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## 1 Purpose

This plan is to detail the actions to warn people on the Waste Water Treatment plant (construction phase or operation) at the Lenzing Fibers Grimsby site and the actions they should take upon receiving an alert of an upcoming flood from the Environment Agency or are made aware of a severe weather warning that may result in flooding to site

## 2 Definitions

Term	Definition	Abbreviation
WWTP	Waste Water Treatment Plant	WWTP
Waste water BREF	Best Available Technique Reference Document	BREF
Flood Procedure	Flood Warning and Evacuation Plan	FWEP
Shift Ops Manager	Shift Operations Manager	SOM
Emergency Controller	Site Emergency Controller	SEC

## 3 Site description, layout and location

Address: Lenzing Fibers Grimsby Ltd,  
Energy Park Way,  
Grimsby,  
North East Lincolnshire  
DN31 2TT

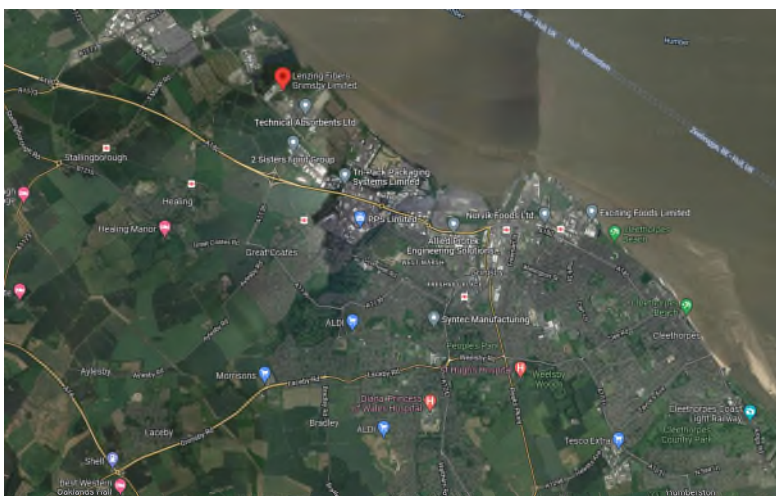


Fig 1 – Location of Lenzing facility

The WWTP is located to the East of the main Lenzing facility on Energy park way in Grimsby



Fig 2 – Location of WWTP in relation to Lenzing main facility

The WWTP is designed to take process effluent, carry out treatment in several different stages and reduce levels of targeted parameters to bring them into compliance with future legislation, namely the Waste Water BREF, which comes into force at the end of 2026

The process consists of several large tanks / bioreactors, pumps, sludge handling and a membrane building where the remote control room and welfare facilities are sited

During the construction phase there is also a contractor / site compound where different trades and discipline are sites throughout the build.

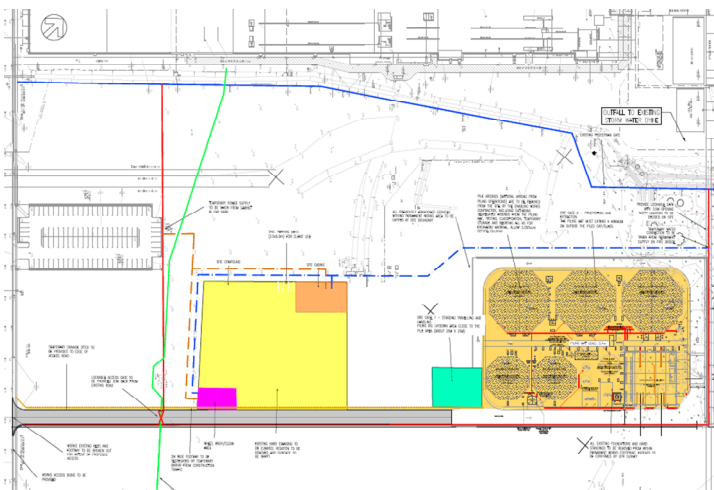


Fig 3 – Site detail including contractor compound.

### 4 Scope

This appendix is written to specifically cover flood risk at the WWTP section of the site – BP030A13 itself should be referred to in order to address similar issues and risks in the production and office areas of the site.

This procedure covers both construction and operational phase of the WWTP.

The people affected by / to use this procedure are:

- WWTP construction site manager
- WWTP Project Engineer
- WWTP technicians
- Main Control room technicians
- Site Operations Manager / Site Emergency Controller

### 5 Flood warning and Evacuation Plan

The Lenzing site location covered by this FWEP is at risk from flooding from the Humber Estuary. It is covered by the Environment Agency (EA) Flood Warning System. The probability of flooding at this location is reduced by the presence of defenses, including a raised defense. The probability of flooding is low.

Inundation from a breach in the defenses would be mostly unpredictable, rapid, and dynamic with minimal warning. Information provided by the EA shows that today breach depths at this location could be between 0.5 and 1.6 m above Sea level. The WWTP site itself is at 3.0 m above sea level with equipment and buildings further raised above this to provide additional protection from flooding.

However, due to the impacts of climate change it may not be possible to say exactly how deep flood water will be in the future, and any flooding may be higher or lower than estimated or experienced before. People on site need to beware of this possibility, and the likely implications on how they can respond safely.

This procedure aims to set out the communication, escalation protocol and actions that are required to be taken in regard to the WWTP construction workers or Lenzing staff on receipt of a flood warning via the UK Environmental Agency Flood Alert Helpline (this service sends automated messages to the Lenzing main control room) or when known adverse weather may cause the risk of flooding.

Flood alerts are graded by severity and the different actions are required for different levels of severity are described below in section 5.

## 5.1 Receiving an alert / Flood warning

In areas of high flood risk, the Environment Agency offers a service called Floodline Warnings Direct which provides free 24 hour automated flood warning alerts via telephone, SMS text or email. Lenzing Fibers Grimsby site falls within the area covered by this service. Warnings can be put in place several days in advance and will be constantly reviewed by the Environment Agency as conditions change.

The control room (manned 24 hours a day) emergency telephone is signed up to receive these warning and it is the control room staff responsibility to inform the Shift Operations Manager (SOM), who now assumes the role of the Site Emergency Controller (SEC), of the alert received to initiate the appropriate response depending on the severity of the alert.

Flooding can be unpredictable and, as such, there will be a need to continually monitor an event as it unfolds both on site and in nearby locations.

### 5.1.1 Estimated Flood Warning Time

For this location, the estimated lead time provided by the EA is 6 hours, a more accurate estimation will be provided when the warning is made.

### 5.1.2 Flood Alert Area

This location is in the EA Flood Alert Area-

- Tidal flooding near the South Humber Bank from Barton Upon Humber to Humberston The EA code is-
- 053WAT600SHBa

### 5.1.3 Flood Warning Area




This location is in the EA Flood Warning Area-

- Wider area at risk of tidal flooding from Immingham to Pyewipe. The EA code is-
- 053FWTIMM2

### 5.1.4 Levels of Alerts

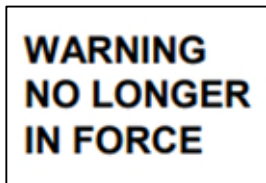
The service provides 3 levels of flood alerts each of which requires a different level of response and /or monitoring

These are shown in the table below:

 <b>FLOOD ALERT</b>	 <b>FLOOD WARNING</b>	 <b>SEVERE FLOOD WARNING</b>
<b>What it means</b> Flooding is possible. Be prepared.	<b>What it means</b> Flooding is expected. Immediate action required.	<b>What it means</b> Severe flooding. Danger to life.
<b>When it's used</b> Two hours to two days in advance of flooding.	<b>When it's used</b> Half an hour to one day in advance of flooding.	<b>When it's used</b> When flooding poses a significant risk to life or significant disruption to communities.
<b>Triggers</b> <ul style="list-style-type: none"> <li>• Forecasts that indicate that flooding from rivers may be possible.</li> <li>• Forecast intense rainfall for rivers that respond very rapidly.</li> <li>• Forecasts of high tides, surges or strong winds.</li> </ul>	<b>Triggers</b> <ul style="list-style-type: none"> <li>• High tides, surges coupled with strong winds.</li> <li>• Heavy rainfall forecast to cause flash flooding of rivers.</li> <li>• Forecast flooding from rivers.</li> </ul>	<b>Triggers</b> <ul style="list-style-type: none"> <li>• Actual flooding where the conditions pose a significant risk to life and/or widespread disruption to communities.</li> <li>• On-site observations from flooded locations.</li> <li>• A breach in defences or failure of a barrier that is likely to cause significant risk to life.</li> <li>• Discussions with partners.</li> </ul>
<b>Impact on the ground</b> <ul style="list-style-type: none"> <li>• Flooding of fields, recreation land and car parks.</li> <li>• Flooding of minor roads.</li> <li>• Flooding of farmland.</li> <li>• Spray or wave overtopping on the coast.</li> </ul>	<b>Impact on the ground</b> <ul style="list-style-type: none"> <li>• Flooding of homes and businesses.</li> <li>• Flooding of rail infrastructure.</li> <li>• Flooding of roads with major impacts.</li> <li>• Significant waves and spray on the coast.</li> <li>• Extensive flood plain inundation (including caravan parks or campsites).</li> <li>• Flooding of major tourist/recreational attractions.</li> </ul>	<b>Impact on the ground</b> <ul style="list-style-type: none"> <li>• Deep and fast flowing water.</li> <li>• Debris in the water causing danger.</li> <li>• Potential or observed collapse of buildings and structures.</li> <li>• Communities isolated by flood waters.</li> <li>• Critical infrastructure for communities disabled.</li> <li>• Large number of evacuees.</li> <li>• Military support.</li> </ul>
<b>Advice to the public/media</b> <ul style="list-style-type: none"> <li>• Be prepared to act on your flood plan.</li> <li>• Prepare a flood kit of essential items.</li> <li>• Avoid walking, cycling or driving through flood water.</li> <li>• Farmers should consider moving livestock and equipment away from areas likely to flood.</li> <li>• Call Floodline on 0845 988 1188 for up-to-date flooding information.</li> <li>• Monitor local water levels on the Environment Agency website <a href="http://www.environment-agency.gov.uk">www.environment-agency.gov.uk</a>.</li> </ul>	<b>Advice to the public/media</b> <ul style="list-style-type: none"> <li>• Protect yourself, your family and help others.</li> <li>• Move family, pets and valuables to a safe place.</li> <li>• Turn off gas, electricity and water supplies if safe to do so.</li> <li>• Put flood protection equipment in place.</li> <li>• If you are caught in a flash flood, get to higher ground.</li> <li>• Call Floodline on 0845 988 1188 for up-to-date information.</li> </ul>	<b>Advice to the public/media</b> <ul style="list-style-type: none"> <li>• Stay in a safe place with a means of escape.</li> <li>• Be ready should you need to evacuate from your home.</li> <li>• Co-operate with the emergency services.</li> <li>• Call 999 if you are in immediate danger.</li> <li>• Call Floodline on 0845 988 1188 for up-to-date flooding information.</li> </ul>
<b>Advice to operational organisations</b> <ul style="list-style-type: none"> <li>• Check your flood response plans to see how your organisation needs to respond.</li> <li>• Speak to your local Environment Agency Flood Warning Duty Officer for the latest forecast information.</li> <li>• Dial into Flood Advisory Service teleconferences.</li> <li>• Advise the public to call Floodline on 0845 988 1188 for up-to-date flooding information.</li> <li>• Please report any flooding in your area to your local Environment Agency office.</li> </ul>	<b>Advice to operational organisations</b> <ul style="list-style-type: none"> <li>• Check flood response plans for actions required at this stage.</li> <li>• Speak to your local Environment Agency Flood Warning Duty Officer for the latest forecast information.</li> <li>• Advise the public to call Floodline on 0845 988 1188 for up-to-date flooding information.</li> <li>• Please report any flooding in your area to your local Environment Agency office.</li> </ul>	<b>Advice to operational organisations</b> <ul style="list-style-type: none"> <li>• Check flood response plans for actions required at this stage.</li> <li>• Advise the public to put their safety first and to be ready to evacuate should the authorities decide it's needed.</li> <li>• Develop clear messages for local communities and the public.</li> </ul>

### 5.1.5 Flood Warning no longer in force

Additionally there is also a 'warning no longer in force' alert issued



1. Flood Warning
  - *Meaning:* No further flooding is currently expected in your area
  - *When it is used:* River or sea conditions begin to return to normal

## 5.2 Actions to be taken in the event of a flood warning alert

Within the organisation the flood alert is initially cascaded to;

- Shift Operations Manager / Site Emergency Controller (SEC)

Depending on the severity of the warning / alert it may then be cascaded accordingly to the following groups

- Staff, contractors and visitors at the Waste Water Treatment Plant Site
- Senior management
- All members of staff, contractors and any visitors at the full Lenzing site

### 5.2.1 Actions in the event of alert at 'Flood Alert' level

The **SEC** will inform all occupants of the WWTP of an increased flood threat and ensure that they are aware of possible site evacuation if the situation deteriorates, the likelihood of the site being flooded and that they should be prepared to leave the site, be vigilant regarding weather conditions forecasts and tide levels, and stay tuned to local radio or TV.

#### What to do;

- Monitor local news, weather forecasts and EA alerts / website
- Be aware of water levels in the surrounding areas.
- Be prepared to act on the FWEP
- Individuals should charge their mobile phone.
- All individuals will be encouraged to think about what items they would need to move to safety during a flood

### 5.2.2 Actions in the event of alert at 'Flood Warning' level

The **SEC** will ensure that the occupants are ready to move off site if and when required.

If the situation is deteriorating OR the defences have been breached with water already on the floodplain, and if it is safe to do so, all occupants must be evacuated from the site before safe egress is lost. All movable belongings and critical items of equipment will be moved to a safe place as high as possible.



**What to do**

- When informed to do so, evacuate the site (**See Section 6**)
- If appropriate and there is sufficient time, move all cars to safety – this may require all individuals leaving site and driving to the Great Coates Village Hall.
- If appropriate and sufficient time, turn off water, and electricity from all equipment. Safety lockout procedures should be used
- protect yourself, and help others

### 5.2.3 Actions in the event of alert at ‘Severe Flood Warning’ level

The most likely safe refuge will be the main Lenzing building level 2 (offices / control room level) and in the event of a Severe flood warning any personnel sited at the WWTP should immediately proceed to that location. However, depending on how the situation develops the **SEC** will ensure that dynamic risk assessments are undertaken which will include details where would be the most secure safe refuge area to reach in the shortest time, the number at that location and the resources and equipment available to sustain them.

In the case of the situation deteriorating and there is water already on the flood plain it is likely that remaining on site in the safe refuge area is the most appropriate action.

Individuals will **Only** leave the site if safe to do so and they are instructed to by the SEC, but be aware that parts of the evacuation route may be up to 1.6m depth of flooding.

**Individual actions / responsibilities;**

- If safe to do, stay in a high place, with a means of escape or evacuate the site as stated in the plan or as advised by the Emergency Services.
  - Avoid electricity sources
  - Avoid walking or driving through flood water
  - In danger, call 999 immediately
  - Listen to emergency services.

### 5.2.4 Actions in the event that Flood Warning is no longer in force is advised

The **SEC** will inform all occupants that no further flooding is expected, and water levels will go down.

If there has not been actual flooding they will advise what the business plan is for resumption of activities.

If flooding has occurred an assessment of damage and hazards will be made.

**What to do;**

- Listen to emergency service.
- Keep listening to weather reports.
- Only return to evacuated buildings when told to do so.
- Beware of sharp objects and pollution in flood waters.

## 6 WWTP evacuation Procedures and Routes

The **SEC** is ultimately responsible for making the decision of whether the occupants of the WWTP are to be evacuated, or remain on the site.

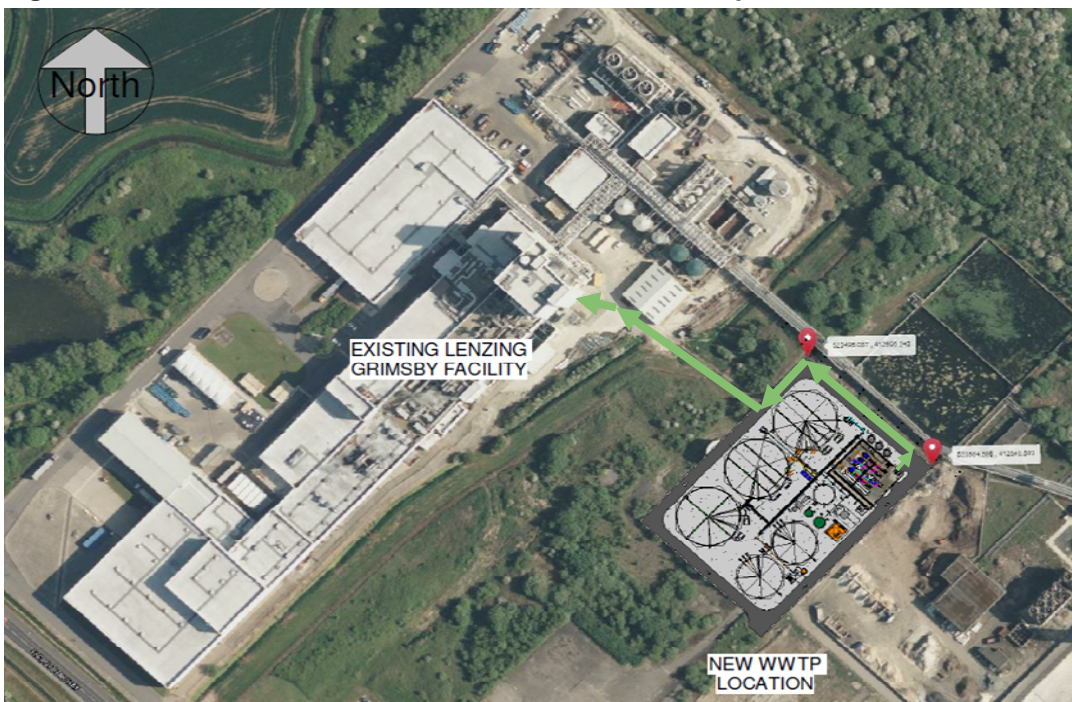
All occupants will familiarise themselves with the evacuation procedure and evacuation route.

Before total evacuation, the **WWTP technician** will ensure that equipment is shutdown, electrical equipment is unplugged and all windows and doors, including internal doors, are securely closed and locked. This will provide protection against water pressure caused by flood waters.

### 6.1 Evacuation Routes

The internal evacuation route is to be used unless advised otherwise by the SEC this is shown below in Fig 6.1

**Figure 6.1 Internal Evacuation Route from WWTP to main plant**

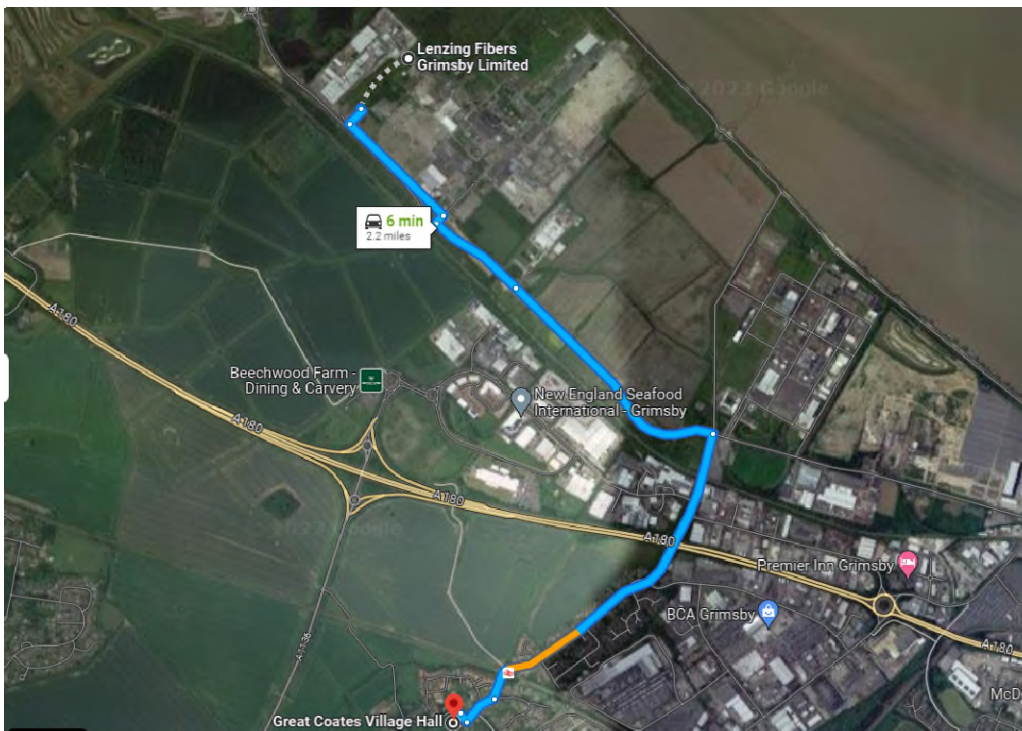


**Route:** Leave the WWTP membrane building / control room using the north facing door (toward reservoirs), Turn left and left again following the road that goes around the plant until it reached the footpath to the Lenzing main site.

Take this footpath to the nearest door at the base of the Polymer tower. Take the stairs (Stair 4) to level 2 where the office and control room are located. Go through the door to the spin deck and pass over the spin deck floor to the door the opposite side where the Control Room is sited. Report to the SOM / SEC on arrival.

The alternative external evacuation route is only to be used if advised by the SEC and a car is available for use. This is shown below in Fig 6.2

**Figure 6.2 External Evacuation Route from WWTP to Great Coates by car**



**Route:** Leave the WWTP membrane building / control room using the north facing door (toward reservoirs), Turn right and right again following the road that goes around the plant until the parking area is reached.

Leave the site using the normal access / egress route (route taken coming to and leaving the site)

At the exit onto Energy Park way turn left toward Grimsby

Proceed along Energy park way until the right turn to Great Coates comes up (just prior to the Novartis site entrance). Turn right onto this road (Woad Lane) and drive over the A180 road flyover to Great Coates Village. Congregate at the Village Hall just past the railway line in Great Coates.

Ring the SEC and confirm you have safely left site and request further guidance.

## 7 Reoccupation of the plant following flooding

If floodwaters have entered the plant it will need to be cleaned, disinfected, repaired, and fully dried out prior to reoccupation.

The **SEC** will check that the membrane building and external plant areas are safe before entering the area, and if there are any doubts professional opinion will be sought.

If there is any doubt that appliances or electrical equipment may be water damaged, they must be checked by the Electrical department before switching the power back on.

A log of damage must be made to allow any claim from the insurance company to be filed.

## 8 Review

The Production Manager must review this FWEP at least annually in accordance with Environment Agency guidance and considering the rise in sea/river level due to climate change. The review must consider the following;

- Read and understand the plan and update the contact lists.
- Contact the Environment Agency to check that the flood risk to the property has not changed.
- Contact the Environment Agency Floodline Service to ensure that you are still registered to receive flood alerts by your preferred method.
- Know how and where to isolate water, and electric supplies.
- At least once a year a test, of the evacuation plan will be carried out with all staff to ensure that all they are familiar with the plan and its procedures

## 9 Signature

Lenzing, approved on 12/9/23

[The procedure has been digitally approved]

...P. Munson.....  
[Author]

... M. Chapman .....  
[Reviewer]

...G. Erlacher.....  
[Approver]