# Section 6: Planning 6.2 Environmental objectives and planning to achieve them 6.2.1 Environmental Objectives Doc. Ref. No: EM6.2.1 Created By: Environmental Manager Issue Date: 07/07/2020 Issue No: 2.0 Authorised By: AOM Page 28 of 67

#### **Purpose:**

This procedure defines the process of establishing environmental objectives and opportunities, quantifying applicable targets and implementing strategies to achieve these.

#### Scope:

This procedure applies to Site's environmental objectives and targets.

#### **Responsibility:**

Planning the implementation of the EMS is the ultimate responsibility of the Operations Manager.

The Environmental Manager has been designated the role for the implementation of this procedure.

#### **Documented information:**

Site Context Statement Register of Aspects Environmental Objectives

#### **Characteristics of the Environmental Objectives and Targets:**

- Environmental objectives and targets relate significant environmental aspects, compliance obligations and opportunities identified in the Context Statement.
- They also relate to the technological options and financial, operational and business requirements.
- They are set at relevant functions and levels of the organisation strategic, tactical and operational.
- They are consistent with the environmental policy, monitored, communicated and updated as appropriate.
- Targets are SMART: Specific, Measureable, Assignable, Realistic and Timerelated.

Section 6: Planning		
6.2 Environmental objectives and planning to achieve them 6.2.2 Planning Actions to Achieve Environmental Objectives		
Doc. Ref. No: EM6.2.2	Created By: Environmental Manager	Issue Date: 07/07/2020
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This procedure outlines the actions to be taken to achieve environmental objectives and how results are evaluated.

#### Scope:

This procedure applies to Site's environmental objectives and targets.

#### **Responsibility:**

Planning the implementation of the EMS is the ultimate responsibility of the Operations Manager.

The Environmental Manager has been designated the role for the implementation of this procedure.

#### **Documented Information:**

Site Context Statement Register of Aspects Environmental Objectives EMS Annual Management Review

#### Planning Actions to Achieve Environmental Objectives:

This procedure outlines:

- ➢ what will be done,
- $\succ$  the resources required,
- ➤ when environmental objectives are aimed to be achieved,
- ➢ how the results will be evaluated and
- how actions to achieve objectives are to be integrated into the business processes.

#### **Environmental Objectives:**

- 1. The Environmental Objectives set out the strategies and the schedule for achieving the specified environmental objectives and targets at relevant functions and levels of the organization strategic, tactical and operational.
- 2. Environmental objectives are set based on the Register of Aspects; compliance obligations are opportunities identified in the Context Statement.
- 3. For each Environmental Objective, the following is decided:
  - Strategies required to meet environmental objectives and targets.
  - Monitoring of objectives and targets required

Section 6: Planning		
6.2 Environmental objectives and planning to achieve them 6.2.2 Planning Actions to Achieve Environmental Objectives		
0.2.2 I failing Actions to Achieve Environmental Objectives		
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- 4. The performance of Environmental Objectives is reviewed annually at the Environmental Management Review meeting, at which time the targets for the following year are defined.
- 5. The tasks set out are carried out and monitored through the regular environmental meetings.
- 6. Business and EMS objectives are aligned wherever possible in order to integrate EMS objectives into the business processes.
- 7. Environmental Objectives are amended as a result of progress reporting, when relevant activities, products, or programmes are modified or relevant legislation introduced.

	Section 7: Support 7.1 Resources	
Doc. Ref. No: EM7.1	Created By: Environmental Manager	Issue Date: 07/07/2020
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This procedure defines the requirements relating to resources for the EMS.

#### Scope:

This procedure applies to the Site EMS:

'Resources' refers to any of:

- Human resources (i.e. specialised skill and knowledge)
- > Natural resources
- Infrastructure (i.e. required buildings, pumps, containment systems, drainage system, space, etc)
- > Technology
- Financial resources

#### **Responsibility:**

The Operations Manager is responsible for ensuring sufficient resources are available for the operation of the EMS.

The Environmental Manager and other Managers as appropriate ensure adequate reporting of resource requirements and compliance with the EMS.

#### **Documented Information:**

Environmental Objectives Annual Management Review Environmental Budgets

#### **Procedure:**

Resources are made available for the: establishment, implementation, maintenance and continual improvement of the EMS and its activities within the business.

The resources required to achieve environmental objectives, are determined at the EMS Management Review and are specified in the Environmental Objectives, along with the intended date of achievement.

	Section 7: Support 7.2 Competence	
Doc. Ref. No: EM7.2	Created By: Environmental Manager	Issue Date: 07/07/2020
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To establish a procedure for determining the necessary competence levels for persons carrying out activities that affect, or have the potential to affect the environmental performance of the company.

To establish and maintain a system for ensuring that employees within Site are qualified by appropriate training, education and/or knowledge/experience to undertake duties associated with significant environmental effects.

#### Scope:

This procedure applies to all persons:

- > Whose work has the potential to cause a significant environmental impact
- > Who are assigned responsibilities for the EMS, including those who:
  - Determine or evaluate environmental impacts or compliance obligations;
  - Contribute to the achievement of an environmental objective;
  - Respond to emergency situations;
  - Perform internal audits;
  - Perform evaluations of compliance.

#### **Responsibility:**

The Operations Manager is responsible for ensuring sufficient competence levels among those whose work is associated with the EMS.

The Environmental Manager in conjunction with Human Resources have been designated the role of the implementation of this procedure.

#### **Documentation:**

Procedure Manual Training /Matrix – HR document Training records Contractor Induction records

#### **Procedure/Action:**

#### **Competence:**

- All personnel performing tasks that may cause an environmental impact shall be competent by means of appropriate education, training and/or knowledge/experience.
- The Human Resources Office holds all training records.

	Section 7: Support 7.2 Competence	
Doc. Ref. No: EM7.2	Created By: Environmental Manager	Issue Date: 07/07/2020
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# > Training:

- The Environmental Manager identifies the key personnel with the knowledge and skills to achieve environmental objectives. This includes those team members who are trained and are responsible for environmental auditing.
- All personnel within the organisation are provided with the appropriate training to conform to the environmental policy and to understand the significance of environmental impacts arising from their work activities. Training takes the form of induction, or on a continual or when needs arise basis.
- The training undertaken by team members are recorded on their training record. These records are kept in the Human Resource office.
- The Environmental Manager reviews the training needs of all team members at least once every twelve months and discusses these needs where appropriate with the Operations Manager and the departmental head. It is also the responsibility of each Manager to ensure that all team members have received environmental training.
- The training plan is developed every twelve months as an aid in assisting in identifying those team members requiring training.
- The environmental training for each team member is established and controlled by the Departmental Manager and where appropriate with the Operations Manager. Records of training are held, which include the following where applicable:
  - i) Record of successful completion of induction
  - ii) ERT training
  - iii) Details of environmental course attended

Section 7: Support 7.3 Awareness		
Doc. Ref. No: EM7.3	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 34 of 67

To ensure persons doing work under the company's control are aware of:

- ➢ The Environmental Policy
- > The significant site environmental aspects
- > The related or actual potential impacts associated with their work.
- Their contribution to the effectiveness of the EMS, including the benefits of enhanced environmental performance
- > The implications of not conforming with the EMS including compliance obligations

#### Scope:

This procedure applies to all persons carrying out activities that affect or have the potential to affect the environmental performance of the company.

#### **Responsibility:**

The Operations Manager is responsible for ensuring sufficient awareness levels among those whose work is associated with the EMS.

Environmental Manager in conjunction with Human Resources have been designated the role of implementation of this procedure.

#### **Documentation:**

Site Training Procedure/Matrix - HR document

#### 1.0 Awareness:

- 1.1 Each Departmental Head and the Environmental Manager are responsible for building awareness and motivating team members by explaining the organisation's environmental values and communicating its commitment to its environmental policy.
- 1.2 This commitment is reinforced by means of training for current and new team members to encourage understanding and sharing in the organisation's commitment to environmental values. The organisation's environmental policy statement is on display to communicate its intentions to interested parties.
- 1.3 All team members should understand and are encouraged to accept the importance of achieving the environmental objectives and targets, relevant to the team member. Team members are made aware of the objectives and targets on a yearly basis.

	Section 7: Support 7.3 Awareness	
Doc. Ref. No: EM7.3	Created By: Environmental Manager	Issue Date: 07/07/2020
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- 1.4 The environmental achievements of the organisation and its team members are recognised by regular communication of the outcome of the progress towards environmental objectives, following review meetings and analysis of performance.
- 1.5 All contractors complete an induction stating that they have been instructed as to the health, safety and environmental requirements of the business before commencing any work on site and will obey all relevant rules.

# **Section 7: Support**

# 7.4 Communication

Doc. Ref. No: EM7.4	Created By: Environmental Manager	Issue Date: 07/07/2020
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#### **Purpose:**

- To plan and implement a process for internal and external communications relevant to the EMS which takes into account the Company's context and compliance obligations.
- > To ensure environmental information is reliable and is consistent with information generated in the EMS.
- To ensure appropriate actions are taken in response to correspondence received relating to environmental issues.

#### Scope:

This procedure applies to the Site EMS as defined by EM 4.3 and EM 4.4.

#### **Responsibility:**

The Operations Manager is responsible for ensuring effective internal and external communication regarding the EMS.

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Documented Information:**

All internal and external documentation relevant to the effective implementation of the EMS is retained in electronic form in a designated file.

#### Procedure

In order to help to continually improve Site's EMS performance and protect the environment, communications regarding the EMS from Site must be:

- Transparent so that external parties can determine how the information being communicated has been derived
- Appropriate and effective meeting interested parties' needs and enabling them to participate
- Factual, accurate and reliable which has been ensured by robust systems and procedures of checks and reviews
- Complete not excluding relevant information
- Consistent with information generated in the EMS
- Clear and understandable to all interested parties.

# **Section 7: Support**

# 7.4 Communication

Doc. Ref. No: EM7.4	Created By: Environmental Manager	Issue Date: 07/07/2020
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#### **Internal Communications Procedure:**

- 1. Internal communications relevant to the EMS are managed by the Environmental Manager.
- 2. The following are communicated to top management, employees and contractors where necessary:
  - Environmental Policy,
  - Strategies required to meet EMS objectives as detailed in the Environmental Objectives document),
  - Progress towards achievement of environmental objectives,
  - Results of EMS monitoring,
  - EMS Management Review,
  - Ad-hoc issues such as recent occurrences of environmental complaints,
  - Changes to EMS.

This enables persons doing work under the organization's control to contribute to continual improvement.

- 3. The Environmental Policy is displayed on the notice-board and reception
- 4. The Environmental Policy, Environmental aspects and environmental impacts associated with employees' and contractors' work is communicated during training and induction.

# **Section 7: Support**

# 7.4 Communication

Doc. Ref. No: EM7.4	Created By: Environmental Manager	Issue Date: 07/07/2020
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#### **External Communications Procedure:**

- 1. Correspondence received by Site from the public and regulatory bodies relating to environmental issues is be managed by the Environmental Manager.
- 2. In the event that a complaint is received, the complaint is investigated by the Environmental Manager.
- 3. An Environmental Complaint record is then completed by the Environmental Manager.
- 4. In the event that the Environmental Manager is absent, the Technical Manager is responsible for responding to the complaint.
- 5. If deemed applicable, an Environmental Corrective and Preventive Action Report is raised to correct or prevent the cause of the complaint.
- 6. In the event that correspondence is received from a regulatory body, the Environmental Manager is responsible for the response.
- 7. Correspondence is responded to appropriately and without delay.
- 8. Where the information required on environmental issues is considered confidential or sensitive, the Environmental Manager reviews all information being provided.
- 9. Members of the public with environmental queries, upon appointment of up to 24 hours' notice, can visit the site Monday Friday 09.00am 16.00 pm.
- 10. All correspondence, Complaint records and Corrective and Preventive Action forms are retained in the EMS communications folder and Environmental Records folder as appropriate.

Section 7: Support		
7.5 Documented Information 7.5.1 General		
Doc. Ref. No: EM7.5.1	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 39 of 67

To describe the core elements of the Environmental Management System and their interactions and to specify the format and content of related documentation.

#### Scope:

This procedure applies to all documented information in Site's Environmental Management System, as outlined in EM 4.4.

#### **Responsibility:**

The Operations Manager is responsible for ensuring effective procedures are in place and maintained regarding the EMS's Documented Information.

The Environmental Manager has been designated the role of implementation of this procedure.

#### Procedure

- 1. Procedures requiring revision and distribution control are termed "controlled". All controlled procedures are reviewed and approved by authorized personnel before being issued.
- 2. Procedures are available where operations essential to the effective functioning of the Environmental Management System are performed.
- 3. Where applicable, the Environmental Manager is responsible for ensuring that when changes are required by internal or external influences, environmental documentation is initiated, updated and approved.
- 4. Internal controlled environmental management system documents are maintained in paper and electronic form, with operational controlled copies available in suitable locations, and may include, but are not limited to:
  - i. Company Context Statement
  - ii. Environmental Policy
  - iii. Environmental Objectives.
  - iv. Environmental Manual.
  - v. Environmental Procedures Manual.
  - vi. Training matrix for tasks involving significant environmental aspects.
  - vii. Register of Environmental Aspects.
  - viii. Master Documents: Environmental Forms and Records.
  - ix. Register of Environmental legislation.
- 5. The above documents form the core elements of the Environmental Management System and outline controls that ensure that the plant operates within the requirements of environmental regulations.

Section 7: Support		
7.5 Documented Information 7.5.1 General		
Doc. Ref. No: EM7.5.1	Created By: Environmental Manager	Issue Date: 07/07/2020
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- 6. Documented information related to external parties, may include but is not limited to:
  - i. Environmental Policy Statement
  - ii. Monitoring Reports
  - iii. Industrial Emissions Licence
  - iv. GHG Permit
- 7. All Environmental Forms and Records are stored electronically in the Environmental Folder, Utilities Spreadsheets and Waste Tracking Spread-sheets as appropriate, which populate the monthly spreadsheet

Paper copies of Waste transfer notes are held in the Environmental office.

Environmental Training Records are kept in the Human Resources Department

Section 7: Support		
7.5 Documented Information		
	7.5.2 Creating and Opdating	
Doc. Ref. No: EM7.5.2	Created By: Environmental Manager	Issue Date: 07/07/2020
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To describe the requirements for creating and updating documented information associated with the Environmental Management System to ensure consistency, clarity, appropriateness and transparency throughout.

#### Scope:

This procedure applies to all documented information associated within the Company Environmental Management System, as outlined in EM 4.4.

#### **Responsibility:**

The Operations Manager is responsible for ensuring effective procedures are in place and maintained regarding the EMS's Documented Information.

The Environmental Manager has been designated the role of implementation of this procedure.

#### Procedure

When creating and updating documented information, the Environmental Manager ensures:

- 1. That documented information contains appropriate identification and description (e.g. a title, date, author, reference number, etc as appropriate).
- 2. That documented information is appropriately formatted and is available in the appropriate media to employees
- 3. That appropriate consultation takes place. New and updated documented information is reviewed by relevant persons (from top management to employees carrying out tasks associated with environmental aspects) to confirm its adequacy.

Section 7: Support			
7.5 Documented Information 7.5.3 Control of Documented Information			
Doc. Ref. No: EM7.5.3 Created By: Environmental Manager Issue Date: 07/07/2020			
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To establish and maintain a system which ensures that documented information associated with the Environmental Management System meets the required criteria, is available to employees whose activities have the potential to affect the Environmental Management System, is reviewed for adequacy and is approved by authorised personnel where applicable.

#### Scope:

This procedure applies to all documented information in Site's Environmental Management System, as outlined in EM 4.4.

Regarding documented information associated with the EMS, the system encompasses:

- the distribution, access, retrieval and use,
- the storage, preservation and maintenance,
- control of changes and
- retention and disposition

#### **Responsibility:**

The Operations Manager is responsible for ensuring effective procedures are in place and maintained regarding the EMS's Documented Information.

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Documented Information:**

EM 7.4 - Communications

#### 1.0 Control of Environmental Manual and Environmental Procedures

- 1.1 The Environmental Manager is responsible for the control, review and approval of the Environmental Manual and the Environmental Procedures Manual.
- 1.2 Master copies of the Environmental Manual and the Environmental Procedures Manual are managed by the Environmental department, being made available electronically on the company network, for access to all who need them.
- 1.3 The Environmental department is responsible for the issue of the Environmental Manual and the Environmental Procedures Manual. One hard

Section 7: Support		
7.5 Documented Information		
7.5.5 Control of Documented Information		
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copy is retained, with a read only copy being available on the company network.

1.4 The electronic master copy is considered controlled, with access for updating only available to the Environmental department. Printed copies of all documents will be considered uncontrolled.

## 2.0 Amendments to the Environmental Manual and Environmental Procedures

- 2.1 If a situation arises or is identified that requires an update or amendment to a section of the Environmental Manual or Environmental Procedures Manual, the amendment required is brought to the attention of the Environmental Manager.
- 2.2 Amendments to documented information relevant to the Environmental Management System must be approved by the Environmental Manager.
- 2.3 All copies of a document to be amended are withdrawn by the Environmental Manager, who then implements the agreed change. The updated document is returned to the folder on the Company network and relevant personnel are advised of the amendment.
- 2.4 The latest environmental procedures are available at the work area of relevant employee's area. Obsolete documents are promptly removed.

#### **3.0** Control of Environmental Forms

- 3.1 A master file of environmental blank forms is retained by the Environmental department. The environmental blank forms revision in the master file is the current revision.
- 3.2 If an environmental blank form becomes obsolete, the Environmental department removes all the obsolete forms from circulation and destroys them.
- 3.3 Once an environmental form is complete it becomes an environmental record and is forwarded to the appropriate department for filing.

#### 4.0 Control of Register of Aspects and Environmental Objectives

- 4.1 The Environmental Manager reviews and approves the Register of Aspects and Environmental Objectives before they are issued.
- 4.2 Read-only copies of the aspects and programme are made available electronically on the company network, for access by all who need them. Printed copies are considered uncontrolled.

Section 7: Support		
7.5 Documented Information		
7.5.3 Control of Documented Information		
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- 4.3 The Environmental Manager is responsible for the issue of both documents.
- 4.4 Master documents are retained by the Environmental department.
- 4.5 Once a register or programme becomes obsolete, the Environmental department ensures all relevant personnel are advised to work only with the updated version.

## 5.0 Safety Data Sheets (SDS)

- 5.1 The H&S department specifies which SDS are to be controlled and issued.
- 5.2 The H&S department is responsible for the issue of SDS.
- 5.3 Electronic copies of the SDS are maintained by the H&S department, and stored on the system where they are accessible to all personnel who require access.
- 5.4 The electronic masters of the SDS in the shared folder are the current issue.
- 5.5 All printed SDS are to be considered uncontrolled.
- 5.6 Once a SDS becomes obsolete, the H&S department ensures that all relevant personnel are advised and that an updated master is made available.
- 5.7 The H&S department retains the copy of the obsolete MSDS for reference purposes.

#### 6.0 External Documentation

6.1 All external documents are reviewed and controlled by the Environmental Manager. These include the Legislation Register in electronic format, IED Licence and GHG Permit.

#### 7.0 Contents of Master Documents

- 7.1 The environmental records should be legible, identifiable and traceable to the activity, product involved. All records are stored in such a way that they are readily retrievable and protected against damage, deterioration or loss.
- 7.2 Environmental Training Records are held in the Human Resources Department.

# **8.1 Operational Planning and Control**

Doc. Ref. No: EM8.1	Created By: Environmental Manager	Issue Date: 07/07/2020
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#### **Purpose:**

To establish a system for ensuring that day-to-day activities are undertaken in accordance with the Company Environmental Policy and Procedures.

To ensure procedures take into account environmental objectives, significant environmental aspects and compliance obligations.

#### Scope:

Operational control applies to all activities that may have a significant environmental impact.

#### **Responsibility:**

The Operations Manager is responsible for ensuring effective procedures are in place and maintained regarding the EMS's Documented Information.

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Procedure:**

The site has identified all operations and activities that are associated with the identified significant environmental aspects and compliance obligations, in line with the Environmental Policy, Objectives and targets.

All significant environmental aspects have corresponding documented environmental processes.

These activities are planned in order to ensure they are carried out under controlled conditions. Carrying out activities associated with significant environmental aspects under these controlled conditions ensures the EMS conforms to its Environmental Policy and to Environmental Objectives and targets.

# **8.1 Operational Planning and Control**

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#### Contractors

Relevant Company environmental requirements are communicated to contractors. All contractors must complete induction which specifies the potential environmental impacts associated with their work/of the Company before commencing work on site. Contractors are issued with the site rules and regulations. Where applicable, waste contractor's licenses/permits are reviewed annually by the Environmental Manager.

#### Production, Storage, Packaging, Delivery

This procedure is the same as the Quality Manual and associated procedures. In the event of the stored product or its packaging becoming damaged, the packaging is replaced immediately to ensure the product is not damaged. Any spillage that occurs in the process is dealt with as per the site ERT procedures.

Disposal of all chemicals, consumables and packaging is carried out according to the instructions on the relevant SDS.

#### **Transportation**

Monitoring of all transporting of waste and recyclables is carried out as per internal waste control procedure. Regarding all raw material and product transportation: refer to Quality Manual and associated procedures. All transport vehicles are serviced as per fleet maintenance requirements.

#### **Production and Maintenance**

Quality procedures have been developed to ensure that processing of products is carried out under controlled conditions (Refer to Production Procedures). Maintenance is the same as per Maintenance Procedures.

Before the disposal of obsolete equipment, investigate sources for reuse and recycling before landfilling.

#### **Strategy Management**

All new equipment, property or construction must comply with the environmental policy of Site, and must satisfy or exceed all relevant legislation governing the business.

It is the responsibility of the Operations Manager to ensure that, before any new construction or property acquisition can take place that:

- (i) All potential environmental impacts have been identified and addressed
- (ii) The training needs of all personnel have been identified and met
- (iii) All environmental legislation (and other requirements) pertaining to the proposed development have been identified and satisfied.

# **8.1 Operational Planning and Control**

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# Life-cycle Perspective of Products and Services

- 1. All products and services procured, used and sold by Site can only be done so after the environmental impacts associated with the life cycle of the product or service have been considered. This includes:
  - a) the methods used to extract the raw materials and process, where applicable,
  - b) the methods used to deliver and store the product/raw materials or chemical, where applicable,
  - c) the environmental aspects associated with the design and use of the product by the Company during the production process, and
  - d) the environmental aspects associated with the end-of-life of product or service after use by the company or by its customers (i.e. is it recyclable or recoverable, etc)
  - 2. Relevant Company environmental requirements are communicated to suppliers. Where it is deemed that the extraction, processing or delivery method employed by a supplier has the potential to cause unnecessary significant adverse environmental impacts when compared to a competitor and where cost of purchasing is similar, alternate supplier options will be considered.
  - 3. Information is provided to relevant persons about the potential significant environmental impacts.

# **8.2 Emergency Preparedness and Response**

Doc. Ref. No: EM8.2	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 48 of 67

#### **Purpose:**

To provide a system which ensures that the business recognises and is prepared for accidental and emergency situations (outlined in 6.1.1) that either will, or have the potential to create an incident that will have a significant environmental impact.

#### Scope:

This procedure applies to all of the operations within the Company and includes any emergency procedures designed to protect the health and safety of employees, contractors, visitors and general public.

#### **Responsibility:**

The Operations Manager is responsible for ensuring effective emergency preparedness and response procedures are in place and maintained.

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Documentation:**

Master Documents: Environmental Forms and Records

#### 1. Review

Where incidents occur which either have or may have a significant environmental impact, these incidents are documented and presented to the next Environmental Management Review meeting by the Environmental Manager for review and procedural revision where necessary.

#### 2. Emergency Procedures

- a) Evacuation procedures, in case of fire or leak, are detailed in the Health and Safety Emergency response procedures
- b) Major incident handling is covered by the ERT Plan and training
- c) Chemical Spill response procedures are covered in Health and Safety Emergency response procedures

#### 3. Testing Procedures

a) In line with site procedures and arrangements, the ERT Plan is tested normally on an annual basis, with an actual event qualifying as a test.

# **8.2 Emergency Preparedness and Response**

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- b) In line with Health and Safety procedures, the Evacuation procedures are tested as required. False alarm activations that result in Evacuation constitute a test of the system, and depending on performance may lead to another test
- c) The Chemical spill procedure is tested on an annual basis, with a mock spill if a real spill has not been recorded during the year. If there has been a real spill, the response to the spill is evaluated to determine if an additional test is required.
- d) Records of Emergency or Incident response testing are maintained in the EHS Office.

#### 4. Training and Information

- a) Employees are trained in the potential emergency situations that may occur on site and in the Evacuation Procedures.
- b) Contractors are given necessary information to ensure they are aware of the potential emergency situations on site and the Evacuation Procedures.
### Section 9: Performance Evaluation

9.1 Monitoring, Measurement, Analysis and Evaluation 9.1.1 General

Doc. Ref. No: EM9.1.1	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 50 of 67

#### **Purpose:**

To establish and maintain a system for the identification, monitoring, measuring, analysis and evaluating on a regular basis the key characteristics of the Company operations and activities that can have a significant impact on the environment.

#### Scope:

This procedure applies to all the operations and activities of the business that can have a significant impact on the environment, are related to compliance obligations or could affect progress towards the organisation's environmental objectives, using indicators where possible.

#### **Responsibility:**

The Operations Manager is responsible for ensuring the EMS' performance is evaluated effectively

The Environmental Manager has been designated the role for the implementation of this procedure.

#### **Documentation:**

Environmental Forms and Records

Environmental Procedures Manual

Environmental monitoring data – retained to allow tracking of the performance of the EMS.

#### **Procedure:**

- 1. The site measures and monitors, on a regular basis, the key characteristics of its operations and activities that can have a significant impact on the environment, as detailed in EM 8.1 Operational planning and control and those as required by compliance obligations, at intervals as required.
- 2. Environmental measuring and monitoring is carried out by suitable testing equipment/facilities in accordance with approved environmental procedures. The results of environmental measuring and monitoring are recorded on the appropriate environmental records.
- 3. Site's environmental performance is reported on a quarterly basis to the regulatory body (EPA).
- 4. This allows tracking and analysis of the following: atmosphere water and waste.

Section 9: Performance Evaluation			
9.1 Monitoring, Measurement, Analysis and Evaluation 9.1.1 General			
Doc. Ref. No: EM9.1.1	Created By: Environmental Manager	Issue Date: 07/07/2020	
Issue No: 2.0	Authorised By: AOM	Page 51 of 67	

- 5. Performance against targets is reviewed by senior management at the annual Environmental Management Review and also by the Site Management Team at the regular meetings for the evaluation of the effectiveness of the EMS.
- 6. Monitoring equipment is calibrated and maintained as appropriate. Records of calibration are retained according to approved documented procedures.
- 7. The Company communicates information relevant to its environmental performance both internally and externally as determined by its communication process and compliance obligations.

### **Section 9: Performance Evaluation**

9.1 Monitoring, Measurement, Analysis and Evaluation 9.1.2 Evaluation of Compliance

Doc. Ref. No: EM9.1.2	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 52 of 67

#### **Purpose:**

To facilitate the evaluation of compliance with the Compliance obligations identified in EM 6.1.3 and applicable permits and licences.

#### Scope:

This procedure applies to evaluation of compliance of environmental legislation, regulations and licences.

#### **Responsibility:**

The Operations Manager is responsible for ensuring the EMS' performance is evaluated effectively

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Documented Information:**

Register of Legislation, permits and Licences

- 1. The Environmental Manager is responsible for developing and maintaining an agreement for IBEC that sources and review current legislation and regulations that relate to environmental issues relevant to the business.
- 2. The Environmental Manager ensures that the register of legislation maintained in accordance with EM 6.1.3 is evaluated for compliance, annually.
- 3. The results of a compliance audit are included as part of the internal audit process and any actions identified form part of the Environmental Objectives.
- 4. The Environmental Manager ensures that the requirements of all permits and Licences are known by all relevant personnel.
- 5. The Environmental Manager, via records maintained and licence details, evaluates compliance against all effective permits and licences.
- 6. Compliance-related non-conformities are analysed and acted upon by the Environmental Manager. They are recorded in the non-compliance records.

Section 9: Performance Evaluation			
9.2 Internal Audit 9.2.1 General			
Doc. Ref. No: EM9.2.1	Created By: Environmental Manager	Issue Date: 07/07/2020	
Issue No: 2.0	Authorised By: AOM	Page 53 of 67	

#### **Purpose:**

To determine whether the EMS:

- Conforms to the Site's own requirements for its EMS
- Conforms to the requirements of ISO14001:2015
- ➢ Is effectively implemented and maintained

#### Scope:

This Procedure applies to the Environmental Management System operated by the Company.

#### **Responsibility:**

The Operations Manager is responsible for ensuring the EMS' performance is evaluated effectively.

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Documented Information:**

Environmental internal audit folder Environmental Corrective and Preventative Action Tracker Environmental Audit Schedule

#### Procedure

The Environmental Manager ensures:

- All areas of the site and operations relevant to the EMS are included in the audit schedule.
- Findings of audits are assessed as appropriate. Observations or non-conformities are followed up on.
- An evaluation of the reasons for occurrence and the effectiveness of actions taken is carried out.
- Auditors have received appropriate training and are free from bias.

Section 9: Performance Evaluation		
9.2 Internal Audit 9.2.2 Internal Audit Programme		
Doc. Ref. No: EM9.2.2	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 54 of 67

#### **Purpose:**

To establish, implement and maintain a system for verifying the effectiveness and implementation of the Environmental Management System and to ensure its conformity to I.S. EN ISO 14001:2015.

#### Scope:

This Procedure applies to the Environmental Management System operated by the Site.

#### **Responsibility:**

The Operations Manager is responsible for ensuring the EMS' performance is evaluated effectively.

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Documentation:**

Environmental internal audit folder Environmental Corrective and Preventative Action - Tracker Environmental Audit Schedule

#### **Procedure**:

- 1. The Environmental Manager compiles an Environmental Audit Schedule for the year. The schedule takes account of the significant environmental aspects, the outputs of environmental monitoring, any previous occurrences of accidents or emergency situations that resulted in or could have resulted in an environmental impact and the results of previous audits.
- 2. The schedule ensures that all aspects of the Environmental Management System, all sections of the standard and all relevant on-site processes are audited at a frequency depending on the status and the importance of the activity. The Environmental Audit Schedule will specify the area to be audited and the time of the audit. The Audit Schedule is updated if extra audits are deemed necessary.
- 3. The Environmental Manager nominates an Auditor for each audit who is not directly involved in the activities being audited. Only personnel trained in auditing will perform audits.
- 4. The Auditor prepares for the audit, which includes:
  - An Environmental Audit Check Sheet

Section 9: Performance Evaluation		
9.2 Internal Audit		
9.2.2 Internal Audit Programme		
Doc. Ref. No: EM9.2.2	Created By: Environmental Manager	Issue Date: 07/07/2020
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- Confirm the auditing arrangements by informing the area under review in advance of the audit and checking the availability of relevant personnel in advance of the audit.
- Gather the relevant documents under review for the audit
- Examining the results and outcomes of previous audit reports.
- 5. The Auditor undertakes the audit by examining objective evidence and recording the details on the Environmental Audit Check Sheet.
- 6. Each audit observation references the applicable ISO14001 requirement. Where discrepancies are identified, they are assigned a number for that audit.
- 7. The Auditor (where possible) convenes a closing meeting with Management representatives and presents an objective overview of the audit and summarise the results on to ensure that it is understood.
- 8. The Environmental Corrective and Preventive Action Tracker is updated

to resolve any non-conformance found, or observations made, if applicable.

- 9. All completed records related to internal environmental management audits are held in the Audits Reports file.
- 10. If required, follow-up audits are undertaken to verify the implementation and effectiveness of the corrective action.
- 11. Results of internal audits are communicated to management where relevant, and to senior management during the annual management review.

#### **Certification Body Audits**

Non-compliances or corrective actions raised, as a result of certification audits, are actioned by the Environmental Manager.

# Section 9: Performance Evaluation

9.3 Management Review

Doc. Ref. No: EM9.3	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 56 of 67

#### **Purpose:**

To ensure that regular reviews of the Environmental Management System occur at determined intervals to ensure its continuing suitability, adequacy and effectiveness.

#### Scope:

The Management review covers the whole Environmental Management System at a high level on an annual basis.

#### **Responsibility:**

The Operations Manager is responsible for ensuring an appropriate Management Review of the EMS takes place at least annually.

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Documented Information:**

Environmental Management Review File

#### **Procedure:**

- 1. Management review meetings are held at least once every year.
- 2. Personnel attending the Management Review Meetings may include the Operations Manager, Environmental Manager, Technical Manager, Production Manager and any other personnel considered appropriate by the Environmental Manager.
- 3. The Environmental Manager arranges for the minutes of the meeting to be recorded.
- 4. The Management Review should be robust and comprehensive and include discussion on all sections introduced by the ISO14001:2015 standard. The meeting includes a review of the following as applicable:
  - The status of actions of the previous Management Review Meeting.
  - Changes in external and internal issues relevant to the EMS, including the requirements of interested parties and changes in compliance obligations.
  - Changes in legislation and relevance to the business.
  - Review of significant aspects, including any changes.
  - Performance against stated Objectives and Targets.
  - System non-conformances, including emergencies and spills.

### Section 9: Performance Evaluation

9.3 Management Review

Doc. Ref. No: EM9.3	Created By: Environmental Manager	Issue Date: 07/07/2020
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- Corrective and Preventive Actions.
- Monitoring and measurement results and conformity to compliance obligations.
- The results of audits and legal compliance review.
- Communications from interested parties, including complaints.
- Opportunities for continual improvement.
- The adequacy of the resources required for maintaining an effective EMS.
- The Environmental Policy.
- Training requirements.
- 5. The outputs of the management review include:
  - Conclusions on the continuing adequacy and effectiveness of the EMS.
  - Decisions related to continual improvement opportunities.
  - Any changes required to the EMS, including resource needs.
  - Actions to meet objectives that have not been met where necessary.
  - Opportunities to further integrate the EMS with business processes.
  - Any implications for the strategic direction of the Company.
- 6. Minutes of meetings are circulated to all attendees, and any other personnel considered appropriate by the Environmental Manager.
- 7. The Environmental Manager maintains the follow up records of all actions.

**10.1 General** 

Doc. Ref. No: EM10.1	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 58 of 67

#### **Purpose:**

To determine opportunities for improvement and implement necessary actions to achieve the intended outcomes of the EMS

#### Scope:

This Procedure applies to the Environmental Management System operated by the Company.

#### **Responsibility:**

The Operations Manager is responsible for ensuring continual improvement of the EMS.

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Documented Information:**

Coillte (Parent Company) Strategy Lean Projects, 6S, A3 Continual Analysis of data Environmental Corrective and Preventive Action - Tracker Register of Legislation Management Review

#### Procedure

Use the outcomes of monitoring (9.1.1), evaluation of compliance (9.1.2), auditing (9.2) and management review (9.3) to identify the necessary actions to achieve the intended outcomes of the EMS.

### **10.2 Non-Conformity and Corrective Action**

Doc. Ref. No: EM10.2	Created By: Environmental Manager	Issue Date: 07/07/2020
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#### **Purpose:**

To establish and maintain a system for handling environmental complaints, identifying, detecting, and documenting non-conformities and for assuring that conditions which, actually or potentially, have adverse impact on the environment are promptly identified, documented, reported and corrected in order to eliminate occurrence and prevent recurrence.

#### Scope:

This procedure applies to environmental complaint and corrective and preventive actions in relation to findings, conclusions and recommendations reached as a result of monitoring, audits and other reviews of the Environmental Management System.

#### **Responsibility:**

The Operations Manager is responsible for ensuring continual improvement of the EMS.

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Documentation:**

EM 7.4 – Communications Internal audit folder Environmental Complaint Record Form Environmental Corrective and Preventive Action Tracker Management Review

#### 1. Environmental Complaints

1.1. Environmental complaints received by the business are managed as outlined in EM 7.4.

#### 2. Non-Conformances

- 2.1. Any environmental condition that has an initial or significant on-going effect on the environment or is in breach of specified requirements of the site effluent discharge licence or any other regulatory limit is considered as a nonconformance.
- 2.2. Any employee may identify a non-conformance. Where appropriate, his/her supervisor records, analyses and corrects the non-conformance prior to it continuing, where it may have an effect on the environment. The Environmental Manager is informed of the non-conformance.

### **10.2 Non-Conformity and Corrective Action**

Doc. Ref. No: EM10.2	Created By: Environmental Manager	Issue Date: 07/07/2020
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2.3. The Environmental Manager or any member of the environmental team raises the non-conformance using the Environmental Corrective and Preventive Action Tracker

#### 3. Corrective Action

- 3.1. The Environmental Manager investigates any non-conformances and identifies the root cause and the need for Corrective and Preventive action, relating to the environmental system. Action is taken based on the magnitude of the problems and the risks encountered.
- 3.2. The Environmental Manager informs the relevant personnel of the corrective and preventive action required.
- 3.3. Where the implementation of corrective and preventive action requires amendments or updates of documented information, such changes are processed in accordance with EM 7.5 Documented Information.
- 3.4. When it is determined that all the corrective and preventive action/s have been implemented, the Environmental Manager verifies that the implemented solution/s have been effective, preventing recurrence of the condition
- 3.5. Requests for Corrective and Preventive action are also raised as a result of:
  - i. Internal environmental system audits.
  - ii. The detection of any conditions that may be adverse to the operation of the environmental system or likely to cause a non-conformance.
  - iii. Lack of documented procedures/instructions.
- 3.6. A summary of the Environmental Corrective and Preventive Action Reports raised during the year is reviewed at the Management Meeting

**10.3 Continual Improvement** 

Doc. Ref. No: EM10.3	Created By: Environmental Manager	Issue Date: 07/07/2020
Issue No: 2.0	Authorised By: AOM	Page 61 of 67

#### **Purpose:**

To state the overall aim of the Company's EMS.

#### Scope:

This procedure applies to the whole Environmental Management System.

#### **Responsibility:**

The Operations Manager is responsible for ensuring continual improvement of the EMS.

The Environmental Manager has been designated the role of implementation of this procedure.

#### **Documented information:**

As outlined in EM 4.4

#### **Overall Aim:**

Through the actions and at the timescales described within this manual, the Company will strive to continually improve the suitability, adequacy and effectiveness of the EMS in order to enhance the Company's environmental performance.

# **APPENDIX A**

- CROSS REFERENCE BETWEEN ENVIRONMENTAL MANUAL AND ASSOCIATED DOCUMENTS -

# **General Requirements**

### Cross reference between Environmental Manual and associated documents, Environmental Procedures Manual, Quality Procedures Manual and Health and Safety Manual

Doc. Ref. No: EM-Appendix A	Created By: Environmental Manager	Issue Date: 07/07/2020
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Contents	Environmental Manual Section	Environmental Procedures Manual Section	Other Documentation
Contents	N/A	N/A	N/A
Introduction	N/A	N/A	N/A
Public Information Contact	N/A	N/A	N/A
Circulation list	N/A	N/A	N/A
Understanding the Organisation and its Context	4.1	N/A	Site Context Statement
Understanding the Needs and Expectations of Interested Parties	4.2	N/A	Site Context Statement
Determining the Scope of the Environmental Management System	4.3	N/A	N/A
Environmental Management System	4.4	N/A	N/A
Leadership and Commitment	5.1	N/A	N/A
Environmental Policy	5.2	Environmental Policy Statement	N/A
Organisational roles, responsibilities and authorities	5.3	Company Organizational Structure	N/A
Actions to address risks and opportunities: General	6.1.1	N/A	N/A

# **General Requirements**

### Cross reference between Environmental Manual and associated documents, Environmental Procedures Manual, Quality Procedures Manual and Health and Safety Manual

Doc. Ref. No: EM-Appendix A	Created By: Environmental Manager	Issue Date: 07/07/2020
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Contents	Environmental Manual Section	Environmental Procedures Manual Section	Other Documentation
Environmental Aspects	6.1.2	Register of Environmental Aspects	N/A
Compliance Obligations	6.1.3	N/A	N/A
Planning action	6.1.4	N/A	N/A
Environmental Objectives	6.2.1	Master Schedule	N/A
Planning actions to achieve environmental objectives	6.2.2	Master Schedule	N/A
Resources	7.1	N/A	Environmental Budgets
Competence	7.2	N/A	HR Training
Awareness	7.3	N/A	HR Training
Communication: General	7.4.1	N/A	N/A
Internal Communication	7.4.2	Internal Communication	N/A
External Communication	7.4.3	External Communication	N/A
Documented Information: General	7.5.1	N/A	N/A

# **General Requirements**

### Cross reference between Environmental Manual and associated documents, Environmental Procedures Manual, Quality Procedures Manual and Health and Safety Manual

Doc. Ref. No: EM-Appendix A	Created By: Environmental Manager	Issue Date: 07/07/2020
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Contents	Environmental Manual Section	Environmental Procedures Manual Section	Other Documentation
Creating and Updating	7.5.2	N/A	N/A
Control of documented Information	7.5.3	N/A	N/A
Operational Planning and Control	8.1	N/A	Procedures
Emergency Preparedness and Response	8.2	ERP Procedure	N/A
Monitoring, Measurement, Analysis and Evaluation: General	9.1.1	Checking and Corrective Action Procedures	N/A
Evaluation of Compliance	9.1.2	N/A	Register of Legislation
Internal Audit: General	9.2.1	N/A	Audit check-sheets
Internal Audits	9.2.2	N/A	Audit check-sheets
Management Review	9.3	N/A	Meeting records
Improvement: General	10.1	N/A	N/A
Non-conformity and Corrective Action	10.2	N/A	Environmental Corrective and Preventive Action Tracker
Continual Improvement	10.3	N/A	N/A

# **APPENDIX B**

### - ENVIRONMENTAL POLICY -

### Medite Europe DAC.

### **Environmental Policy Statement**

Medite Europe DAC, a wholly owned subsidiary of Coillte, manufactures Medium Density Fibreboard, an environmentally sustainable timber-based product, which is used for non-structural building applications.

Medite Europe DAC works to obtain a leadership role in the community by striving for ever-higher levels of environmental and ethical standards. Responsible environmental management is a core value of the business strategy. A prerequisite to all the operations is the commitment to protect the environment and prevent pollution. The scope of this policy covers the operations and activities associated with the site.

### Fundamental Environmental Policy

The Senior Management and Board of Directors are accountable of:

- ✓ Ensuring compliance with all the applicable environmental laws, regulations and governmental policies and with other requirements to which the organization subscribes and relate to its environmental aspects.
- ✓ Prevention of pollution by identifying the organization's footprint on the environment, creating flexible systems to evaluate and enhance the responses plus the manufacturing practices and processes.
- ✓ Continual improvement by fostering creativity and innovation in the management and performance of the business, supporting research, implementing international best practices and introducing best available technologies that minimize the footprint on the environment, where feasible.
- ✓ Promote the preservation of natural resources, energy efficiency and continue with sustainable forestry practices through FSC Certification.
- ✓ Open and honest communication of this Policy, the Environmental Management System principles and environmental topics in a transparent and easy way to understand to all interested parties; taking notice of the opinion of others.

The goal is to collaborate in building a sustainable society. This policy is reviewed annually to take into account current and potential future business issues.

Pat Beardmore CEO MEDITE-SMARTPLY

Date: 07<sup>th</sup> July 2020

EMS Doc Ref: POL-0431 Version 4

### **Revision History**

Date	Rev	Nature of change	Person who made change
26/06/18	1	New ISO14001:2015 Version	Environmental Manager
07/07/20	2	Updated Environmental Policy	Environmental Manager

Appendix 2-3 Industrial Emissions licence (P0027-04)

Chapter 2 Jan 2024





Headquarters P.O. Box 3000 Johnstown Castle Estate County Wexford Ireland

# INDUSTRIAL EMISSIONS LICENCE

Licence Register Number:	P0027-04
Company Register Number:	80984
Licensee:	Medite Europe Limited
Location of Installation:	Redmondstown Clonmel
	County Tipperary





#### ENVIRONMENTAL PROTECTION AGENCY ACT 1992 AS AMENDED

### INDUSTRIAL EMISSIONS LICENCE

Decision of Agency, under Section 90(2) of the Environmental Protection Agency Act 1992 as amended.

Reference number in Register of licences: P0027-04

Further to notice dated 06/10/2016 the Agency in exercise of the powers conferred on it by the Environmental Protection Agency Act 1992 as amended, for the reasons hereinafter set out, hereby grants a revised Industrial Emissions licence to Medite Europe Limited, Redmondstown, Clonmel, County Tipperary, CRO number 80984,

to carry on the following activities

- -: Production in industrial installations of one or more of the following wood-based panels: fibreboard with a production capacity exceeding 600m<sup>3</sup> per day.
- -: Combustion of fuels in installations with a total rated thermal input of 50MW or more.

at Redmondstown, Clonmel, County Tipperary, subject to the conditions as set out.

GIVEN under the Seal of the Agency this 7<sup>th</sup> day of March 2017

PRESENT when the seal of the Agency was affixed hereto: \$ Ms Mary Turner, Authorised Person



# **INTRODUCTION**

This introduction is not part of the licence and does not purport to be a legal interpretation of the licence.

Medite Europe Limited (Medite) is a medium density fibreboard (MDF) manufacturing installation located in Redmondstown, approximately 4 km from Clonmel, County Tipperary. MDF is a wood based sheet material manufactured from wood fibre bonded together with a synthetic resin adhesive.

The installation was first granted a licence by the Agency on 16 April 1996 (Reg. No. P0027-01). A revised licence was granted on 30 November 2001 (P0027-02). Medite Europe Limited review application, Reg. No. P0027-03 received 30 March 2011 was withdrawn as and from 22 July 2013.

Medite applied for a review of licence register no. P0027-02 in 2015 to accommodate new emissions to air associated with an enclosed cleaning and pneumatic transport system for woodchip, called a 'classicleaner' with storage in a new silo for woodchip, seven additional particulate filters, maintenance of two particulate filters, a new press extraction scrubber and a new boiler.

For the purposes of the EU Industrial Emissions Directive (IED) (2010/75/EU), this installation falls within the scope of Annex I categories:

- 6.1(c): Production in industrial installations of one or more of the following wood-based panels: fibreboard with a production capacity exceeding 600 m<sup>3</sup> per day.
- 1.1: Combustion of fuels in installations with a total rated thermal input of 50 MW or more.

The licence sets out in detail the conditions under which Medite Europe Limited will operate and manage this installation.

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# **Glossary of Terms**

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Act 1992 as amended / Waste Management Act 1996 as amended, unless otherwise defined in the section.

Adequate lighting	20 lux measured at ground level.	
AER	Annual Environmental Report.	
Agreement	Agreement in writing.	
Annually	All or part of a period of twelve consecutive months.	
Application	The application by the licensee for this licence.	
Appropriate Facility	A waste management facility, duly authorised under relevant law and technically suitable.	
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.	
Baseline report	Means information on the state of soil and groundwater contamination by relevant hazardous substances.	
BAT	Best Available Techniques.	
BAT conclusions	A document containing the parts of a BAT reference document laying down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.	
BAT reference document	A document drawn up by the Commission of the European Union in accordance with Article 13 of the Industrial Emissions Directive, resulting from the exchange of information in accordance with that Article of that Directive and describing, in particular, applied techniques, present emissions and consumption levels, techniques considered for the determination of best available techniques as well as BAT conclusions and any emerging techniques.	
Biannually	At approximately six – monthly intervals.	
Biennially	Once every two years.	
Biomass	Products consisting of any vegetable matter from agriculture or forestry which can be used as a fuel for the purpose of recovering its energy content and the following waste used as a fuel:	
	(a) Vegetable waste from agriculture and forestry;	
	<ul><li>(b) Vegetable waste from the food processing industry, if the heat generated is recovered;</li></ul>	
	(c) Fibrous vegetable waste from virgin pulp production and from production of paper from pulp, if it is co-incinerated at the place of production and the heat generated is recovered;	

(d) Cork waste; (e) Wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating, and which includes, in particular, such wood waste originating from construction and demolition waste. BOD 5 day Biochemical Oxygen Demand (without nitrification suppression). CEN Comité Européen De Normalisation – European Committee for Standardisation. COD Chemical Oxygen Demand. **Compliance** Point The point (location, depth) at which a compliance value should be met. Generally it is represented by a borehole or monitoring well from which representative groundwater samples can be obtained. The concentration of a substance and associated compliance regime that, **Compliance Value** when not exceeded at the compliance point, will prevent pollution and/or achieve water quality objectives at the receptor. A boom that can contain spillages and prevent them from entering drains or Containment watercourses or from further contaminating watercourses. boom **CRO** Number Company Register Number. A cyclofilter combines the gravitational forces from cyclone technology to Cyclofilter separate coarser dust and to capture finer dust with a battery of bag filters. During all days of plant operation and, in the case of emissions, when Daily emissions are taking place; with at least one measurement on any one day. Day Any 24 hour period. 0700 hrs to 1900 hrs. Daytime dB(A) Decibels (A weighted). **Diffuse emissions** Non-channelled emissions that are not released via specific emission points such as stacks. DO Dissolved oxygen. Any report, record, results, data, drawing, proposal, interpretation or other Documentation document in written or electronic form which is required by this licence. Any reference to a drawing or drawing number means a drawing or drawing Drawing number contained in the application, unless otherwise specified in this licence. Dust Total Particulate Matter.

Э

Emission limits	Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> , of this licence.
ЕМР	Environmental Management Programme.
Environmental damage	As defined in Directive 2004/35/EC.
EPA	Environmental Protection Agency.
European Waste Catalogue (EWC)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC, as amended by Commission Decision 2014/955/EU and any subsequent amendment published in the Official Journal of the European Community.
Evening Time	1900hrs to 2300hrs.
Facility	Any site or premises used for the purpose of the recovery or disposal of waste.
Fibreboard	As defined in EN 316, i.e. 'panel material with a nominal thickness of 1.5 mm or greater, manufactured from lignocellulosic fibres with application of heat and/or pressure'. Fibreboards include wet process boards (hardboard, mediumboard, softboard) and dry-process fibreboard (MDF).
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.
Gas Oil	Gas Oil as defined in Council Directive 1999/32/EC and meeting the requirements of S.I. No. 119 of 2008.
GC/MS	Gas chromatography/mass spectroscopy.
Green Waste	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
Groundwater	Has the meaning assigned to it by Regulation 3 of the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010).
ha	Hectare.
Hazardous Substances	Substances or mixtures as defined in Article 3 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.
Heavy metals	This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1- 84095-015-3.

Hours of operation	The hours during which the installation is authorised to be operational.		
ICP	Inductively coupled plasma spectroscopy.		
IE	Industrial Emissions.		
Incident	The following shall constitute as incident for the purposes of this licence:		
	(i)	an emergency;	
	(ii)	any emission which does not comply with the requirements of this licence;	
	(iii)	any malfunction or breakdown of key environmental abatement, control or monitoring equipment;	
	(iv)	any trigger level specified in this licence which is attained or exceeded; and,	
	(v)	any compliance value specified in this licence which is attained or exceeded; and,	
	(vi)	any indication that environmental pollution has, or may have, taken place.	
Industrial Emissions Directive	Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (Recast).		
Installation	A stationary technical unit or plant where the activity concerned referred to in the First Schedule of EPA Act 1992 as amended is or will be carried on, and shall be deemed to include any directly associated activity, which has a technical connection with the activity and is carried out on the site of the activity.		
Irish Water	Irish Water, Colvill House, 24/26 Talbot Street, Dublin 1.		
к	Kelvin.		
kPa	Kilopascals.		
L <sub>Aeq</sub> ,T	This is the equivalent continuous sound level. It is a type of average and is used to describe a fluctuating noise in terms of a single noise level over the sample period (T).		
Landfill Directive	Council	Directive 1999/31/EC.	
L <sub>Ar,T</sub>	The Rat plus spo sound.	ted Noise Level, equal to the $L_{Aeq}$ during a specified time interval (T), ecified adjustments for tonal character and/or impulsiveness of the	
Licensee	Medite Number	Europe Limited, Redmondstown, Clonmel, County Tipperary, CRO 80984.	

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List I	As listed in the EC Directives 2006/11/EC and 80/68/EEC and amendments.
List II	As listed in the EC Directives 2006/11/EC and 80/68/EEC and amendments.
Local Authority	Tipperary County Council.
Maintain	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function adequately.
Mass flow limit	An emission limit value expressed as the maximum mass of a substance that can be emitted per unit time.
Mass flow threshold	A mass flow rate above which a concentration limit applies.
Mat Forming	The process of laying out particles, strands or fibres to create the mat, which is directed to the press.
Monthly	A minimum of 12 times per year, at intervals of approximately one month.
Night-time	2300 hrs to 0700 hrs.
Noise-sensitive location (NSL)	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other installation or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
Oil separator	Device installed according to the International Standard I.S. EN 858-2:2003 (Separator system for light liquids, (e.g. oil and petrol) – Part 2: Selection of normal size, installation, operation and maintenance).
PCDD/F	Polychlorinated dibenzo-dioxins and -furans.
PRTR	Pollutant Release and Transfer Register.
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Recovered wood	Material predominantly containing wood. Recovered wood can consist of 'reclaimed wood' and 'wood residues'. 'Reclaimed wood' is a material predominantly containing wood derived directly from post-consumer recycled wood.
Relevant Hazardous Substances	Those substances or mixtures defined within Article 3 of Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) which, as a result of their hazardousness, mobility, persistence and biodegradability (as well as other characteristics), are capable of contaminating soil or groundwater and are used, produced and/or released by the installation.
SAC	Special Area of Conservation designated under the <i>Habitats Directive</i> , Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

Sample(s)	Unless the context of this licence indicates to the contrary, the term samples shall include measurements taken by electronic instruments.
Sanitary effluent	Wastewater from installation toilet, washroom and canteen facilities.
Soil	The top layer of the Earth's crust situated between the bedrock and the surface. The soil is composed of mineral particles, organic matter, water, air and living organisms.
SOP	Standard operating procedure.
SPA	Special Protection Area designated under the Birds Directive, Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.
Specified emissions	Those emissions listed in Schedule B: Emission Limits, of this licence.
Standard method	A National, European or internationally recognised procedure (e.g. I.S. EN, ISO, CEN, BS or equivalent); or an in-house documented procedure based on the above references; a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by A.P.H.A., A.W.W.A. & W.E.F.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or an alternative method as may be agreed by the Agency.
Storage	Includes holding of waste.
Storm water	Rain water run-off from roof and non-process areas.
Surface run-off water	Water from precipitation run-off and drainage, collected from outdoor log yard areas, including outdoor process areas.
The Agency	Environmental Protection Agency.
тос	Total organic carbon.
Trade effluent	Trade effluent has the meaning given in the Water Services Act, 2007.
Trigger level	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
TVOC	Total Volatile Organic Compounds, expressed as C (in air).
VOC	Volatile Organic Compounds.
Waste	Any substance or object which the holder discards or intends or is required to discard.
Water Services Authority	Tipperary County Council.
Weekly	During all weeks of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement in any one week.

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WWTP Waste water treatment plant.

# **Decision & Reasons for the Decision**

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of Section 83(5) of the Environmental Protection Agency Act 1992 as amended.

The Agency also considers that the activities will not adversely affect the integrity of any European Site, and has decided to impose conditions for the purposes of ensuring they do not do so. It has determined that the activities, if managed, operated and controlled in accordance with the licence, will not have any adverse effect on the integrity of any of those sites.

The Agency has applied the Commission Implementing Decision (EU) 2015/119 of 20 November 2015 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the production of wood-based panels as a reference when setting licence conditions.

The Agency has accordingly decided to grant a licence to Medite Europe Limited to carry on the activities listed in *Part I Schedule of Activities Licensed*, subject to the conditions set out in *Part III Conditions*; such licence to take effect in lieu of Licence Register Number: P0027-02.

In reaching this decision the Agency has considered the documentation relating to: the existing licence, Register Number: P0027-02, the review application, Register Number: P0027-04 and the supporting documentation received from the applicant; the Inspector's Report dated 13 September 2016; the proposed determination dated 6<sup>th</sup> October 2016; the objection received from the Applicant; the Technical Committee Report dated 16<sup>th</sup> February 2017on the objection to the proposed determination; and has carried out an Environmental Impact Assessment (EIA) and an Appropriate Assessment of the likely significant effects of the activities on European Sites.

It is considered that the Inspector's Report and the Technical Committee Report contain a fair and reasonable examination, evaluation and analysis of the likely significant effects of the activities on the environment, and adequately and accurately identify, describe and assess those effects. The assessment as reported in those documents is adopted as the assessment of the Agency. Having regard to this assessment, it is considered that activities, if managed, operated and controlled in accordance with the licence will not result in the contravention of any relevant environmental quality standards or cause environmental pollution.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activities, individually or in combination with other plans or projects are likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Site(s) at Lower River Suir SAC (site code 002137), Comeragh Mountains SAC (site code 001952) and Nier Valley Woodlands SAC (site code 00688).

The activities are not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it cannot be excluded, on the basis of objective information, that the activities, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activities was required, and for this reason determined to require the applicant to submit a Natura Impact Statement.

This determination has been made on the basis of the hydrological connectivity to the Lower River Suir SAC and the nature and scale of air emissions from the installation and the distance to European sites.

The Agency has completed the Appropriate Assessment of potential impacts on these sites and has made certain, based on best scientific knowledge in the field and in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, pursuant to Article 6(3) of the Habitats Directive, that the activities, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site, in particular Lower River Suir SAC (site code 002137), Comeragh Mountains SAC (site code 001952) and Nier Valley Woodlands SAC (site code 00688), having regard to their conservation objective's and will not affect the preservation of these sites at favourable conservation status if carried out in accordance with this licence and the conditions attached hereto for the following reasons:

- The storm water passes through a settling lagoon (settlement pond), before discharging to a drain leading to the River Anner to ensure that the discharges will not negatively impact water quality and ensure the continued protection of water dependent species;
- The licence requires the licensee to meet emission limit values set in *Schedule B.1 Emissions* to *Air* of this licence to ensure that the air emissions will not negatively impact air quality beyond the boundary of the installation and ensure the continued protection of qualifying interests of any European site;
- The licence requires ambient monitoring of formaldehyde to confirm the absence of impact from the air emissions in the ambient environment and ensure the continued protection of qualifying interests of any European site;
- The distance and the lack of hydrological connectivity connecting the European sites Comeragh Mountains SAC (site code 001952) and Nier Valley Woodlands SAC (site code 00688) to the installation;
- The licence requires the licensee to meet emission limit values set in *Schedule B.2 Emissions* to *Water* of this licence for SW2 and SW1 to ensure that the discharges will not negatively impact water quality and ensure the continued protection of water-dependent species.
- Noise emissions are not significant for the processes involved at the installation, noise modelling demonstrates that the impact of noise from the installation on the qualifying interests of any European site is negligible. The licence specifies standard noise conditions and emission limit values for noise;
- While there is potential for accidents and unplanned releases from the installation, it is considered that the conditions of the licence in relation to bunding and the protection of surface water and groundwater, are sufficient to ensure that accidental emissions from the activity will not impact on the qualifying interests of any of the European sites identified above. The licence specifies accident prevention and emergency response requirements.

The Agency is satisfied that no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of those European Site(s) Lower River Suir SAC (site code 002137), Comeragh Mountains SAC (site code 001952) and Nier Valley Woodlands SAC (site code 00688).

# Part I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Environmental Protection Agency Act 1992 as amended, the Agency hereby grants this revised Industrial Emissions licence to: Medite Europe Limited, Redmondstown, Clonmel, County Tipperary, and CRO Number 80984, under Section 90(2) of the said Act to carry on the following activities:

- Production in industrial installations of one or more of the following wood-based panels: fibreboard with a production capacity exceeding 600 m<sup>3</sup> per day.
- Combustion of fuels in installations with a total rated thermal input of 50 MW or more.

at Redmondstown, Clonmel, County Tipperary subject to the following twelve Conditions, with the reasons therefor and associated schedules attached thereto.

# Part II Schedule of Activities Refused

None of the proposed activities as set out in the licence application have been refused.

# **Part III Conditions**

### Condition 1. Scope

- 1.1 Industrial Emissions Directive activities at this installation shall be restricted to those listed and described in *Part I Schedule of Activities Licensed*, and shall be as set out in the licence application or as modified under Condition 1.4 of this licence and subject to the conditions of this licence.
- 1.2 Activities at this installation shall be limited as set out in *Schedule A: Limitations*, of this licence.
- 1.3 For the purposes of this licence, the installation authorised by this licence is the area of land outlined in red on Drawing No. EN/000-IPPC-00, Rev 2 entitled 'Site Location Plan', Attachment B.2 of the review application (Register No. P0027-04). Any reference in this licence to "installation" shall mean the area thus outlined in red. The licensed activities shall be carried on only within the area outlined.
- 1.4 No alteration to, or reconstruction in respect of, the activity, or any part thereof, that would, or is likely to, result in
  - (i) a material change or increase in:
    - the nature or quantity of any emission;
    - the abatement/treatment or recovery systems;
    - the range of processes to be carried out;
    - the fuels, raw materials, intermediates, products or wastes generated, or
  - (ii) any changes in:
    - site management, infrastructure or control with adverse environmental significance;

shall be carried out or commenced without prior notice to, and without the approval of, the Agency.

- 1.5 The installation shall be controlled, operated and maintained, and emissions shall take place as set out in the licence. All programmes required to be carried out under the terms of this licence become part of this licence.
- 1.6 This licence is for the purpose of IE licensing under the EPA Act 1992 as amended only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.7 This licence shall have effect in lieu of the licence granted on 30 November 2001 (Register No. P0027-02).

Reason: To clarify the scope of this licence.

### Condition 2. Management of the Installation

- 2.1 Installation Management
  - 2.1.1 The licensee shall employ a suitably qualified and experienced installation manager who shall be designated as the person in charge. The installation manager or a nominated, suitably qualified and experienced deputy shall be present on the installation at all times during its operation or as otherwise required by the Agency.
  - 2.1.2 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience as required and shall be aware of the requirements of this licence.

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- 2.2 Environmental Management System (EMS)
  - 2.2.1 The licensee shall maintain and implement an Environmental Management System (EMS), which shall incorporate the following:
    - (i) energy efficiency management;
    - (ii) A dust management plan;
    - (iii) A waste management plan;
    - (iv) A noise reduction plan.

The EMS shall be reviewed by senior management for suitability, adequacy and effectiveness and updated on an annual basis.

- 2.2.2 The EMS shall include, as a minimum, the following elements:
  - 2.2.2.1 Commitment of the management, including senior management.
  - 2.2.2.2 An environmental policy defined for the installation that includes the continuous improvement for the installation by the management.
  - 2.2.2.3 Management and Reporting Structure and responsibility.
  - 2.2.2.4 The necessary procedures, objectives and targets, in conjunction with financial planning and investment.
  - 2.2.2.5 Procedures that ensure employee involvement in ensuring compliance with environmental legislation.
  - 2.2.2.6 A procedure for checking performance by sectoral benchmarking on a regular basis including energy efficiency.
  - 2.2.2.7 A quality control plan for recovered wood used as raw material for panels and used as fuel.
  - 2.2.2.8 Schedule of Environmental Objectives and Targets.

The licensee shall maintain and implement a Schedule of Environmental Objectives and Targets. The schedule shall, as a minimum, provide for a review of all operations and processes, including an evaluation of practicable options for the reduction of suspended solids in surface run-off water, for energy and resource efficiency, the use of cleaner technology, cleaner production and the prevention, reduction and minimisation of waste and shall include waste reduction targets. The schedule shall include time frames for the achievement of set targets and shall address a five-year period as a minimum. The schedule shall be reviewed annually.

2.2.2.9 Environmental Management Programme (EMP)

The licensee shall prepare, maintain and implement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.8. The EMP shall include:

- designation of responsibility for targets;
- the means by which they may be achieved;
- the time within which they may be achieved.

The EMP shall be reviewed annually.

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.

#### 2.2.2.10 Documentation

- (i) The licensee shall maintain and implement an environmental management documentation system.
- (ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

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2.2.2.11 Corrective and Preventative Action

- (i) The licensee shall establish maintain and implement procedures to ensure that corrective and preventative action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective and preventative action in the event of a reported non-conformity with this licence shall be defined.
- (ii) Where a breach of one or more of the conditions of this licence occurs, the licensee shall without delay take measures to restore compliance with the conditions of this licence in the shortest possible time and initiate any feasible preventative actions to prevent recurrence of the breach.
- (iii) All corrective and preventative actions shall be documented

#### 2.2.2.12 Internal Audits

The licensee shall maintain and implement a programme for independent internal audits of the EMS. Such audits shall be carried out at least once every three years. The audit programme shall determine whether or not the EMS is being implemented and maintained properly, and in accordance with the requirements of the licence. Audit reports and records of the resultant corrective and preventative actions shall be maintained as part of the EMS in accordance with Condition 2.2.2.11.

2.2.2.13 Awareness, Training and Competence

The licensee shall maintain and implement procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment to ensure awareness and competence in their work area. Appropriate records of training shall be maintained.

#### 2.2.2.14 Communications Programme

The licensee shall maintain and implement a Public Awareness and Communications Programme to ensure that members of the public can obtain information at the installation, at all reasonable times, concerning the environmental performance of the installation.

#### 2.2.2.15 Maintenance Programme

The licensee shall maintain and implement a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme. The licensee shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel (see Condition 2.1 above). The maintenance programme shall use appropriate techniques and measures to ensure the optimisation of energy efficiency in plant and equipment.

#### 2.2.2.16 Efficient Process Control

The licensee shall maintain and implement a programme to ensure there is adequate control of processes under all modes of operation. The programme shall identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these parameters. Abnormal process operating conditions shall be documented, and analysed to identify any necessary corrective action.

Reason: To make provision for management of the activity on a planned basis having regard to the desirability of ongoing assessment, recording and reporting of matters affecting the environment.
## Condition 3. Infrastructure and Operation

- 3.1 The licensee shall establish and maintain, for each component of the installation, all infrastructure referred to in this licence in advance of the commencement of the licensed activities in that component, or as required by the conditions of this licence. Infrastructure specified in the application that relates to the environmental performance of the installation and is not specified in the licence, shall be installed in accordance with the schedule submitted in the application.
- 3.2 The licensee shall have regard to the following when choosing and/or designing any new plant/infrastructure:
  - (i) Energy efficiency, and
  - (ii) The environmental impact of eventual decommissioning.
- 3.3 Installation Notice Board
  - (i) The licensee shall, within one month of the date of grant of this licence, provide an Installation Notice Board on the installation so that it is legible to persons outside the main entrance to the installation. The minimum dimensions of the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.
  - (ii) The board shall clearly show:
    - (i) the name and telephone number of the installation;
    - (ii) the normal hours of operation;
    - (iii) the name of the licence holder;
    - (iv) an emergency out of hours contact telephone number;
    - (v) the licence reference number; and
    - (vi) where environmental information relating to the installation can be obtained.
- 3.4 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 3.5 In the case of composite sampling of aqueous emissions from the operation of the installation, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be refrigerated immediately after collection and retained as required for Agency use.
- 3.6 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency. The requirement with regard to off-site points is subject to the prior agreement of the landowner(s) concerned.
- 3.7 Tank, Container and Drum Storage Areas
  - 3.7.1 All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. Bunds shall be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).
  - 3.7.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:
    - (i) 110% of the capacity of the largest tank or drum within the bunded area; or
    - (ii) 25% of the total volume of substance that could be stored within the bunded area

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- 3.7.3 All drainage from bunded areas shall be treated as contaminated unless it can be demonstrated to be otherwise. All drainage from bunded areas shall be diverted for collection and safe disposal, unless it can be deemed uncontaminated and does not exceed the trigger levels set for surface run-off water emissions under Condition 6.12.
- 3.7.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.7.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.

- 3.7.6 All bunds shall be uniquely identified and labelled at the bund.
- 3.8 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the installation. Once used, the absorbent material shall be disposed of at an appropriate facility.
- 3.9 Oil Separators

The licensee shall maintain an oil separator on the storm water discharge from yard areas. The separator shall be a Class I full retention separator.

The separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids), unless otherwise agreed by the Agency.

3.10 Fire-water Retention

In the event of a fire or a spillage to storm water, the site storm water shall be diverted to the emergency lagoon for collection. The licensee shall have regard to any guidelines issued by the Agency with regard to firewater retention.

- 3.11 All pump sumps, storage tanks, lagoons or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate).
- 3.12 The provision of a catchment system to collect any leaks from flanges and valves of all overground pipes used to transport material other than water shall be examined. This shall be incorporated into a Schedule of Environmental Objectives and Targets set out in Condition 2. of this licence for the reduction in diffuse emissions.
- 3.13 All wellheads, as shown on Drawing No. EN/000-IPPC-008, Revision 2, Licence return Number: LR015264 shall be adequately protected to prevent contamination or physical damage.
- 3.14 The licensee shall, maintain in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.15 The licensee shall maintain a weather monitoring station on the site at a location agreed by the Agency, which records conditions of wind speed and wind direction.

**Reason:** To provide for appropriate operation of the installation to ensure protection of the environment.

## **Condition 4.** Interpretation

- 4.1 Emission limit values for emissions to atmosphere in this licence shall be interpreted in the following way:
  - 4.1.1 Continuous Monitoring
    - (i) No 24 hour mean value shall exceed the emission limit value.
    - (ii) 97% of all 30 minute mean values taken continuously over an annual period shall not exceed 1.2 times the emission limit value.
    - (iii) No 30 minute mean value shall exceed twice the emission limit value.
  - 4.1.2 Non-Continuous Monitoring
    - (i) For any parameter where, due to sampling/analytical limitations, a 30 minute sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.
    - (ii) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.
    - (iii) For all other parameters, no 30 minute mean value shall exceed the emission limit value.

- 4.2 The concentration and volume flow limits for emissions to atmosphere specified in this licence shall be achieved without the introduction of dilution air and shall be based on gas volumes under standard conditions of:
  - 4.2.1 From non-combustion sources:
    - (i) Temperature 273.15K, Pressure 101.3 kPa (no correction for oxygen or water content) until 19 November 2019.
    - (ii) Temperature 273.15K, Pressure 101.3 kPa, dry gas, no correction for oxygen from 20 November 2019.
  - 4.2.2 In the case of combustion gases from the boilers and Energy Plant:
    - (i) Temperature 273.15K, Pressure 101.3 kPa, no correction for oxygen for wood biomass or water content, 3% oxygen for liquid and gas fuels, 6% oxygen for solid fuels until 19 November 2019.
    - (ii) Temperature 273.15K, Pressure 101.3 kPa, dry gas; no correction for oxygen for wood biomass, 3% oxygen for liquid and gas fuels, 6% oxygen for solid fuels from 20 November 2019.
- 4.3 Emission limit values for emissions to sewer/waters in this licence shall be interpreted in the following way:
  - 4.3.1 Continuous Monitoring
    - (i) No flow value shall exceed the specific limit.
    - (ii) No pH value shall deviate from the specified range.
    - (iii) No temperature value shall exceed the limit value.
  - 4.3.2 Composite Sampling
    - (i) No pH value shall deviate from the specified range.
    - (ii) For parameters other than pH and flow, eight out of ten consecutive composite results, based on flow proportional composite sampling, shall not exceed the emission limit value. No individual results similarly calculated shall exceed 1.2 times the emission limit value.
    - (iii) The yearly average concentration limit for suspended solids and COD discharged from SW2 and for suspended solids discharged from SW1 shall not exceed the yearly average limits specified in *Schedule B.2 Emissions to Water* of this licence. The yearly average is the average of all the 24 hour flow proportional composite samples taken in a calendar year.
  - 4.3.3 Discrete Sampling

For parameters other than pH and temperature, no grab sample value shall exceed 1.2 times the emission limit value.

- 4.4 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.
- 4.5 Noise

Noise from the installation shall not give rise to sound pressure levels measured at noise sensitive locations which exceed the limit value(s).

4.6 Dust and Particulate Matter

Dust and particulate matters from the activity shall not give rise to deposition levels which exceed the limit value(s).

Reason: To clarify the interpretation of limit values fixed under the licence.

# Condition 5. Emissions

- 5.1 No specified emission from the installation shall exceed the emission limit values set out in *Schedule B: Emission Limits*, of this licence. There shall be no other emissions of environmental significance.
- 5.2 No emissions, including dust and odours, from the activities carried on at the site shall result in an impairment of, or an interference with amenities or the environment beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary.
- 5.3 No substance shall be discharged in a manner, or at a concentration, that, following initial dilution, causes tainting of fish or shellfish.

Reason: To provide for the protection of the environment by way of control and limitation of emissions.

# Condition 6. Control and Monitoring

- 6.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with *Schedule C: Control & Monitoring*, of this licence.
  - 6.1.1 Analyses shall be undertaken by competent staff in accordance with documented operating procedures.
  - 6.1.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.
  - 6.1.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.
  - 6.1.4 Where any analysis is sub-contracted it shall be to a competent laboratory.
- 6.2 The licensee shall ensure that:
  - (i) sampling and analysis for all parameters listed in the Schedules to this licence; and
  - (ii) any reference measurements for the calibration of automated measurement systems;

shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards that will ensure the provision of data of an equivalent scientific quality shall apply.

- 6.3 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. The use of alternative equipment, other than in emergency situations, shall be as agreed by the Agency.
- 6.4 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission/discharge (or ambient conditions where that is the monitoring objective).
- 6.5 The licensee shall ensure that groundwater monitoring well sampling equipment is available/installed on-site and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.
- 6.6 All treatment/abatement and emission control equipment shall be calibrated and maintained in accordance with the instructions issued by the manufacturer/supplier or installer.
- 6.7 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the approval of the Agency following evaluation of test results.

- 6.8 The licensee shall prepare a programme, for the identification and reduction of diffuse emissions using an appropriate combination of best available techniques. This programme shall be included in the Environmental Management Programme.
- 6.9 The integrity and water tightness of all tanks, bunding structures, containers, underground pipes and their resistance to penetration by water or other materials carried or stored therein shall be tested. This testing shall be carried out by the licensee at least once every three years and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 6.10 The stormwater drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be agreed) shall be visually inspected weekly, and desludged as necessary. Bunds, oil separators shall be inspected weekly and desludged as necessary. All sludge and drainage from these operations shall be collected for safe disposal. The drainage system, bunds and oil interceptors shall be properly maintained at all times. The licensee shall maintain a drainage map on site. The drainage map shall be reviewed annually and updated as necessary.
- 6.11 An inspection system for the detection of leaks on all flanges and valves on over-ground pipes used to transport materials other than water shall be developed and maintained.
- 6.12 Surface run-off water
  - 6.12.1 A visual examination of the surface run-off water discharges shall be carried out daily. A log of such inspections, shall be maintained.
  - 6.12.2 The licensee shall, within six months of the date of grant of this licence, establish suitable trigger levels for pH, suspended solids and COD in surface run-off water discharges, such that surface run-off waters exceeding these levels will be diverted for retention and suitable disposal. The licensee shall have regard to the Environmental Protection Agency "Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities" when establishing the suitable trigger levels.
  - 6.12.3 Surface run-off water from log-yard unloading, storage areas and the roadway leading to these areas shall be discharged to the River Anner via an oil interceptor and the Northern Lagoon.
  - 6.12.4 The licensee shall maintain roads, roofs, storage areas and yards within the site, in a manner which will minimise, having regard to CID 2015/2119/EU, the contamination of surface water leaving the site.
- 6.13 Process Effluent
  - 6.13.1 The acute toxicity of the undiluted final effluent to at least four aquatic species from different trophic levels shall be determined by standardised and internationally accepted procedures and carried out by a competent laboratory.
  - 6.13.2 Having identified the most sensitive species outlined in Condition 6.13.1, subsequent compliance toxicity monitoring shall be carried out on the two most sensitive species.
  - 6.13.3 A representative sample of effluent shall be screened for the presence of organic compounds. Such screening shall be repeated at intervals as requested by the Agency thereafter.

#### 6.14 Ground Water

- 6.14.1 Within eighteen months of the date of grant of this licence, the licensee shall carry out a risk screening and where necessary a technical assessment in accordance with the Guidance on the Authorisation of Discharges to Groundwater, published by the Environmental Protection Agency. A report on the outcome of the screening and where relevant the recommendations of the technical assessment in relation to the setting of groundwater compliance points and values, shall be submitted to the Agency for approval. Any actions required to demonstrate compliance with the European Communities Environmental Objectives (Groundwater) Regulations 2010, shall be agreed by the Agency and implemented within a period to be agreed by the Agency. Groundwater monitoring results shall be submitted annually or as required in the Schedules to this licence.
- 6.14.2 The licensee shall have regard to the EPA Guideline Template Report for Reporting Compliance with the Environmental Objectives (Groundwater) Regulations 2010, and the EPA Guidance on the Management of Contaminated Land and Groundwater at EPA licenced sites, and the baseline report (received by the Agency on 17 July 2015) when implementing Condition 6.14.1 above.
- 6.15 Noise

The licensee shall carry out a noise survey of the site operations as required by the Agency. The survey programme shall be undertaken in accordance with the methodology specified in the 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' as published by the Agency.

6.16 Pollutant Release and Transfer Register (PRTR)

The licensee shall prepare and report a PRTR for the site. The substance and/or wastes to be included in the PRTR shall be determined by reference to EC Regulations No. 166/2006 concerning the establishment of the European Pollutant Release and Transfer Register. The PRTR shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted electronically in specified format and as part of the AER.

6.17 Soil and Groundwater Monitoring

The licensee shall carry out monitoring for relevant hazardous substances in soil and groundwater at the site of the installation. The substances for monitoring shall be identified by the licensee by undertaking a risk based assessment. The risk assessment, sampling and monitoring shall be carried out in accordance with any guidance published by the Agency. The licensee shall have regard to the 'Classification of Hazardous and Non-Hazardous Substances in Groundwater' as published by the Agency

- 6.17.1 Monitoring shall be carried out in accordance with Schedule C.6.4 Groundwater Monitoring of this licence. Soil monitoring shall be carried out at the site of the installation at least once every ten years. Monitoring shall be carried out in accordance with Schedule C.6.5 Soil Monitoring of this licence.
- 6.18 Impact of Emissions to Air
  - 6.18.1 The licensee shall maintain a programme for the monitoring and assessing of Formaldehyde concentration in ambient air. Monitoring shall be carried out in accordance with *Schedule C.6. Ambient Monitoring* of this licence. The results of this monitoring programme shall be submitted to the Agency on a quarterly basis, and a summary report shall be submitted as part of the AER.

*Reason:* To provide for the protection of the environment by way of treatment and monitoring of emissions.

# Condition 7. Resource Use and Energy Efficiency

- 7.1 The licensee shall carry out an audit of the energy efficiency of the site as required by the Agency. The audit shall be carried out in accordance with the guidance published by the Agency, "Guidance Note on Energy Efficiency Auditing". The energy efficiency audit shall be repeated at intervals as required by the Agency.
- 7.2 The audit shall identify all practicable opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.
- 7.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into Schedule of Environmental Objectives and Targets.
- 7.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets.

Reason: To provide for the efficient use of resources and energy in all site operations.

# Condition 8. Materials Handling

- 8.1 The licensee shall implement a waste management plan to ensure that waste generated in the carrying on of the activity shall be prepared for re-use, recycling or recovery or, where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment.
- 8.2 Disposal or recovery of waste on-site shall only take place in accordance with the conditions of this licence and in accordance with the appropriate National and European legislation and protocols.
- 8.3 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor. The waste shall be transported from the site of the activity to the site of recovery/disposal only in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 8.4 The licensee shall ensure that, in advance of transfer to another person, waste shall be classified, packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 8.5 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.6 Waste shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste shall be clearly labelled and appropriately segregated.
- 8.7 No waste classified as green list waste in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended) shall be consigned for recovery without the approval of the Agency.
- 8.8 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C: Control* & *Monitoring*, of this licence.
- 8.9 Unless approved in writing, in advance, by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.

- 8.10 The licensee shall neither import waste into the State nor export waste out of the State except in accordance with the relevant provisions of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14th June 2006 on shipments of waste and associated national regulations.
- 8.11 Soil Gas monitoring shall be carried out in accordance with *Schedule C.6.3 Soil Gas Monitoring* of this licence. A report of such results shall be submitted to the Agency as part of the AER.
- 8.12 No wood wastes, other than those listed in *Schedule A.1 Fuel Use in the Boilers and combined Energy Plant*, of this licence shall be used as fuel on site.
- 8.13 All wood wastes accepted for use as fuel shall comply with detailed written inspection and acceptance procedures which shall form part of the documentation system for the site.
- 8.14 Wood waste shall only be accepted at the installation from known suppliers or new suppliers subject to initial waste profiling, and analysis and characterisation off-site. The written records of this off-site waste profiling and characterisation shall be retained by the licensee for all active suppliers and for a two-year period following termination of licensee/supplier agreements.
- 8.15 Wood waste shall be accepted at the installation only from suppliers who are holders of a waste collection permit, unless exempted under the *Waste Management (Collection Permit)* Regulations 2001 (as amended).

Reason: To provide for the appropriate handling of material and the protection of the environment.

# Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall also address fire prevention and be reviewed annually and updated as necessary.
- 9.2 The licensee shall, ensure that a documented Emergency Response Procedure is in place, that addresses any emergency situation which may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.

#### 9.3 Incidents

- 9.3.1 In the event of an incident the licensee shall immediately:
  - (i) carry out an investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
  - (ii) isolate the source of any such emission;
  - (iii) evaluate the environmental pollution, if any, caused by the incident;
  - (iv) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
  - (v) identify the date, time and place of the incident;
  - (vi) notify the Agency as required by Condition 11.1 of this licence.
- 9.3.2 Where an incident or accident that significantly affects the environment occurs, the licensee shall, without delay take measures to limit the environmental consequences of the incident or accident and to prevent further incident or accident.

Reason: To provide for the protection of the environment.

# Condition 10. Closure, Restoration and Aftercare Management

- 10.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery any soil, subsoil, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.2 Closure, Restoration and Aftercare Management Plan (CRAMP)
  - 10.2.1 The licensee shall maintain, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning or closure of the site or part thereof.
  - 10.2.2 The plan shall be reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the agreement of the Agency.
  - 10.2.3 The licensee shall have regard to the Environmental Protection Agency's Guidance on Assessing and Costing Environmental Liabilities (2014) and, as appropriate, Guidance on Financial Provision for Environmental Liabilities (2015) and the baseline report, when implementing Condition 10.2.1 above.
- 10.3 The Closure, Restoration and Aftercare Management Plan shall include, as a minimum, the following:
  - (i) a scope statement for the plan;
  - (ii) the criteria that define the successful decommissioning of the activity or part thereof, which ensures minimum impact on the environment;
  - (iii) a programme to achieve the stated criteria;
  - (iv) where relevant, a test programme to demonstrate the successful implementation of the decommissioning plan; and
  - (v) details of the costings for the plan and the financial provisions to underwrite those costs.
- 10.4 A final validation report to include a certificate of completion for the Closure, Restoration and Aftercare Management Plan, for all or part of the site as necessary, shall be submitted to the Agency within three months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

Reason: To make provision for the proper closure of the activity ensuring protection of the environment.

# Condition 11. Notification, Records and Reports

- 11.1 The licensee shall notify the Agency by both telephone and either email or webform, to the Agency's headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:
  - (i) an incident or accident as defined by the glossary;
  - (ii) any release of environmental significance to atmosphere from any potential emissions point including bypasses;
  - (iii) any breach of one or more of the conditions attached to this licence;
  - (iv) any malfunction or breakdown of key environmental abatement, control or monitoring equipment; and
  - (v) any incident or accident as defined in the glossary requiring an emergency response by the Local Authority.

The licensee shall include as part of the notification, date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any emissions. All details required to be communicated must be in accordance with any Guidance provided by the Agency.

- 11.2 The following shall be notified, as soon as practicable after the occurrence of any incident which relates to a discharge to water:
  - (i) Inland Fisheries Ireland in the case of discharges to receiving waters.
- 11.3 The licensee shall make a record of any notification made under Condition 11.1. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident or accident. The record shall include all corrective actions taken to manage the incident or accident, minimise wastes generated and the effect on the environment, and avoid recurrence. In the case of a breach of a condition, the record shall include measures to restore compliance. The licensee shall, as soon as practicable following notification, submit to the Agency the record.
- 11.4 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant (if provided), and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.
- 11.5 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation.
- 11.6 The licensee shall as a minimum ensure that the following documents are accessible at the site:
  - (i) the licences relating to the installation;
  - (ii) the current EMS for the installation including all associated procedures, reports, records and other documents;
  - (iii) the previous year's AER for the installation;
  - (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation;
  - (v) relevant correspondence with the Agency;
  - (vi) up-to-date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;
  - (vii) up-to-date Standard Operational Procedures for all processes, plant and equipment necessary to give effect to this licence or otherwise to ensure that standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment;
  - (viii) any elements of the licence application or EIS documentation referenced in this licence.

This documentation shall be available to the Agency for inspection at all reasonable times.

- 11.7 The licensee shall submit to the Agency, by the 31<sup>st</sup> March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule D: Annual Environmental Report*, of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.8 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall as a minimum contain details of the following:
  - the tonnages and EWC Code for the waste materials imported and/or sent off-site for disposal/recovery;
  - the names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and vehicle registration number);

- details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required;
- (iv) written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site;
- (v) details of all waste consigned abroad for Recovery and classified as 'Green' in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended). The rationale for the classification must form part of the record;
- (vi) details of any rejected consignments;
- (vii) details of any approved waste mixing;
- (viii) the results of any waste analyses required under *Schedule C: Control & Monitoring*, of this licence; and
- (ix) the tonnage and EWC Code for the waste materials recovered/disposed on-site.
- 11.9 The licensee shall submit report(s) as required by the conditions of this licence to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency.
- 11.10 All reports shall be certified accurate and representative by the installation manager or a nominated, suitably qualified and experienced deputy.
- 11.11 The licensee shall notify the Agency of any proposed alterations to the dryers, which would change the maximum calculated gas volumetric flow rates as calculated by the licensee as part of the licence application.

Reason: To provide for the collection and reporting of adequate information on the activity.

## **Condition 12.** Financial Charges and Provisions

- 12.1 Agency Charges
  - 12.1.1 The licensee shall pay to the Agency an annual contribution of €13,831, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Environmental Protection Agency Act 1992 as amended. The first payment shall be a pro-rata amount for the period from the date of grant of this licence to the 31<sup>st</sup> day of December, and shall be paid to the Agency within one month from the date of grant of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency of its relevant functions under the Environmental Protection Agency Act 1992 as amended and all such payments shall be made within one month of the date upon which demanded by the Agency.
  - 12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defray its costs in regard to items not covered by the said annual contribution.
- 12.2 Environmental Liabilities
  - 12.2.1 The licensee shall as part of the AER, provide an annual statement as to the measures taken or adopted at the site in relation to the prevention of environmental damage, and the financial provisions in place in relation to the underwriting of costs for remedial actions following anticipated events (including closure) or accidents/incidents, as may be associated with the carrying on of the activity.

- 12.2.2 The licensee shall arrange for the completion, by an independent and appropriately qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA) which addresses the liabilities from past and present activities. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the CRAMP. A report on this assessment shall be submitted to the Agency for agreement within three months of date of grant of this licence. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement. Review results are to be notified as part of the AER.
- 12.2.3 Within six months of date of grant of this licence, the licensee shall, to the satisfaction of the Agency, make financial provision to cover any liabilities associated with the operation (including closure, restoration and aftercare). The amount of indemnity held shall be reviewed and revised as necessary, but at least annually. Proof of renewal or revision of such financial indemnity shall be included in the annual 'Statement of Measures' report identified in Condition 12.2.1.
- 12.2.4 The licensee shall revise the cost of closure, restoration and aftercare annually and any adjustments shall be reflected in the financial provision made under Condition 12.2.3.
- 12.2.5 The licensee shall have regard to the Environmental Protection Agency's Guidance on Assessing and Costing Environmental Liabilities (2014) and, as appropriate, Guidance on Financial Provision for Environmental Liabilities (2015) and the baseline report, when implementing Conditions 12.2.2 and 12.2.3 above.

Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.

## **SCHEDULE A: Limitations**

#### A.1 Fuel use in the Boilers and combined Energy Plant

Waste to be used as fuel in the Boilers and combined Energy Plant shall be limited to the following materials:

Fuel Type	Note 1
Wood biom	ass
The follow	ng fuel from the on-site processing:
• D	ewatered sludge from the biological treatment plant Note 2
• D • C	swatered DAF solids sympacted wood solids from rundown screens Note 3
• Ba	urk
• Cl	lip/fines
• Re	ject Fibre
• Ro • Sa	w trimmings/sander dust

Note 1: Wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with preservatives or coating, and which includes in particular such wood waste originating from construction and demolition waste and wood waste mentioned in the hazardous waste list.

Note 2: The maximum rate of combustion of sludge (from WWTP and DAF) shall be 0.25 tonnes per hour with no more than 0.084 tonnes per hour combusted in each boiler or the energy plant, unless otherwise approved by the Agency.

Note 3: The maximum rate of combustion of screening shall be 0.3 tonnes per hour unless otherwise approved by the Agency.



## SCHEDULE B: Emission Limits

**B.1** Emissions to Air

Emission Point Reference No: Location:

Volume to be emitted: Minimum discharges height: A1-1 Press Thermal fluid heater, Production Line I Grid Reference: 224039E, 123995N Maximum rate per hour: 360 m<sup>3</sup> 11 m above ground

Parameter	Emission Limit Value	
Nitrogen oxides (as NO <sub>2</sub> )	110 mg/m <sup>3</sup>	

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Emission Point Reference No	Location	Minimum discharges Height above ground (m)	Maximum volume Nm <sup>3</sup> /hr	Dust Emission Limit Value mg/Nm <sup>3</sup>
A2-1	Wood Chip Cleaning HPS Cyclo filter Grid Reference: 223952E, 123952N	17.8	23,000	5
A2-2	Wood Chip cleaning STS Cyclo filter Grid Reference: 223962E, 123953N	17.8	32,000	5
A2-3	Wood chip cleaning SAS Cyclo filter Grid Reference: 223952E, 123957N	14.3	7,920	5
A2-4	Fines silo Cyclo filter Grid Reference: 223957E, 124049N	24.5	12,500	5
A2-7	Clean up bag filter, Production Line 1 Grid Reference: 224027E, 123925N	7	133,920	5
A2-8	Clean up Cyclo filter, Production Line 1 Grid Reference: 224035E, 123948N	26.8	12,500	5
A2-9	Glue Core Blender Bag Filter, Production Line 1 Grid Reference: 224037E, 123919N	10,4	82,440	5
A2-10	Reject Bag Filter, Production Line 1 Grid Reference: 224023E, 123940N	11.5	92,520	5
A2-11	Reject cyclo filter, Production Line 1 Grid Reference: 224035E, 123945N	27.7	18,360	5
A2-16	Saw Bag Filter, Production Line 1 Grid Reference: 224010E, 124090N	11.5	124,920	5
A2-17	Sander Bag Filter, Production Line I Grid Reference: 224029E, 124085N	12.5	124,920	5
A2-18	Sander Dust Silo Cyclo Filter, Production Line 1 Grid Reference: 223962E, 124059N	24.5	12,500	5
A2-19	Sander Dust Silo Cyclo Filter, Production Line 1 Grid Reference: 223695E, 124051N	22.5	4,260	5
A2-20	A2-20 Hog Trim Silo Bag Filter, Production Line 1 Grid Reference: 222008E, 124058N		4,605	5
A2-24	A2-24 Sand Bag Filter, Production Line 2 Grid Reference: 223989E, 12425N		142,200	5
A2-25	A2-25 Saw Bag Filter, Production Line 2 Grid Reference: 223972E, 124193N		21,960	5
A2-26	Sander Dust Silo Bag Filter, Production Line 2 Grid Reference: 223966E, 124087N	18	4,605	5
A2-27	FR Dust Silo Bag Filter, Production Line 1 & 2 Grid Reference: 223959E, 124084N	18	4,605	5

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#### **Emission Point Reference No:** Location:

Volume to be emitted:

A2-5 Core Dryer - Stage 1, Production Line 1 Grid Reference: 224010E, 124020N

#### Maximum rate per hour:

174,400 m<sup>3</sup>

174,400 m<sup>3</sup>

Minimum discharges height:

39 m above ground

Parameter	Emission Limit Value mg/m <sup>3 Note 1</sup>	Emission Limit Value mg/m <sup>3 Note 2</sup>
PM <sub>10</sub>	5	5
Dust	20	20
Condensable Volatile Organic Compounds	100	-
(excluding particulate matter) (as C)	USURA A	
TVOC	-	120
CO	600	600
Nitrogen oxides (as NO <sub>2</sub> )	110	110
Formaldehyde	20	15
MDI	0.06	0.06

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Emission limit value applicable until 19 November 2019. Emission limit value applicable from 20 November 2019. Note 1: Note 2:

**Emission Point Reference No:** Location:

A2-6 Face Dryer - Stage 1, Production Line 1 Grid Reference: 224020E, 124024N

Maximum rate per hour:

39 m above ground

Volume to be emitted:

Minimum discharges height:

Parameter	Emission Limit Value mg/m <sup>3 Note 1</sup>	Emission Limit Value mg/m <sup>3 Note 2</sup>
PM <sub>10</sub>	5	5
Dust	20	20
Condensable Volatile Organic Compounds	100	-
(excluding particulate matter) (as C)	1 Contractor	
TVOC		120
CO	600	600
Nitrogen oxides (as NO <sub>2</sub> )	110	110
Formaldehyde	20	15
MDI	0.06	0.06

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Emission limit value applicable until 19 November 2019. Emission limit value applicable from 20 November 2019. Note 1:

Note 2:

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**Emission Point Reference No:** Location:

Volume to be emitted:

A2-12 Press Vent 1, Production Line 1 Grid Reference: 224069E, 123975N

50,000 m<sup>3</sup> Maximum rate per hour:

Minimum discharges height:

15	m	above	ground	
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Parameter	Emission Limit Value mg/m <sup>3</sup>
PM <sub>10</sub>	3.75
Dust	15
Condensable Volatile Organic Compounds (excluding particulate matter) (as C)	100 <sup>Note 1</sup>
TVOC	100 Note 2
Formaldehyde	5
MDI	0.06

Note 1:Emission limit value applicable until 19 November 2019.Note 2:Emission limit value applicable from 20 November 2019.

Minimum discharges height:	10 m above ground	
Volume to be emitted:	Maximum rate per hour:	50,000 m <sup>3</sup>
Location:	Grid Reference: 224046E, 124017N	
Emission Point Reference No:	A2-13	

Parameter	Emission Limit Value mg/m <sup>3</sup>
PM <sub>10</sub>	3.75
Dust	15
Condensable Volatile Organic Compounds	100 Note 1
(excluding particulate matter) (as C)	
TVOC	100 Note 2
Formaldehyde	5
MDI	0.06

Emission limit value applicable until 19 November 2019. Note 1: Note 2: Emission limit value applicable from 20 November 2019.

174,160 m<sup>3</sup>

43,200 m<sup>3</sup>

**Emission Point Reference No:** Location:

A2-15 Press Extraction Scrubber, Production line 1 Grid Reference: 224015E, 124009N

Volume to be emitted:

#### Minimum discharges height:

Maximum rate per hour: 12.5 m above ground

Parameter	Emission Limit Value mg/m <sup>3</sup>	
PM <sub>10</sub>	3.75	
Dust	15	
Condensable Volatile Organic Compounds	20 <sup>Note 1</sup>	
(excluding particulate matter) (as C)		
TVOC	20 Note 2	
CO	100	
Nitrogen oxides (as NO <sub>2</sub> )	100	
Formaldehyde	10	
MDI	0.06	

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Emission limit value applicable until 19 November 2019. Note 1: Note 2:

Emission limit value applicable from 20 November 2019.

**Emission Point Reference No:** Location:

A2-21 Dryer - Stage 1, Production Line 2 Grid Reference: 223986E, 124087N

Maximum rate per hour:

39.94 m above ground

Volume to be emitted:

Minimum discharges height:

Parameter	Emission Limit Value Note 1 mg/m <sup>3</sup>	Emission Limit Value Note 2 mg/m <sup>3</sup>
PM <sub>10</sub>	5	5
Dust	20	20
Condensable Volatile Organic Compounds	100	10 <del>7</del> .
(excluding particulate matter) (as C)		
TVOC		120
СО	600	300
Nitrogen oxides (as NO <sub>2</sub> )	110	110
Formaldehyde	20	15
MDI	0.06	0.06

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Emission limit value applicable until 19 November 2019. Note 1:

Note 2: Emission limit value applicable from 20 November 2019.

**Emission Point Reference No:** Location:

A2-22 Press Vent 2, Production Line 2 Grid Reference: 223994E, 124163N

Volume to be emitted:

Maximum rate per hour:

50,000 m<sup>3</sup>

Minimum discharges height:

12 m above ground

Parameter	Emission Limit Value mg/m <sup>3</sup>
PM <sub>10</sub>	3.75
Dust	15
Condensable Volatile Organic Compounds (excluding particulate matter) (as C)	100 <sup>Note 1</sup>
TVOC	100 Note 2
Formaldehyde	6
MDI	0.06

Emission limit value applicable until 19 November 2019. Note 1:

Emission limit value applicable from 20 November 2019. Note 2:

Emission Point Reference No: Location:	A2-23 Press Vent 1, Production Line 2 Grid Reference: 224001E, 124152N	
Volume to be emitted:	Maximum rate per hour: 50,000 m <sup>3</sup>	
Minimum discharges height:	12 m above ground	
Parameter	Emission Limit Value mg/m <sup>3</sup>	
PM <sub>10</sub> Dust Condensable Volatile Organic Compounds (excluding particulate matter) (as C)	3.75 15 100 Note 1	
TVOC Formaldehyde MDI	100 <sup>Note 2</sup> 6 0.06	
Note 1: Emission limit value applicable until 19 Novem	ber 2019.	

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Note 2: Emission limit value applicable from 20 November 2019.

## **B.2** Emissions to Water

Emission Point Reference No:	SW2 (combined process effluent and southern run-off)	
Name of Receiving Waters:	River Anner	
Monitoring Location:	224187E, 123967N	
Discharge Location:	224379E, 123974N	
Volume to be emitted:	Maximum in any one day: $1,500 \text{ m}^3$	

Maximum in any one hour:  $75 \text{ m}^3$ 

Parameter	Emission Limit Value
Temperature	25 °C (max)
pH	6 - 9
Toxicity	2.3 TU
	mg/1
BOD	50
COD	400
COD – yearly average limit	150 Note 1
Suspended Solids	200
Suspended Solids – yearly average limit	35 Note 1
Nitrates (as N)	15
Ammonia (as N)	5
Orthophosphate (as P)	1.5
Oils, fats and grease	10

Note 1: Emission limit value applicable from 20 November 2019.



Parameter	Emission Limit Value
	mg/1
Total Suspended Solids - yearly average limit	40 Note 1
	10

Note 1: Emission limit value applicable from 20 November 2019.

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## **B.3** Emissions to Sewer

There shall be no process effluent emissions to sewer.



## **B.4** Noise Emissions

Daytime ( (30 mir	iB L <sub>Ar,T</sub> nutes)	Evening time dB L <sub>Ar,T</sub> (30 minutes)	Night-time dB L <sub>Aeq,T</sub> (15-30 minutes)
55	l	50	45 <sup>Note 1</sup>
Note 1: There shall any noise-s	be no clearly audibl ensitive location.	e tonal component or impulsive compon	ent in the noise emission from the activity at

## **B.5.** Diffuse Dust Emissions

Monitoring Point Reference No.: AA1 to AA4; and any other locations that may be approved by the Agency.

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Limit Value
350 mg/m <sup>2</sup> /day

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## SCHEDULE C: Control & Monitoring

### C.1.1. Control of Emissions to Air

#### Emission Point Reference No:

A2-1 to A2-4, A2-7 to A2-11, A2-16 to A2-20, A2-24 to A2-27 Bag filter/cyclo filter

**Description of Treatment:** 

Control Parameter	Monitoring	Key Equipment Note 1
Pressure Drop	Continuous	Differential pressure gauge
Filter Integrity	Weekly inspection	Differential pressure switch

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

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A2-5, A2-6, A2-21 Dryer cyclones

Control Parameter	Monitoring	Key Equipment Note 1
Air flow through cyclone	Continuous	High efficiency cyclone/flow meter
Temperature	Continuous	Thermometer
Wood flow	Continuous	
Particulate removal	Particulate measurement	

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.



### C.1.2. Monitoring of Emissions to Air

**Emission Point Reference No:** 

A1-1

Parameter	Monitoring Frequency	Analysis Method/Technique
Nitrogen oxides (as NO <sub>2</sub> )	Annually	EN 14792

EN 1948 parts 1, 2, 3

Standard Method

### A2-5, A2-6, A2-21

Formaldehyde	yllsunnsið	Standard Method Note 3
Vitrogen oxides (as NO <sub>2</sub> )	Диягтегіу	76 <i>1</i> †1 NH
CO	Quarterly	85051 NH
TVOC TVOC TVOC	s <sup>مەرە z</sup> <sup>كەنە z</sup> كالمانىڭ	EN15619
Condensable Volatile Organic	ر atenuu المعرفة المعامة المعام المعامة المعامة	12641NB
teud	Շոցւլգւլչ	EN 13284-1
nsgyxO	ylisunnA	Standard Method
MOLT	As required by the Agency	Standard reference method
Parameter	Monitoring Frequency	oupindooT/bodtoM sizylanA
Emission Point Reference No:	A2-5, A2-6, A2-21	

Applicable until 19 November 2019. :1 stoN

Applicable from 20 November 2019. :2 atoN

Dioxins and furans (TEQ)

MDI (as NCO group)

Emission Point Reference No:

In the absence of an EV standard, the preferred approach is isokinetic sampling in an impinging solution with a heated probe and filter box and without probe washing, e.g. based on the US EPA M316 method. :E stoN

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YllsunnA

A2-12, A2-13, A2-22, A2-23

human a manager and famous	Camanha e a Surroumonu	
EN13284-1	gliannnaiß	Dust
Standard Method	yllennnA	01Mg
Standard Method Note 3	Riannually	Formaldehyde
12671NH	t 210N YllennnA	Condensable Volatile Organic Compounds (excluding particulate
EN12619	Biannally Note 2	matter) (as C) IVOC
Standard Method	۲llsunnA	MDI (88 NCO)

Z DION

Applicable from 20 November 2019. In the absence of an EN standard, the preferred approach is isokinetic sampling in an impinging solution with a heated probe and filter box and without probe washing, e.g. based on the US EPA M316 method. :£ 3toN

#### **Emission Point Reference No:**

A2-15

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust	Biannually	Isokinetic/gravimetric
PM <sub>10</sub>	Annually	Standard Method
Formaldehyde	Biannually	Standard Method Note 3
Condensable Volatile Organic Compounds (excluding particulate matter) (as C)	Annually Note 1	EN14971
TVOC	Biannually Note 2	EN 12619
MDI (as NCO)	Annually	Standard Method
CO	Quarterly	Flue gas analyser/
Nitrogen oxides (as NO <sub>2</sub> )	Quarterly	Electrochemical sensors EN14792

Applicable until 19 November 2019. Note 1:

Note 2:

Applicable from 20 November 2019. In the absence of an EN standard, the preferred approach is isokinetic sampling in an impinging solution with a heated Note 3: probe and filter box and without probe washing, e.g. based on the US EPA M316 method.



### C.2.1. Control of Emissions to Water

**Emission Point Reference No: Description of Treatment:** 

SW2 Waste Water Treatment

Control Parameter	Monitoring	Key Equipment Note 1
Temperature	Daily	Thermometer
	25	Heat exchanger
Solids removal		Fan separator
		settlement tank
pH control	Continuous	pH probe and meter
		Dosing pump
동안 집 가슴을 것 같아 가 말 봐. 봐.		Balancing tank
		Dissolved air flotation tanks
Flow	Continuous	Flow meter
<b>Biological treatment</b>	Daily inspections	DO probe and meter
	Continuous DO	Aerators
Final settlement		Clarifiers and pumps

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

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**Emission Point Reference No: Description of Treatment:** 



Control Parameter	Monitoring	Key Equipment Note 1
Visual inspection of bar screen and	Daily	-
Flow	Continuous	Flow meter/Ultrasonic meter

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### C.2.2. Monitoring of Emissions to Water

<b>Emission Po</b>	int Reference No:	SW2
121111351011 1 0	int Reference No.	

Control Parameter	Monitoring Frequency	Key Equipment/Technique
Flow	Continuous	On-line flow meter with recorder
Temperature	Daily	Thermometer
рН	Daily	pH electrode/meter
Chemical Oxygen Demand	Weekly Note 1	Standard Method
COD:BOD ratio	Monthly	-
<b>Biochemical Oxygen Demand</b>	Weekly Note 1	Standard Method
Suspended Solids	Weekly Note 1	Standard Method
Nitrates (as N)	Fortnightly Note 1	Standard Method
Ammonia (as N)	Fortnightly Note 1	Standard Method
Total Phosphorus (as P)	Monthly Note 1	Standard Method
Orthophosphate (as P)	Monthly Note 1	Standard Method
Phenols	Monthly Note 1	Standard Method
Zinc	Annually Note 1	Standard Method
Copper	Annually Note 1	Standard Method
Chromium III	Annually Note 1	Standard Method
Chromium VI	Annually Note 1	Standard Method
Trace Organics	Quarterly Note 1	Standard Method
Oils, fats and greases	Quarterly Note 1	Standard Method
Toxicity Note 2	Annually	Standard Method

Note 1: All samples shall be collected on a 24 hour flow proportional composite sampling basis.

Note 2: The number of toxic units (Tu) = 100/x hour  $EC/LC_{50}$  in percentage vol/vol so that higher Tu values reflect greater levels of toxicity. For test regimes where species death is not easily detected, immobilisation is considered equivalent to death.

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## C.2.3. Monitoring of Surface run-off water Emissions

#### **Emission Point Reference No:**

SW1 (Northern Discharge)

Parameter	Monitoring Frequency	Analysis Method/Technique
BOD	Monthly	Standard method
Suspended Solids	Monthly Note 1	Standard method
Conductivity	Monthly	Standard method
COD	Monthly	Standard method
Nitrate (NO <sub>3</sub> /N)	Quarterly	Standard method
Phenol	Biannually	Standard method
Visual Inspection	Daily	Sample and examine for colour and

Note 1: All samples shall be collected on a 24 hour flow proportional composite sampling basis from 20 November 2019.



### C.3.1. Control of Emissions to Sewer

There shall be no process effluent emissions to sewer.

## C.3.2. Monitoring of Emissions to Sewer

There shall be no process effluent emissions to Sewer.



### C.4 Waste Monitoring

Waste Class	Frequency	Parameter	Method
Ash from the furnace	Annually	Dioxin	GC-MS
		Heavy Metals	AA/ICP
Sludge from lagoons	Annually	Heavy Metals	AA/ICP
WWTP sludge	Annually	Trace Organics	GC-MS
	Biannually	Organic Matter	Loss on ignition
	Biannually	Water Content	Loss on drying
Other Note 1			

Note 1: Analytical requirements to be determined on a case by case basis.



## C.5 Noise Monitoring

No additional noise monitoring is required in this schedule.

### C.6 Ambient Monitoring

#### C.6.1 Dust Deposition Monitoring

**Monitoring Locations:** 

AA1 (Grid Reference: 223798E, 124380N) AA2 (Grid Reference: 224193E, 124297N AA3 (Grid Reference: 224264E, 123861N). AA4 (Grid Reference:: 223928E, 124115N) Any other locations agreed by the Agency

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Parameter	Monitoring Frequency	Analysis Method/Technique
Dust deposition	Monthly	VDI 2119 (Bergerhoff method)

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## C.6.2 Ambient Formaldehyde Monitoring

Location.	Location:	
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AA5 (Grid Reference: 223900E, 124000N) AA6 (Grid Reference: 224400E, 124100N) AA7 (Grid Reference: 224121E, 124510N) AA8 (Grid Reference: 224214E, 123935N) AA9 (Grid Reference: 223686E, 124051N) AA10 (Grid Reference: 223574E, 124594N)

Parameter	Monitoring Frequency	Analysis Method/Technique
Formaldehyde	Biannually	NIOSH 2016



#### C.6.3 Soil Gas Monitoring Air Monitoring Location:

ASL1 (Grid Reference: 223836E, 124342N) ASL2 (Grid Reference: 223833E, 124288N) ASL3 (Grid Reference: 223927E, 124305N) ASL4 (Grid Reference: 223888E, 124326N)

Parameter	Monitoring Frequency	Analysis Method/Technique
Methane	Biannually	Geotechnical Instruments (GA94A) Analyser
Oxygen	Biannually	Geotechnical Instruments (GA94A)
Carbon dioxide	Biannually	Geotechnical Instruments (GA94A) Analyser

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### C.6.4 Groundwater Monitoring

Location: AGW1 (Grid Reference: 223946E, 124301N) (down gradient of the landfill) AGW2 (Grid Reference: 224010E, 124274N) (down gradient of the landfill) AGW3 (Grid Reference: 223798E, 124380N) (up gradient of the landfill) AGW4 (Grid Reference: 224193E, 124297N) (down gradient of the landfill) AGW5 (Grid Reference: 224312E, 124060N) (down gradient of the factory) AGW6 (Grid Reference: 224279E, 123936N) (down gradient of the factory) AGW7 (Grid Reference: 224017E, 123996N) (down gradient of the factory) AGW8 (Grid Reference: 223978E, 124054N) (down gradient of the factory) Or alternative monitoring location(s) approved by the Agency

Parameter	Monitoring Frequency	Analysis Method/Techniques
рН	Quarterly	pH electrode/meter
Trace Organics	Annually	Note 1
Major Anions	Biannually	Standard Method
Major Cations	Biannually	Standard Method
Phenol	Biannually	Standard Method
Individual heavy metals	Quarterly	AA/ICP
Total Ammonia	Quarterly	Standard Method
Groundwater level	Quarterly	Standard Method
Relevant Hazardous Substances Note 2	Every five years	Standard Method

Note 1: (1) United States Environmental Protection Agency Method 524.4 - Measurement of purgeable organic compounds in water by capillary column gas chromatography/ mass spectroscopy. (2) Non--purgeable organic compounds by GC or GC/MS.

Note 2: Groundwater monitoring for relevant hazardous substances shall be in accordance with Condition 6.17.

#### C.6.5 Soil Monitoring

**Monitoring Location:** 

Monitoring locations as agreed by the Agency

Parameter	Monitoring Frequency	Analysis Method/Techniques
Relevant hazardous Substances <sup>Note 1</sup>	Every ten years	Standard Method

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Note 1: Soil monitoring for relevant hazardous substances shall be in accordance with Condition 6.17.

# SCHEDULE D: Annual Environmental Report

Annual Environmental Report Content Note 1
Emissions from the installation.
Waste management record.
Resource consumption summary.
Complaints summary.
Schedule of Environmental Objectives and Targets.
Environmental management programme - report for previous year.
Environmental management programme – proposal for current year.
Pollutant Release and Transfer Register – report for previous year.
Pollutant Release and transfer Register - proposal for current year.
Noise monitoring report summary.
Ambient monitoring summary.
Tank and pipeline assessment report.
Reported incidents summary.
Energy efficiency audit report summary.
Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated.
Report on progress made and proposals being developed to minimise water demand and the volume of trade effluent discharges.
Development/Infrastructural works summary (completed in previous year or prepared for current year).
Reports on financial provision made under this licence, management and staffing structure of the installation, and a programme for public information.
Review of decommissioning management plan.
Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).
Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change including financial provisions.
Any other items specified by the Agency.
Note 1: Content may be revised subject to the approval of the Agency.

# Sealed by the seal of the Agency on this the 7<sup>th</sup> day of March 2017.

PRESENT when the seal of the Agency Was affixed hereto:

Ms Mary Turner, Authorised Person

