Permitting Decisions - Bespoke Permit

We have decided to grant the permit for the Barrow Green Hydrogen Project operated by Barrow Green Hydrogen Limited.

The permit number is EPR/YP3425MZ

The permit was granted on 14/7/2026

The application is for the facility to produce hydrogen using proton exchange membrane (PEM) electrolysis, which is a Section 4.2 Part A(1)(a)(i) scheduled activity under The Environmental Permitting (England and Wales) Regulations 2016.

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.
- highlights key issues in the determination
- 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.

Key issues of the decision

This application is for a hydrogen production facility comprising six 5 MWe proton exchange membrane electrolysers (30 MWe in total), which will together produce a maximum amount of 12,816 kg of hydrogen per day. The hydrogen will be purified, compressed and then supplied to the adjacent Kimberley Clark Limited paper mill through a pipeline installed and operated by a third party. Hydrogen will be supplied for use as a fuel for combustion and will either be used directly or temporarily stored, as required, in nine 128,000 litre storage tanks.

Feedwater will be supplied by a mains water connection provided by United Utilities. The feedwater will be demineralised prior to use, with the resulting effluent pumped to the onsite attenuation lagoon, which in turn drains into the Walney channel.

It is expected that the operator follows the 'Hydrogen production by electrolysis of water: emerging techniques' guidance or use an alternative approach that provides the same or greater level of protection for the environment. We have reviewed the operator's proposed operating techniques against the requirements of the guidance in the table below and we agree that they meet the requirements.

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
2 Technique selection	When designing a hydrogen production plant and its associated activities, you should consider its overall environmental performance. You should justify your choice of technology at each stage using the principles of 'best available techniques' throughout your permit application including: • Energy demand and efficiency. • Water demand, efficiency, and evaluation for re-use.	The operator has chosen proton exchange membrane (PEM) electrolysers because they can: • Operate at a high efficiency across a wide range of electrical loads. • They operate at temperatures below 100°C • They are capable of dynamic and flexible operation, i.e. adapt to changing loads placed on the system. • They have a compact and modular design, allowing them to be more readily replaced when required. The operator considers that these reasons make them more suitable

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
	• Emissions to the environment.	than the other techniques available. The evidence review carried out for UK environmental regulators on the emerging techniques for electrolysis of water technologies considers both alkaline electrolysis and PEM as suitable options to produce hydrogen by electrolysis. The evidence review states that PEM technology is suitable for use with renewable power sources such as wind and power, due to its high turndown capability, rapid start-up and response to load changes. We therefore accept the operator's justification for their choice of technology in terms of its environmental performance and agree that the proposed technology meets the requirements of our guidance in relation to providing a justification for technology selection.
3.1 Operation	You must consider whether your hydrogen production plant may need to operate on a flexible basis and whether this will affect the design, operation, and maintenance of the plant.	The operator selected the PEM electrolysis method due to its greater flexibility in hydrogen production, allowing output to vary in response to the availability of renewable electricity. The plant also incorporates nine hydrogen buffer vessels to accommodate variations in hydrogen demand. The operator has provided detailed information on hydrogen system control in the application.

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
	You should identify all operating scenarios and describe measures to minimise the environmental impact of these scenarios.	Barrow Green Hydrogen will produce and implement an Other than Normal Operating Conditions (OTNOC) management plan. This plan will address the following: • Start-up and shutdown events. • Testing and maintenance. • Regeneration of the water purification system • When off-specification hydrogen is produced • During the commissioning of the plant
3.2 Reliability and availability	You will need to identify the equipment and systems, and their associated operating and maintenance techniques, which are critical in avoiding emissions or minimising environmental impact. You will need to design, operate, and maintain these to make sure they are reliable and available. You should implement a risk-based OTNOC management plan. This should identify potential scenarios, mitigation measures, monitoring, and periodic assessment of the OTNOC management plan. This should be part of your environmental management system.	The applicant has considered the following key systems and their design: • The pressure vessels • Gas and water piping • Cooling circuits • Instrument air lines • The certification of the process assembly • Pressure safety and relief valves • Gas and fire detection systems The operator has stated that their environmental management system will include OTNOC procedures and the implementation of appropriate maintenance programmes. We have put in a pre-operational condition for an OTNOC management plan to be sent to the Environment Agency.
3.3	You should design, operate, and maintain your	The operator has chosen PEM electrolysers because of their

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
Energy efficiency, process efficiency, cooling	hydrogen production plant to maximise energy efficiency and process efficiency. You should consider the use or recovery of oxygen by-product when this is commercially and technically viable. You must explain how you have balanced achieving these efficiencies to optimise environmental and economic requirements and what your considerations were. You should consider: • Electrical power needs and whether you will import or generate on site. • High pressure steam need and availability (SOEC). • Maximising any residual waste heat recovery. • Cooling needs. • Cooling type and medium. • Energy recovery devices on high pressure fluids. You should also consider heat integration optimisation.	efficiency over a wide range of operating load, with electricity imported from renewable energy sources. Each electrolyser has a key performance indicator (KPI) of 54.21 kWh/kg H_2 for an electrical consumption value. This is within the benchmark range of 45 – 66 kWh/kg H_2 for PEM electrolysers identified in the evidence review. The site will implement measures including the use of low-carbon electricity, energy-efficient equipment and controls, and effective operational practices (e.g. maintenance, insulation, and leak reduction) to maximise energy efficiency. During the electrolysis process, excess heat is generated. The installation uses circulation of excess ultra-pure water in combination with an anode heat exchanger to provide effective cooling. There is no use or recovery of the oxygen produced by the process.
3.4	You should:	We requested a process flow diagram for the electrolyser units from the operator. The diagram

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
Water supply and use	• Minimise the quantity of water you use. • Segregate, treat and re-use water where possible. • Identify how much contaminant needs to be removed to maintain the water quality necessary for effective operation. • Determine the quantity of water to be purged, the characteristics of that purged water, and design the treatment process accordingly. • Eliminate, minimise, or treat any emissions to air or wastes that may result from the water treatment process. • Choose a cooling method that takes account of the impact of temperature on process performance, energy efficiency, and environmental impact on the receiving medium.	shows that the input potable water flow is 1300 kg/hr with a reject water flow of 335 kg/hr. This is a net figure of 965 kg/hr of demineralised water to produce 89 kg/hr of hydrogen. This equates to a ratio of 10.8 kg of pure water per 1 kg of hydrogen. Compared to the ideal minimum 9:1 ratio this produces 83% efficiency which is considered good. Additionally: - The feed water for electrolysis will be treated as little as necessary so as not to consume more water than necessary but sufficient to match the specification of the electrolyte. - Water will be used more effectively using a closed loop/recirculating cooling system.
3.5 Electricity supply	You should take account of power supply issues when you design and operate the hydrogen plant, to eliminate or mitigate any environmental impact.	The application states that the plant will be powered by 100% renewable electricity from behind-the-meter local sources (e.g. solar panels) or importing via a dedicated local connection. The operator has chosen to use PEM electrolysers because they can operate efficiently with a variable energy supply.

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
3.6 Hydrogen purification	You should describe and justify your choice of purification techniques and the relevant aspects which will affect environmental criteria.	The operator will use a deoxo-dryer to remove trace oxygen and virtually remove water content both of which will be discharged to atmosphere.
4 Emissions to air	You should identify, eliminate, minimise, or reduce any emissions to air that could cause pollution. You should carry out a risk assessment, including detailed air quality modelling where appropriate, to assess the impact of these emissions.	Emissions of hydrogen are specifically addressed in section 4.1 below. The operator has stated that there is no local market for oxygen supply, and the electrolyser manufacturer does not guarantee the equipment for capture of oxygen. Thus, oxygen produced will be vented to atmosphere during normal operations. Fugitive emissions will be minimised in the following ways. • Using pressure release valves as opposed to breathing vents. • Maintaining bulk storage temperatures as low as practicable considering solar heating and using tank paint with low solar absorbency. • Temperature control. • Good inventory management, i.e. monitoring and managing hydrogen production, meeting customer demand and storage in the low pressure buffer vessels as required. In their application Barrow Green Hydrogen are committed to implementing a Leak Detection

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
		and Repair (LDAR) programme to minimise releases including from joints, flanges, seals, and glands. We have included an improvement condition (IC3) for the operator to submit a written report for implementation of the LDAR programme.
4.1 Emissions of hydrogen	You should design and operate your plant to achieve the following, which are listed in priority order. (Where technically and economically viable and ensuring safety is not compromised.) 1. Prevent or avoid emissions of hydrogen. 2. Recover or recycle hydrogen. 3. Avoid or minimise continuous or intermittent flaring of hydrogen. 4. Avoid or minimise continuous or intermittent venting of hydrogen, whether for operational or safety reasons. You should consider using these techniques to achieve this: • Designing and operating your plant to maximise equipment availability and reliability.	The operator stated that they intend to minimise venting of hydrogen and limit to OTNOC such as pressure relief, start-up, shut down and commissioning of the facility. No flaring of hydrogen is planned. The operator has, in their application, made their intention to implement a Waste Gas Management and Treatment Strategy to reduce emissions to air. At least every 4 years, they will review the management and treatment strategy to review opportunities to further minimise or treat the vented hydrogen and capture the produced oxygen.

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
	• Designing and operating your plant to minimise the frequency of and amount of hydrogen purged, including during change of production rate, start-up and shutdown, abnormal operations, and preparation for maintenance. • Use of buffer storage of out of specification hydrogen or hydrogen product during start-up and shutdown to minimise intermittent operation. • Recovery of hydrogen. • Treatment of hydrogen, for example, by recombination with oxygen or storage and purification of purged hydrogen. • Flaring rather than venting of hydrogen, where emissions cannot be eliminated and where practicable. • Designing flaring devices to ensure efficient combustion of hydrogen. • Venting hydrogen safely, where the above techniques are not practicable. You should explain your design and operational considerations behind your	

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
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	proposed techniques, including how you have considered overall environmental impact of their use.	
4.2 Other emissions from venting or purging	You should quantify and assess other venting and purging requirements, identifying any pollutants that are expected to be present.	The operator has identified other emissions to air of oxygen and nitrogen, but these are not considered to pose any environmental risk.
4.3 Other pollutants	You should identify, quantify and assess other pollutants.	No other pollutants are identified.
5 Emissions to water	You must identify and eliminate, minimise, recycle or treat any emissions to water that could cause pollution. You should carry out a risk assessment, including detailed modelling where appropriate, to assess the impact of these emissions.	The effluent from the raw water demineralisation process, contains the same dissolved species as the intake water but at higher concentrations. The intake water will be potable water supplied by United Utilities. The effluent will be pumped to an attenuation pond which drains into a final discharge point at the Walney Channel at grid reference SD 18943 72196. This is an intertidal channel which contains the Duddon Estuary SSSI. The operator has conducted a surface water risk assessment based on the expected amount and composition of this effluent. The H1 assessment passed the initial test except for copper and benzo(ghi)pyrene. The anticipated concentrations of both chemicals are very low; at or below the detection limit for dissolved copper and no onsite source of

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		benzo(ghi)pyrene. A significant load assessment was also conducted for cadmium and PAHs which also passed the initial test. We have audited the applicant's risk assessment and agree with their conclusions. We have included an improvement condition in the permit (IC1) for the operator to provide sampling data to validate the expected composition of the effluent discharge.
5.1 Wastewater treatment	You should identify continuous and periodic effluent streams from the process and determine whether effluent treatment is required. You should decide how much water to treat and how to treat it before it is: • Re-used. • Discharged to surface water or sewage undertaker. • Disposed of. You should identify how much contaminant can be removed to comply with discharge requirements and design the treatment process accordingly. You should identify any unavoidable emissions to	No effluent treatment will be carried out on site.

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
	air or wastes that may result from the water treatment process. You should treat water for re-use, where practicable. You should refer to the appropriate BREF, BATC and guidance.	
6 Emissions to ground and groundwater	You must design your process to avoid emissions to ground and groundwater.	There are no emissions to ground or groundwater. To minimise fugitive emissions to ground, the following measures have been adopted. • Operational areas will be provided with an impermeable pavement with an engineered drainage system designed to prevent fugitive emissions to surface or ground water. • Non-operational areas will be provided with surface water drainage comprising percolation and runoff to the site's attenuation lagoon. • Spill kits will be located around the site with training on procedures for responding to a leak or a spill. • There will be a planned preventative maintenance and inspection regime of site surfacing, drainage and features such as separators, containment bunding and valves. • Proper procedures for the handling of deliveries on site. • Deliver training to staff on the safe handling of chemicals and fuels.

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
7 Waste	Before considering waste disposal, as far as practicable you must follow the waste hierarchy and: • Prevent. • Minimise. • Re-use. • Recycle. • Recover. • Treat. You should consider how to deal with liquid and solid wastes that may be generated and justify your choice following this waste hierarchy.	The operator has considered the waste that will be produced on site in section 5.3 of the application document. This section sets out measures to be taken that are within the scope of the waste hierarchy.
8 Monitoring and reporting	Your permit application should include a monitoring plan for: • Routine operation. • Commissioning, where appropriate.	The operator has proposed the following: - Monitoring of emissions of hydrogen - Monitoring of emissions of effluent into the Walney Channel - Process monitoring
8.1 Monitoring point source emissions to air	You should eliminate or minimise emissions of hydrogen due to their global warming potential. You should provide a monitoring plan for monitoring emissions to air, based on expected pollutants such as hydrogen.	We have included an improvement condition in the permit (IC2) for the operator to submit their methodology for quantifying and reporting emissions of hydrogen from venting. We have included an improvement condition in the permit (IC3) for the operator to provide details of the monitoring techniques proposed to detect and quantify fugitive emissions of hydrogen.

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
	You should do this using appropriate methods and measuring techniques. Your monitoring should consider, for example, any other sources of hydrogen emissions, such as venting and fugitive emissions, including vented oxygen.	We have also included reporting requirements in the permit for vented and fugitive emissions of hydrogen.
8.2 Monitoring emissions to water	You must monitor emissions to water based on expected impurities using appropriate methods and measuring techniques. You should use monitoring standards for discharges to water following the relevant BATC.	The operator has proposed monitoring emissions to water (Walney Channel) for an initial 12 month period to demonstrate that the impact of the emissions on the receiving waters will be insignificant. We have included an improvement condition (IC1) in the permit for the operator to provide for monthly monitoring of effluent for 12 months post commissioning as a validation of the surface water risk assessment.
8.3 Monitoring emissions to ground and groundwater	You must provide a site condition report that assesses any relevant hazardous substances and includes baseline monitoring if necessary.	The operator has submitted a site condition report, which identified oil and greases as the relevant hazardous substance from the proposed activity. However, as the baseline monitoring has not been conducted, and as the site is a brownfield site with historical contamination, we have included an improvement (PO2) in the permit for the operator to conduct baseline monitoring at the beginning of the permit.
8.4	MCERTS sets the monitoring standards you	The application confirms that the rate of discharge at W1 will be

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Monitoring standards	should meet. You can use another certified monitoring standard, but you must provide evidence that it is equivalent to the MCERTS standards.	monitored in line with MCERTS for flow monitoring.
8.5 Monitoring process performance	You should identify the main requirements for monitoring process operations where these impact on environmental performance. You should monitor energy efficiency in the hydrogen production by measuring energy consumption per kg of hydrogen produced to calculate overall energy consumption. You should monitor overall water use by quality of water and purpose of use by carrying out a water balance across the installation.	The operator will monitor energy usage and efficiency and water usage and efficiency in line with reporting requirements that we have included in the permit.
9 Unplanned emissions and accidents	You should design your plant to: • Inherently avoid leaks by good design practice. • Ensure the plant is operated and maintained to appropriate industry standards. You should propose a risk-based leak detection and repair (LDAR) programme	The operator will use networked and alarmed hydrogen detection for fugitive emissions and minimise potential leak sources at the design stage, as part of accident prevention measures. We have included an improvement condition in the permit (IC3) for the operator to submit a report describing their LDAR programme for fugitive hydrogen emissions for approval by us. Both HAZID and HAZOP studies have been undertaken by the operator to assess the balance of

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
	that is appropriate for the fluids and their composition. You should include how you will use the principles of LDAR to eliminate or reduce fugitive emissions of hydrogen due to its global warming potential. Your hazard assessment and mitigation for the plant must consider the risks of accidental releases to the environment.	the plant and its interface with the electrolyser.
10 Noise	You should consider sources that have potential for noise and vibration.	The noise impact assessment used the recommended BS4142:2014 + A1:2019 'Methods for rating and assessing industrial and commercial sound.' Measurements were at representative receptor locations and proprietary software was used to predict sound levels from the inventory of principal noise sources. The predicted sound levels are either below or close to the measured background levels. The submitted Noise Management Plan is well developed and provides a good framework for the management and control of noise. There is a tabulated list of activities with proposed mitigation measures and further actions provided. There is also good complaints procedure with a method for registering a complaint with an appropriate complaint assessment form.

Assessment against 'Hydrogen production by electrolysis of water: emerging techniques' guidance		
Guidance reference	**Summary of requirements**	**Application evidence**
		We have included an improvement condition (IC4) for the operator to validate the conclusions of the noise impact assessment (NIA) submitted within this application.

Decision considerations

Confidential information

A claim for commercial or industrial confidentiality has not been made.

Identifying confidential information

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

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:

- Westmorland and Furness Council Environmental Protection Department
- Westmorland and Furness Council Planning Department
- Cumbria Fire and Rescue Service
- Health and Safety Executive
- UK Health Security Agency
- Marine Management Organisation

The comments and 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.

The site

The operator has provided a plan which we consider to be satisfactory.

This shows the extent of the site of the facility.

The plan is included in the permit.

Site condition report

The operator has provided a description of the condition of the site, which we consider is generally satisfactory. However, the following have been included in the pre-operational condition 2 (PO2)

1.Include an updated Stage 1 to 3 assessment if propylene glycol and oils and or greases are to be stored on site.

Tables 4 and 5 in section 5.2 in the Environmental Permit application document dated 3 March 2026 (Ref: 416.066073.0001) states these substances will not be stored on site. These tables report propylene glycol will be dosed directly into the cooling system and oils used for maintenance. However, it is assumed these will need to be stored on site prior to use.

2. Include new soil and groundwater measurements to establish a baseline that accurately reflects the current condition of the soil and groundwater.

The soil data presented in the Sub-Surface report dated November 2012 (Ref: 5651) is not acceptable as baseline given this will not be reflective of current site conditions and analysis was limited to a standard suite of contaminants.

The above was taken in accordance with our guidance on site condition reports.

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 included an improvement condition (IC1) in the permit to validate the H1 surface water risk assessment submitted by the operator.

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.

General operating techniques

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

Our key reference has been our ‘Hydrogen production by electrolysis of water: emerging techniques’ guidance (available on www.gov.uk).

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 copper and benzo(ghi)pyrene 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.

Noise management

We have reviewed the noise management plan in accordance with our guidance on noise assessment and control.

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

We have approved the noise 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.

We have included improvement condition IC4 to serve as a validation of the assessment under operating conditions.

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.'

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:

- The effluent composition once operational is within the risk envelope of that assessed in the application (IC1).
- Emissions of hydrogen from venting will be measured (IC2).
- Fugitive emissions of hydrogen will be measured and a leak detection and repair plan implemented (IC3).
- The noise impact assessment is validated under operational conditions. (IC4).

- An updated Environmental Risk Assessment and Accident Management Plan is in place (IC5).

Pre-operational Conditions

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

We have included a pre-operational programme to ensure that:

- The Operator's Environment Management System has a full other than normal operational conditions management plan (PO1).

- The operator updates the Site Condition Report with reference to the Environment Agency's H5 Guidance on Site Condition Reports.
  And that the operator undertakes new soil and groundwater measurements to establish a baseline that accurately reflects the current condition of the soil and groundwater (PO2).

- The operator submits a written report for approval to ensure that the drainage, containment measures and attenuation pond are fit for purpose. (PO3)

Emission Limits

No emission limits have been set.

We have imposed descriptive limits on visual appearance and visible oil and grease.

We have included a limit on the volume of the discharge at point W1. This is based on the maximum rate of discharge used in the application's risk assessment and has been included to ensure protection of the receiving water body of the effluent discharge.

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.

This is in relation to measurements at emission point W1 and the parameters are

- Flow rate
- pH
- TOC
- Total dissolved solids

- Dissolved metals including copper

These monitoring requirements have been included to ensure protection of the receiving water body of the effluent discharge.

We made these decisions in accordance with our Surface water pollution risk assessment for your environmental permit - GOV.UK

Based on the information in the application that although the application shows the intention to have either MCERTS certification or accreditation then this will need to be demonstrated at the time of installation.

Reporting

We have specified reporting in the permit.

Reporting requirements have been set for parameters for which monitoring requirements have been set, in relation to discharge at emission point W1.

We made these decisions in accordance with our 'Surface water pollution risk assessment for your environmental permit' guidance (available at www.gov.uk).

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.

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:

1 Response received from:

UK Health Security Agency

Brief summary of issues raised:

The consultee concluded that they have no significant concerns regarding the risk to the health of the local population from the installation.

Summary of actions taken:

None

No other responses have been received.

2 Response received from:

Westmorland and Furness council

Brief summary of issues raised:

The response was received from Gareth Walmsley, Environmental Health Officer (Environmental Protection). The officer is satisfied with the Noise Management Plan but as there is a query regarding the data in the application submission in Tables 4-3 and 4-4, he has suggested a survey should be performed to update the baseline measurements.

Summary of actions taken:

Improvement Condition 4 (IC4) addresses the above as well as requesting a noise impact assessment with the plant working under normal operations.