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# Introductions

## Introduction to Lenzing Fibers Grimsby

 Lenzing Fibers Grimsby Ltd is a member of the Lenzing Group within the UK, manufacturing Lyocell fibre on a continuous production facility in Grimsby, North East Lincolnshire. The main activities carried out on site involve making fibres from cellulose dissolved in Amine Oxide solvent (N Methyl Morpholine-N-Oxide). Lyocell is the generic name for all fibres made from cellulose dissolved in this solvent. Tencel® is the brand name of certified fabrics made from Lenzing's lyocell fibre.

Under the Environmental Permitting Regulations the existing site has an environmental permit (SP3936HE/V003) to operate from the Environment Agency (EA).

The site has an integrated management system covering environmental, health and safety and quality which all conform with ISO14001, ISO45001 and ISO9001 standards. Valid cerificates are held.

## Introduction to the Proposed Permit Changes

The introduction of the new ‘Best Available Techniques Reference Document for Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector‘ (BREF), stricter COD targets within the EU Ecolabel certification and internal Lenzing targets for reducing COD have all led to the decision to construct a water water treatment plant at Lenzing Fibers Grimsby relating to the scheduled environmental permitting activity: S5.7 part A (1) (a). This requires a substantial permit variation application of which this managment system summary is required for.

# Environmental Management System

The Grimsby Lenzing site is regulated by the Environment Agency under the Environmental Permiting Regulations 2016. It also is certified to the ISO14001 Environmental Management System standard since 24th July 2003. This system uses established business standards and procedures for compliance with the EMS and ensures a documented management system is in place to effectively control all potentially environmentally harmful processes. This is achieved through an intranet based integrated management system (IMS) approach. This IMS contains all releavant procedures and standards ranging from global down to site specific relevance.

The EMS already provides an adequate vehicle for ensuring continued compliance with relevant environmental legislation. Key environmental aspects and impacts for the site have been identified with the Compliance Obligation Risk Evaluation (CORE) register and will be brought in line with the new permit once the permit variation has been agreed.

## Context of the organization (Clause 4)

### Scope of the Environmental Management System (Clause 4.3)

The scope of the Lenzing Fibers Grimsby management system includes all activities within the site boundary that are relevant to the particular management system. Upstream and downstream partners such as suppliers, customers and haulage firms are included within the scope but limited to the appropriate level of influence that Lenzing Grimsby have over their activities.

## Leadership (Clause 5)

### Leadership and Commitment (Clause 5.1)

The Operations Director holds the responsibility of ensuring the resources needed for implementation and continual improvement of the EMS are available with continuous improvement a key part of the ISO 14001:2015 standard. Management must also ensure that environmental objectives set align with the strategic direction of the business each year.

### Environmental Policy (Clause 5.2)

The Grimsby site follows the Global Policy for Safety, Health and Environment (SHE). Appendix 1 shows this policy. It highlights the importance placed on environmental protection stating that our SHE ambitions are driven by a strong belief that protecting people from harm and preserving the environment are fundamental prerequisites for doing business and that we minimis emissions, waste and ensure resource efficiency.

### Organisational roles, responsibilities and authorities (Clause 5.3)

A current organogram is available from the Lenzing Global and Grimsby intranet site displaying the hierarchal roles within departments – including the SHE team. The business procedure BP092 titled Environmental Responsibilities details how it is the responsibility of the Operations Director at Grimsby to set environmental policy and provide the necessary resources in terms of people and finance to succeed. The procedure contains a table stating the environmental responsibilities of each line manager who may delegate these further. It also states a main contact along with secondary or deputy contact for some responsibilities.

## Planning (Clause 6)

### Actions to address risks and opportunities (Clause 6.1)

### General (Clause 6.1.1)

How the company complies with 6.1.1 to 6.1.4 is summarised below and considers the scope of the business operations, interested parties, and their associated needs and expectations as ISO14001:2015 states.

#### Actions to address risks and opportunities – Environmental aspects (Clause 6.1.2)

The CORE register contains a section on environmental aspects and associated impacts that may occur for a variety of business areas. This includes raw materials, fiberline, and off site activities for example. It calculates the significance of the environmental aspect based on frequency, severity, compliance status and risk or opportunities status with this significance then leading to a categorisation of the impact being significant or not with scoring of A, B and C – A being the most significant and C least significant. The top 3 significant impacts and their causal aspects are recorded within the CORE register. This can be accessed through the integrated managment system (IMS) page on the Grimsby intranet site. It is updated at least once annually but also whenever there are audit findings or significant incidents.

#### Actions to address risks and opportunities – Compliance obligations (Clause 6.1.3)

The environmental compliance obligations that Lenzing Fibers Grimsby comply with are also listed in the CORE register, split into areas of environmental legislation. These sections are: air, chemical hazards, climate change, countryside protection, energy, noise, planning and impact assessment, pollution control, waste and recycling and water. Within each area, a spreadsheet details the legislation description, what Lenzing must do, what actions are taken to display compliance and areas for future improvement. This, together with the health and safety compliance obligations register, is reviewed at least once annually to evaluate compliance.

#### Actions to address risks and opportunities – Planning actions (Clause 6.1.4)

Actions are planned to address the risks, take advantage of possible opportunities to the business and ensure continued compliance with obligations. These actions are stated on the documents within the CORE register with the environmental compliance register specificially containing an *areas for improvement* and *actions to address areas that are non-demonstrable* collumns. We also have a risk an opportunities register which details issues the plant is or may face in the future, the associated risk and/or opportunities these issues can create and the mitigation and/or capitalisation measures we can take. These measures are then linked to plans such as the local SHE strategy which details the workstreams to focus on, the site strategy or global strategy. Environmental objectives and planning to acheive them (Clause 6.2)

#### Environmental Objectives (Clause 6.2.1)

The Lenzing Global team set group level environmental objectives for all sites within the Lenzing Group to achieve, however the Grimsby site also set their own. The CORE register contains a risk and opportunities register whereby strategic internal and external issues along with operational needs and expectations, environmental aspects and compliance obligations are listed. These are then determined to either be a risk or opportunity for the business, with mitigation or capitalisation objectives established, along with the document reference these objectives are stated within.

From a hierarchal perspective, a common document reference here is the senior level mangers reliability of supply plan which is reviewed at least once a year.

On a departmental level, another document referenced which contains environmental objectives for the the safety, health and environment (SHE)team is the SHEstrategywhich sets out environmental objectives, along with health and safety, of which the SHE team evaluate quarterly for progress and can be found on the IMS portal page*.* This organises objectives into categories based on the sites sCore Ten strategy: people, planet, profit and strengthen the core.

KPIs for departments are also set which contains some environmental reporting indicators with 2 levels – high level KPI‘s and specific departmental KPI’s. Both are reported and reviewed monthly. This is contained in the reliability of supply plan also. Global have also set annual environmental KPIs for the site waste management.

#### Planning actions to achieve environmental objectives (Clause 6.2.2)

As referred to above, when outlining these objectives there is consideration on who will be responsible and a timeframe for delivery. A clear example of this is the SHE strategy containing a column for initials of the responsible person, along with a timeline separated by quarters to specify deadlines. Furthermore, relevant targets for each objective are stated in order to measure success of the objectives and evaluate achievement. As mentioned above, this is reviewed quarterly by the SHE department to monitor progress and any requirements for new workstreams with historic records of each version of the document stored.

# Support (Clause 7)

## Resources (Clause 7.1)

The resources required for the implementation, maintenance and continual improvement of the Lenzing Grimsby EMS are provided by the operations director. In practice, delegation occurs. The SHE team hierarchy is displayed on the site organogram showing the roles within the department including a Site Protection and Management System Specialist. The organogram can be found on the Grimsby intranet portal. The business procedure BP007 also outlines the role, responsibility and competency requirements for safety, health and environmental responsibilities.

## Competence (Clause 7.2)

Competence is assessed using a SKATE approach: skills, knowledge, attributes, training and experience. Job descriptions detail the skills knowledge and experience required and training records are all kept in personal training files onsite.

Currently a SHEQ induction is completed by all new people on site which outlines basic environmental awareness. Within this, participants are made aware that it is everyone’s responsibility to protect the environment, the presence of an EA permit regulation across site, spills and waste management. This is completed via the online portal known as Learn@Lenzing and repeated every 3 years for all staff and before any visitors who are completing work on the plant enter site.

## Awareness (Clause 7.3)

The site has a SHE policy, displayed in appendix 1. This policy is displayed in physical format in multiple places across site and when amended is redistributed. It is also always accessible through the group intranet portal for all employees to access. Within the SHEQ induction introduced above, inductees are made aware of their contribution to the continual success of the management system by completing the SHEQ induction and subsequently raising their awareness of SHEQ factors.

## Communication (Clause 7.4)

### General (Clause 7.4.1)

Business procedures are in place at Lenzing Grimsby to state on what is to be communicated, when and by whom to internal and external parties. This takes into account compliance obligations such as environmental permiting reporting periods and compliance with ISO standards.

### Internal (Clause 7.4.2)

The line managers at Lenzing Grimsby hold responsibility to ensure all employees are informed of relevant environmental information and maintain open communication. A method of achieving this is through team briefings.

### External (Clause 7.4.3)

The site communicates externally to the Environment Agency (EA) directly to our assigned site inspector. Firstly, in the event of a breech of permit conditions such as emissions to air or water, it is the responsibility of the SHE manager to inform the EA. Business procedure BP093 details this process based on the site’s permit conditions with instruction to submit via email a schedule 5A form within 24 hours of the detection or as soon as practicable in the event of a weekend or public holiday followed by a 6B form in due course after further investigation and understanding of the event.

Secondly, the site communicates with the EA in the form of written performance reports as BP094 business procedure stipulates. Currently, quartely and annual environmental permiting reports are submitted reviewing performance against permit conditions for that time period, along with a producer responsibility packaging wastes report of which is submitted annually.

Aside from this, any external complaints are sent directly to Lenzing Fibers Grimsby Ltd and all records of contact are recorded in the incident reporting system and acted on accordingly.

## Documented Information (Clause 7.5)

### General (Clause 7.5.1)

BP001 and BP004 cover the sites document control procedure with the aims of ensuring documents are available, current, reviewed by authorised persons, amendments controlled and the effectivness of the procedure auditable.

### Creating and Updating (Clause 7.5.2) & Control of Documented Information (Clause 7.5.3)

The format for controlled documents is set out in BP001 with required and optional information to be added. BP004 also explains the procedure for issuing, amending or reissue of procedures. Each document has a defined owner, who holds the ability to issue or amend the documents with their responsibilities stated in BP004. It states the need for master copies on the group portal of which only the authorised reviewer again may amend. Procedures must be reviewed by those authorised, on a time frame stated in BP004. Specifically, routinely used environmental procedures should be reviewed every 2 years, with other environmental procedures every 3 years. Obsolete copies are automatically archieved on the portal when an updated version is uploaded.

# Operation (Clause 8)

## Operational planning and control (Clause 8.1)

Risk assessments are carried out in order to identify activities which are associated to significant environmental aspects. Standard working practices (SWP) are written for all internal activities related to significant aspects. Examples of these are controlling air emissions, controlling waste water discharges, controlling waste and recycling or reuse of products and materials.

## Emergency preparedness and response (Clause 8.2)

BP030 explains the site’s emergency procedure with appendix A-M explaining the procedure for a variety of situations which may have adverse environmental implications. These include: fire, gas release, exotherms and flooding. Specifically, the site is signed up to receive flood warnings from the Environment Agency with the Production Manager and SHE team within the communication chain for these warnings. The site emergency incident alarms are also tested weekly by the SHE department to ensure operation. The site is also beginning to implement table top exercises for these emergency plans to test how responses would be made and identify gaps for continuous improvement.

# Performance evaluation (Clause 9)

## Monitoring, measurement, analysis and evaluation (Clause 9.1)

### General (Clause 9.1.1)

The environmental performance of the site is tracked via a series of monitors and measurements on key areas which require this - as determined by the site. The Environment Permit is a key document which states what is required for measurements. Standard working practices (SWPs) for these tasks have been written and can be accessed via the site intranet portal on the laboratory page. Examples of SWPs for monitoring that occurs on site are:

* T9106 = pH of NMMO and effluent samples
* T9119 = Chemical oxygen demand of effluent
* T9121 = Total suspended solids of effuent
* T9127 = Environmental testing of spinning X-draught exhaust vents

The instructions for these, when it is required to be carried out, and the appropriate indicators for evaluation are explained within. They also state where to record the information and who to contact in the event of a high result. Long term trends are also tracked to evaluate performance and identify potential issues developing. Internal and external communication of environmental performance based on these regular measurements are then communicated out via various reports as defined in section 3.4.

### Evaluation of compliance (Clause 9.1.2)

Compliance with our permit conditions is continually monitored via the monitoring discussed above within the laboratory. The site’s environmental compliance is also evaluated within the CORE register – refered to previously in this document. An evaluation of compliance meeting within the SHE department occurs annually with a record of the previous years evaluations provided alongside the current year.

## Internal audit (Clause 9.2)

### General (Clause 9.2.1)

In order to comply with the ISO 14001:2015 standard internal audits are carried out to evaluate the EMS effectiveness and ISO compliance.

### Internal audit programme (Clause 9.2.2)

The internal audit schedule for safety, quality and environmental audits is managed by the Site Protection and Management System Specialist. BP062 details on the internal audit programme and what the audits should contain, with the evaluation of compliance annual review steering which areas of compliance need prioritising at the next internal audit.

## Management review (Clause 9.3)

The management review occurs annually and evaluates any changes to external and internal issues, needs and expectations of interested parties, significant environmental aspects, risks and opportunities – all of which are on the CORE register as mentioned previously. It also looks into the success of environmental objectives previously set and opportunities for continual improvement.

# Improvement (Clause 10)

## Nonconformity and corrective action (Clause 10.2)

The process in the event of an actual or potential nonconformity is outlined in BP060.

In the event of a nonconformity with our EA permit conditions specifically, a schedule 5 notification must be submitted as outlined in section 3.4.3. Event investigation is also conducted for medium or high level events (including a spill even if contained within site) with the BP032 internal procedure followed for this. A root cause analysis is conducted within 14 days, either departmental or management led depending on the level of event in order to determine the causes and plan solutions to prevent it occurring in the future.

Our internal reporting for safety, health and environmental incidents is ‘SHEARS’ – a SAP based system. This allows for any audits or significant environmental events to be recorded and actions assigned and tracked. BP111 procedure details how to use this system with the SHE department super users.

## Continual improvement (Clause 10.3)

References to continuous improvement feature throughout this EMS summary, and is achieved through routine reviews.

# Appendix 1

