SITE CONDITION REPORT TEMPLATE

For full details, see H5 *SCR guide for applicants* v2.0 4 August 2008

**COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION**

**DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7**

**AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION.**

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| **1.0 SITE DETAILS** |  |
| Name of the applicant | Lenzing Fibers Grimsby |
| Activity address | Energy Park WayGrimsbyNorth East Lincolnshire DN31 2TT |
| National grid reference | TA 23425 12721  |

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| Document reference and dates for Site Condition Report at permit application and surrender |  |

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| Document references for site plans (including location and boundaries) |  |

**Note:**

In Part A of the application form you must give us details of the site’s location and provide us with a site plan. We need a detailed site plan (or plans) showing:

* Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
* Locations of receptors, sources of emissions/releases, and monitoring points.
* Site drainage.
* Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

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| **2.0 Condition of the land at permit issue** |
| Environmental setting including:* geology
* hydrogeology
* surface waters
 | **Location and Site Land Use:**Lenzing Fibers Grimsby is located in North East Lincolnshire, approximately 5km to the north west of Grimsby town centre and 3km from nearby Stallingborough village. It lies on Energy Park Way adjacent to the Humber Estuary south bank. The land lies between 1-3m AOD at ground level and is 12.1Ha **Surrounding Land Use:**As mentioned, the site is accessed via Energy Park Way which continues north westerly as Hobson Way – both running parallel to the A180 road which is a key transport route for the local area. Lenzing Grimsby site is neighboured by other industrial sites with the South Humber Bank power station and Synthomer UK Ltd to the north west and Technical Absorbents Ltd and Solenis UK Ltd to the south east. South westerly from the site, land is characterised by fields with the Mawmbridge drain running through – spanning over 3km up to its estuary outfall. Fields also characterise the rear of site north easterly for 0.5km where they meet the estuary banks. Oldfleet drain is also present, 6.5km long, flowing past Healing and up towards the Humber Estuary. **Geology:**In general, the site lies on bedrock of chalk formation formed in the Cretaceous period up to 100 million years ago. Superficial deposits of alluvium clay, sand and silt overlain the chalk formed 2 million years ago in the Quaternary period up to 2 million years ago typical of coastal plain environments.Three cable percussive Boreholes have been carried out in November and December 2019 as part of the groundwater survey for the new wastewater treatment plant on site. These samples showed made ground, followed by alternating layers of clay and sand as expected with gravel of chalk at the base of the borehole sample at 23.6m below ground level. Please see the attached groundwater survey report for detailed results and location in the appendix. **Hydrogeology:**With reference to the aquifer productivity of the land, the superficial geology layer is classified as unproductive, however the bedrock is classed as a principle aquifer therefore providing high level of water storage opportunities. Specifically the groundwater vulnerability map shows vulnerability of groundwater to a pollutant discharged at ground level and classifies Lenzing Grimsby land as low vulnerability. The site is in a nitrate vulnerable zone therefore at risk from agricultural nitrate pollution.**Surface Waters:**The most significant surface water nearby is the Humber estuary which is around 0.5km away from the rear of the site. There is also a man-made pond to the west which is an old firewater pond for Acordis Fibers Ltd from 1999 - 0.2km at its widest point. Furthermore, Oldfleet drain runs south east to north west which approaches within 20m of the Lenzing site which drains into the estuary however the site does not discharge directly into this watercourse. Mawmbridge drain lies to the east of site. On the Lenzing site specifically, there is also a drainage ditch running North-East to south west which is supporting a variety of flora and fauna with the water in good condition.The flood risk of the site falls into flood zone 3 according to the Environment Agency flood zone guidance and mapping. This indicates that the risk of the site flooding due to riverine conditions is a 1 in 100 year or greater probability followed by a 1 in 200 year or greater chance of flooding due to the sea assuming no presence of flood defences – of which are present along the estuary.**Ecology:**The Humber Estuary is the closest designated area to site of high ecological importance with several designations in place: site of special scientific interest (SSSI), special area of conservation (SAC), special protection area (SPA) and wetlands of international importance designation (RAMSAR). These are largely due to the habitats created in the unique macro-tidal estuarine environment with salt marshes, sand dunes and inter-tidal mudflats exposing sediment rich riverbeds, and food sources such as marine worms and molluscs to support a rich ecosystem within the local area.  |
| Pollution history including:* pollution incidents that may have affected land
* historical land-uses and associated contaminants
* any visual/olfactory evidence of existing contamination
* evidence of damage to pollution prevention measures
 | **Site historic land use info**Early land maps from 1895 can be found online showing the area to have compromised of fields with no industrial use at this time.Records kept from 1998 to 2005 show several small spill events to land on site in this time frame. This document is referenced below, along with reasons for the spills, and a map showing the location of these spills within the document. As can be seen, substances released were NMMO, dilute acid, citric acid and effluent ranging from 10kg to 1000kg – with the larger of these quantities effluent. It should be noted that the 1998 NMMO spills events have been mitigated by installing a more reliable, different designed influent filter unit. The leaking effluent transfer line construction materials were also changed to a PTFE lined pipe in response to the 2001 incident. Moreover, the effluent sampling enclosure was redesigned to ensure effluent is contained at all times in response to overflowing tundish. The evaporator cleaning spill was mitigated by ensuring the cleaning vessels are now located inside a curbed area that drains into the effluent, and periodic inspections along with process changes to prevent future effluent neutralisation tank damage similar to the 2004 event listed here has occurred. Overall, it is stated that the nature and volumes of these spills are not judged to have led to any significant or long-lasting land contamination and measure have been taken to prevent them occurring again. There are no known incidents in recent years  |
| Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available) | The historic spills incident document outlined above is attached however as stated the nature of these events have not led to any long-term contamination. |
| Baseline soil and groundwater reference data | A ground survey was undertaken in 2019 by RGS on behalf of Lenzing to assess soil types on the newly acquired land for the waste water treatment plant to the east. The general soil strata results are described above in the geology section along with hydrology. This study also outlined metals within soil samples collected and results can be found in the RGS report in appendix 4 and can be used as a baseline for reference data to inform future assessment of the land quality at the site on permit surrender. An electrical resistivity report has also been completed. These documents are referenced below. |
| **Supporting information** | *Ref: Lenzing spill incidents 1999-2005* *Ref: C177\_19\_E\_268 Lenzing Fibers – RGS Phase 1 Desk Study**Ref: C177\_19\_E\_268\_Rev1 Lenzing Fibers – RGS Phase 2 Report* *Ref: ER Survey – Lenzing Fibers – Report V1* |

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| **3.0 Permitted activities** |
| Permitted activities  | The main operations of Lenzing Fibers Grimsby is the production of Lyocell fibre, through the dissolving of cellulose wood pulp with non-volatile organic solvent names N Methyl Morpholine-N-Oxide (NMMO). Please see table S1.1 pg8 of permit SP3936HE.V003 for a list of specific permitted operations. |
| Non-permitted activities undertaken | There are no non-permitted activities occurring on site. |
| Document references for:* plan showing activity layout; and
* environmental risk assessment.
 | *Ref: rd4417-04-site-location-plan-rev-a* *Ref: J6285 – ga001 Rev 3 Site Plan* *Ref: 70096275-WSP-XX-XX-DG-CV-1356-C03 Drainage Drawing* |

**Note:**

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as ‘dangerous’ under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

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| 4.0 Changes to the activity |
| Have there been any changes to the activity boundary? | No at present, however, Biological ETP development is in progress and the plan is to be commissioned by 2025. This is the reason for the permit variation.  |
| Have there been any changes to the permitted activities? | No - Refer to Introductory Note for ETP. |
| Have any ‘dangerous substances’ not identified in the Application Site Condition Report been used or produced as a result of the permitted activities? | No - Details in C3 3c - Raw Materials Table Updated & Table 1 – Chemical Supply)  |
| Checklist of supporting information | * Site Plan showing main site & ETP extension
* Description of the changes to the permitted activities (Refer to Introductory Note for ETP)
* Refer to C3 3c - Raw Materials Table rev2
* Refer to Table 1 - Chemical Supply
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| 5.0 Measures taken to protect land |
| As stated above. The 1998 NMMO spills events have been mitigated by installing a more reliable, different designed influent filter unit. The leaking effluent transfer line construction materials were changed to a PTFE lined pipe in response to the 2001 incident. Moreover, the effluent sampling enclosure was redesigned to ensure effluent and contained at all times in response to overflowing tundish. The evaporator cleaning spill was mitigated by ensuring the cleaning vessels are now located inside a curbed area that drains into the effluent, and periodic inspections along with process changes to prevent future effluent neutralisation tank damage similar to 2004 event listed here has occurred. Overall, it is stated that the nature and volumes of these spills are not judged to have led to any significant or long-lasting land contamination and measure have been taken to prevent reoccurring again. There are no known incidents in recent years  |
| Checklist of supporting information | *Ref: Lenzing spill incidents 1999-2005*  |

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| 6.0 Pollution incidents that may have had an impact on land, and their remediation |
| None based on statement above. |
| Checklist of supporting information |  |

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| 7.0 Soil gas and water quality monitoring (where undertaken) |
| Not applicable. |
| Checklist of supporting information |  |

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| 8.0 Decommissioning and removal of pollution risk |
| Not applicable. |
| Checklist of supporting information |  |

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| 9.0 Reference data and remediation (where relevant) |
| Not applicable. |
| Checklist of supporting information |  |

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| 10.0 Statement of site condition |
| Not applicable. |