

Permitting Decisions- Bespoke Permit

We have decided to grant the permit for Levertonhelm Viabes Industrial Production operated by Levertonhelm Limited.

The permit number is EPR/GP3023PH

The application is for a new Bespoke Installation Permit to produce up to 10,000 tonnes of Lithium Chloride annually under Section 4.2 part A (1) a) iv Producing inorganic chemical salts.

The site is located at Jays Close, Viable Industrial Estate, Basingstoke, Hampshire, RG22 4BA.

The operator currently produces a variety of Lithium salts at their Sherrington Way site permit no AP3838SH. Their Sherrington Way site has no further scope to expand their manufacturing capacity. They acquire the new site at Jays Close, Basingstoke to modernise their production and enable growth of their business.

This permit allows the operator to manufacture Lithium Chloride through a chemical reaction of Lithium Carbonate and Hydrochloric Acid. The process of Lithium Chloride production comprises of an acid-based reaction, filtration/separation, concentration, drying and blending.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision-making process. It:

- summarises the decision making process in the decision considerations section to show how the main relevant factors have been taken into account
- shows how we have considered the consultation responses

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit.

Decision considerations

Confidential information

A claim for commercial or industrial confidentiality has been made.

We have not accepted the claim for confidentiality.

The confidential request was made only in relation to potential future technical submissions, which wasn't required.

We consider that the inclusion of the relevant information on the public register would not prejudice the applicant's interests to an unreasonable degree.

The decision was taken in accordance with our guidance on confidentiality.

Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

Consultation

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

- UK Health Security Agency - Response received.
- Local Authority (Basingstoke Environmental Protection) – No response received.
- Basingstoke Planning Department – No response received.
- Health and Safety Executive - No response received.
- Food Standards Agency - No response received.
- Director of Public Health - No response received.

- Local Sewage undertaker (Thames Water) - Response received, confirming Trade Effluent Consent application.
- Local Fire Service - No response received.

The comments and our responses are summarised in the [consultation responses](#) section.

Operator

We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit.

The decision was taken in accordance with our guidance on legal operator for environmental permits.

The regulated facility

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN2 'Defining the scope of the installation' and Appendix 1 of RGN 2 'Interpretation of Schedule 1.

The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.

Site condition report

The operator has provided a description of the condition of the site, which we consider is not satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.

There was a concern regarding the lack of empirical data for groundwater. The operator refused to accept a groundwater baseline of zero. Instead, the operator opted to use leachate data from soils as a proxies for groundwater quality, which we did not accept.

The operator has confirmed they will accept a pre-operational condition, to provide comprehensive groundwater baseline data from relevant locations at the site prior to the commencement of the permitted activities.

Nature conservation, landscape, heritage and protected species and habitat designations

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation,

landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

We have not consulted Natural England.

The decision was taken in accordance with our guidance.

Environmental risk

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator's risk assessment is satisfactory.

The operator's assessment accounted for their emissions to air and water, but Lithium emission's failed to show any screening results stating N/A.

Lithium does not have a clear EQS. We investigated both European and Canadian figures and used the lowest toxicity data which is noted as NOEC of 1.65mg/l for algal species and applied an assessment factor of 10 to give a PNEC of 0.165mg/l.

The Sewage Treatment Factor also needed correcting, as sewage treatment reduces the concentration of Lithium by 90.51%. The updated assessment shows both Lithium and Chloride has screened out at Test 2 stage of the Water Impact assessment.

The River Loddon's hydrological data and the overall water body classification, shows Lithium is not on the list of pollutants of concern that have the potential of contaminating the river.

To reach our conclusion we took into consideration the H1 assessment, River Loddon's hydrological data and operator's EMS ISO 14001 monitoring that require yearly audits for emissions and targets for improvement.

The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment, all emissions may be screened out as environmentally insignificant.

General operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

Operating techniques for emissions that screen out as insignificant

Emissions of Hydrochloric Acid, Chloride and Lithium have been screened out as insignificant, and so we agree that the applicant's proposed techniques are Best Available Techniques (BAT) for the installation.

We consider that the emission limits included in the installation permit reflect the BAT for the sector.

National Air Pollution Control Programme

We have considered the National Air Pollution Control Programme as required by the National Emissions Ceilings Regulations 2018. By setting emission limit values in line with technical guidance we are minimising emissions to air. This will aid the delivery of national air quality targets. We do not consider that we need to include any additional conditions in this permit.

Dust management

We requested a dust management plan as the operator is producing and packaging powder material, leading to a point source and fugitive emissions of dust.

We have reviewed the dust and emission management plan in accordance with our guidance on emissions management plans for dust.

We consider that the dust and emission management plan is satisfactory and we approve this plan.

We have approved the dust and emission management plan as we consider it to be appropriate measures based on information available to us at the current time. The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

The applicant should keep the plans under constant review and revise them annually or if necessary sooner if there have been complaints arising from

operations on site or if circumstances change. This is in accordance with our guidance 'Control and monitor emissions for your environmental permit.

Pre-operational conditions

Based on the information in the application, we consider that we need to include pre-operational conditions.

We have imposed a pre-operational measure requiring the operator to obtain comprehensive groundwater baseline data from multiple locations at the site.

The above pre-operational conditions have been added as the operator confirmed they do not have empirical evidence of groundwater quality and are not willing to accept a zero-impact baseline. They have alternatively opted to provide a groundwater baseline data before commencing.

Improvement programme

Based on the information on the application, we consider that we need to include an improvement programme.

We have included an improvement programme to ensure that estimations within the H1 and any other parameters are verified. This includes submitting a revised H1 using monitoring data where the actual emissions figure are higher than those in the original H1.

Emission Limits

Emission Limit Values (ELVs) and equivalent parameters or technical measures based on Best Available Techniques (BAT) have been included for the following substances: Hydrochloric acid.

It is considered that Lithium and Chloride limits set by Thames Water will prevent significant deterioration of receiving waters. The limits set by the Water Treatment Facility are the same figures used by the operators in their H1 assessment and is a worst-case scenario. These figures have screened out as insignificant in the H1, so additional limits of the same figures aren't necessary.

We have included these limits based on non-statutory Environmental Quality Standards (EQS).

Monitoring

We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.

These monitoring requirements have been included in order to ensure Levertonhelm's production plant is operating effectively to the Inorganic

Chemicals Sector (EPR 4.03) guidance and against their predicted figures. This includes the effectiveness of their operational techniques to control and minimise emissions.

Reporting

We have specified reporting in the permit for the following parameters annually:

- Production of Lithium Chloride
- Water usage
- Energy usage
- Raw material usage

Annual reporting required for emissions to air from source point A1, A2, A3 and A4 as reference from the site plan.

Six monthly reporting required of emissions and discharges to water from source point S1.

We made these decisions in accordance with our guidance the Inorganic Chemicals Sector (EPR 4.03)

Management System

We are not aware of any reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

Previous performance

We have assessed operator competence. There is no known reason to consider the applicant will not comply with the permit conditions.

No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.

Financial competence

There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.

Growth duty

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Consultation Responses

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section:

Response received from UK Health Security Agency.

Brief summary of issues raised: The Environmental Risk Assessment, Accident Management Plan, nuisance complaints procedures and Fire Prevention Plan are not included within the application.

The human receptors in the proximity of the site have not been identified and considered by the applicant.

Summary of actions taken:

A Schedule 5 request for information was sent to the operator regarding the Management System and Environmental Risk Assessment. The operator had referenced these documents but initially the documentation was not included in their application.

A Fire Prevention Plan is not required for the type of substances used by the operator, but information regarding fire prevention, were requested as part of the management plan and risk assessment.

After reviewing the documents, we consider both the Management System ISO 14001 and Environmental Risk assessment provide appropriate techniques for the facility and are satisfactory.

The H1 tool screens chemicals against EQS levels. The levels consider wildlife, foliage and human's receptors. As Hydrochloride Acid has screened out, we consider this as enough evidence regarding human receptors.