

Decision document variation

We have decided to grant the variation for Fujifilm Diosynth Biotechnologies operated by Fujifilm Diosynth Biotechnologies UK Limited.

The variation number is EPR/BJ8987IQ/V007.

The permit was issued on 23/10/2026.

This variation is for increasing the installation boundary to include two new facilities – Borealis and BIC-UK, replacing existing boilers, inclusion of two new emission points to sewer, addition and removal of emission points to air, and inclusion of dewar and nitrogen storage.

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

- highlights key issues in the determination
- 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 and the variation notice.

Key issues of the decision

Air emissions risk assessment

The applicant submitted an air emissions risk assessment, in line with the Environment Agency guidance '[Air emissions risk assessment for your environmental permit](#)'. The assessment considered emissions of oxides of nitrogen (NO_x) from boilers and emergency generators, and volatile organic compounds (VOCs) from the dispensing booth. Our assessment of the modelling is set out below.

Boilers and emergency generators

The applicant submitted a dispersion modelling report titled, '*Air Quality Assessment*' dated 31st March 2026 and used ADMS model version 6.0 to model emissions to air.

The existing boilers Danks and Babcock emit gaseous releases to atmosphere via a 15.6 m stack at the existing boiler house. The applicant proposes to replace these with two Clayton boilers, in the same building with emissions via a 20 m stack. The combined rated thermal input of the new boilers will be 10.114 MWth. The proposed boilers will meet the definition of a new medium combustion plant (MCP). The existing boilers will be decommissioned before the new boilers become operational. The existing and new boilers will not operate simultaneously.

The site also has 12 emergency units, three of which are MCPs: the generator at building L6, with a net thermal input of 1.062 MWth; the Borealis standby electricity supply generator, with a rated thermal input of 6.4 MWth; and the Borealis diesel fire pump, with a rated thermal input of 5.2 MWth. These three units had not previously been assessed or included in the permit. The diesel fire pump was not included in the air emissions assessment for this application.

The applicant assessed the cumulative impact of emissions from the two new boilers and the two emergency generators (for electricity supply). The modelling assumed continuous operation of both boilers when assessing long term and short-term impacts. For the emergency generators, the long-term emissions were pro-rated to their operational hours, and for short term assessment, both generators were assumed to operate continuously at their emission levels.

The assessment considered the short-term and long-term impact of NO_x emissions on human health and ecological receptors. It also considered nutrient nitrogen and acid deposition at ecological receptors. The applicant's air emissions risk assessment predicted:

Human health receptors:

- a maximum predicted environmental concentration (PEC) of 38% of the long-term environmental standard and 64% of the short-term environmental standard for NO_x.

Ecological receptors:

- a maximum process contribution (PC) of 0.1% of the long-term critical level and 5.5% of the short-term critical level for NO_x.
- a maximum PC of 0.1% of the critical load for nutrient nitrogen deposition.
- a maximum PC of less than 0.1% of the critical load for acid deposition.

The applicant concluded that cumulative emissions from the boilers and emergency generators would not have a significant impact on human health and ecological receptors.

We have audited the applicant's modelling report and while we do not agree with the exact numerical output of their modelling, we agree with their conclusion that emissions from the modelled boilers and electricity supply generators would not have significant impacts on human health and ecological receptors.

Dispensing booth

The applicant submitted a VOC risk assessment in their report titled, '*H1 screening assessment for a chemical dispensing booth at Fujifilm Diosynth Biotechnologies Limited Facility*' dated 11th March 2026. The VOCs released are acetone, acetonitrile, ethanol and methanol. These substances are dispensed within the booth, and emissions arise from evaporation. No chemical reactions take place within the dispensing booth.

Based on the 2025 operational data, the dispensing booth operates for approximately 3,500 hours per year i.e. 40% of the year. The applicant has used an effective height of 0 m, a long-term dispersion factor of 148 µg/m³ per g/s and a short-term dispersion factor of 3,900 µg/m³ per g/s. The assessment assumed an emission concentration of 100 mg/m³, an emission rate of 0.428 g/s for each substance and a time factor of 0.4 for long-term emissions. The background concentration for these substances is assumed to be zero; therefore, the predicted environmental concentrations are equal to the process contributions.

The applicant carried out the screening steps in line with the Environment Agency guidance [Air emissions risk assessment for your environmental permit - GOV.UK](#) and concluded that the predicted short-term and long-term impact of emissions from the dispensing booth stack would not be significant, and that detailed modelling was not required. The tables below show our calculations using the applicant's stated inputs.

Predicted long-term impacts:

Substance	Calculated PC ($\mu\text{g}/\text{m}^3$)	EAL ($\mu\text{g}/\text{m}^3$)	PC as % of EAL	PC < 1%	PEC < 70%
Acetone	25.3376	18100	0.14%	Yes	N/A
Acetonitrile	25.3376	680	3.73%	No	Yes
Ethanol*	25.3376	19200	0.13%	Yes	N/A
Methanol	25.3376	2660	0.95%	Yes	N/A

*The applicant derived the long-term EAL for ethanol using workplace exposure limit. However, they did not assess the short-term impact of ethanol emissions.

Predicted short-term impacts:

Substance	Calculated PC ($\mu\text{g}/\text{m}^3$)	EAL ($\mu\text{g}/\text{m}^3$)	PC as % of EAL	PC < 10%	20% of (EAL - (2*BC))	PC < 20% (EAL - (2*BC))
Acetone	1669.2	362,000	0.46%	Yes	N/A	N/A
Acetonitrile	1669.2	10,200	16.36%	No	2040	Yes
Methanol	1669.2	33,300	5.01%	Yes	N/A	N/A

The applicant derived a long-term EAL for ethanol from the workplace exposure limit and used this to assess the long-term impact of ethanol emissions. Ethanol screened out as insignificant against this derived EAL. As the derived EAL does not follow the current Environment Agency methodology for deriving new EALs, the applicant also undertook a sensitivity analysis using the more stringent published long-term EAL for methanol. The long-term PC for ethanol was 0.95% of the methanol EAL and therefore also screened out as insignificant.

The applicant did not include ethanol in its short-term assessment. We have therefore undertaken an additional assessment of the short-term impact of ethanol, using the same conservative approach and applying the published short-term EAL for methanol. Using the short-term PC of 1,669.2 $\mu\text{g}/\text{m}^3$ and the short-term methanol EAL of 33,300 $\mu\text{g}/\text{m}^3$, the PC is approximately 5% of the EAL. This is below the 10% short-term screening criterion and therefore the short-term impact of ethanol screens out as insignificant.

We agree with the applicant's numerical values and conclusions that the VOC emissions from the dispensing booth will not have a significant impact on human health receptors. However, the assessment is based on an assumed emission concentration of 100mg/m³ for each substance, which has not been validated by monitoring. We have therefore included an improvement condition (IC6) requiring the operator to monitor and characterise VOC emissions from the dispensing booth and validate the assumptions and conclusions of the H1 risk assessment.

The applicant stated that the dispensing booth also has an abatement system comprising pre-pad filters, fine dust filters and HEPA filters. Further information provided by the applicant identified the potential for particulate matter emissions associated with the use of powdered chemicals in the dispensing booth. We have therefore included requirements within IC6 for the operator to monitor particulate matter emissions and assess their impact through an H1 risk assessment.

Emissions to sewer risk assessment

The variation proposed two new emission points to sewer: S1 from Project Borealis and S2 from Project BIC-UK.

Borealis effluent

Aqueous effluent from Borealis will be treated in the effluent treatment plant, prior to discharge to Bran Sands Industrial Effluent Treatment Works, with final discharge to Dabholm Gut. The effluent treatment steps consist of pH neutralisation, temperature reduction, bio-inactivation and segregation prior to discharge via Northumbrian Water Limited (NWL).

The applicant has submitted a H1 screening risk assessment for emissions to sewer in their report titled, '*Surface Water Risk Assessment*' dated 31st March 2026. The risk assessment assumes discharge of substances at the limits specified in the trade effluent consent, which are significantly higher than their environmental quality standards (EQS), therefore the substances do not screen out at Test 1 as insignificant. Since the final location of discharge (Dabholm Gut) is less than 50m offshore, the seabed at the discharge location is less than 1m below chart datum and since the discharge is into a protected habitats site, if the substances fail Test 1, the applicant must carry out modelling of their effluent. The applicant requested a pre-operational condition to do modelling of the effluent, as representative sampling data is not available during the permit determination period. Until then the effluent will be tankered off site for disposal.

We have accepted the applicant's request and have included a pre-operational condition in the permit for the applicant to undertake modelling prior to S1 discharge via NWL at Bran Sands. Until then the effluent will be tankered off site for disposal.

BIC-UK effluent

The effluent from the laboratory will be pH adjusted in the laboratory via an automated process in small quantities; this effluent along with dishwasher wastewater and sanitary wastewater from the offices, will be released via emission point S2 to Cowpen Road combined sewer and eventually be discharged at Bran Sands (Dabholm Gut).

The maximum trade effluent discharged during any 24-hour period shall not exceed 0.5m³ and will have a pH value in the range of 6 to 10. As the discharge quantity is very low and the process effluent mixes with sanitary wastewaters from the lab offices, we have agreed that a full H1 risk assessment is not required specifically for S2 effluent.

However, we advised the applicant to include any substances and quantities from BIC-UK in the modelling for S1. This way, the applicant can provide a combined modelling report, rather than separate risk assessments, and ensure that emissions from BIC-UK are included within the overall environmental risk envelope for the site.

Nutrient neutrality

The applicant has submitted an assessment of nutrient neutrality in their report titled, 'Nutrient Neutrality Assessment for Project Borealis' dated 11th March 2026. The report outlines how the proposal would impact nutrient loading on The Teesmouth and Cleveland Coast Ramsar and Special Protection Area (SPA) and their intended mitigation solution. This site is in an unfavourable condition due to excess nutrients, and is subject to nutrient neutrality measures, meaning the Environment Agency should not permit activities that lead to additional nutrient loads, as this may cause or contribute to adverse effects on habitats sites designated under the Habitats Regulations.

Project Borealis will comprise five production lines which will discharge a maximum of 350.25 g/week of NH₄-N. The assessment converted this to an annual loading to Bran Sands wastewater treatment works, then applied a treatment reduction factor to estimate the nitrogen budget for the receiving watercourse. The applicant used bespoke calculations which adopted the 20% buffer used in the Teesmouth & Cleveland Coast Special Protection Area/Ramsar nutrient budget calculator in order to account for uncertainties. We have confirmed these calculations which show that the final nutrient budget for the project would be 52.453 kg/year.

The applicant proposed that to meet the requirement of nutrient neutrality, they will purchase 52.453 kg/year of nitrogen credits from a registered credit supplier under a Natural England approved nutrient credit scheme. This will ensure the nutrient budget from the project is offset and therefore it is concluded that there will be no adverse effects.

Further, it is proposed that for the first year of operation, all effluent from S1 will be tankered off-site for disposal. Nutrient credits will be purchased if and when the proposal to discharge via S1 comes into effect.

Noise Impact Assessment (NIA) & Noise Management Plan (NMP)

We have audited the applicant's NIA (ref. 2064003-RSKA-RP-001-(02) dated 23/04/2026) and agree with their conclusions that there is a risk of adverse impact at the nearest receptors from the site during daytime operations while impact during night-time operations is low. Further to this, the applicant modelled the emergency plant comprising a diesel backup generator and a diesel generator that maintains the supply pressure for the fire hydrant (i.e. diesel fire pump). The standby diesel generator was proposed to run for one hour off load every fortnight and one hour on load every three months, equating to 30 hours per year. The diesel fire pump was proposed to test for 5 minutes weekly. We agree with the consultant's conclusions that the emergency plant operations would result in significant adverse impact.

The applicant subsequently submitted additional modelling for the emergency plant, including mitigation measures, in a technical addendum (ref. 2064003-RSKA-TN-001-(02) dated 29/09/2026) to the NIA. We audited their additional modelling files and their proposed mitigation measures and concluded that either mitigation at source using acoustic louvres/splitter attenuators or mitigation using an acoustic barrier are effective options to reduce noise impact at sensitive receptors. We agree that the adverse BS 4142 impact identified for typical operations would not increase by the emergency testing when using either of the above mitigation options. The applicant has also confirmed to reduce testing of their emergency plant to once a month for a total of 35 minutes.

The applicant submitted an NMP (dated 15/05/2026) which considered the conclusions of the original NIA (dated 23/04/2026) and included a detailed BAT assessment for noise at the site. To capture the proposals set out in the technical addendum (dated 29/09/2026), we have included an improvement condition (IC8) in the permit requiring the operator to submit an updated NMP with the following information:

- Confirmation that off load testing of the standby diesel generator and diesel fire pump will take place for no longer than 35 minutes per month, 0900 – 1500 Monday – Friday.
- Confirmation that either acoustic louvres / splitter attenuators or an acoustic barrier has been installed to mitigate the noise impacts from the testing of emergency plant.
- Evidence to confirm that either:
 - the insertion loss of acoustic louvres/ splitter attenuators is no less than the indicative performance specifications provided in the technical addendum to the NIA.

	Insertion loss dB, in octave frequency band (Hz)							
Mitigation proposal element	63	125	250	500	1000	2000	4000	8000
SBL1 – Sound Bar Louvre, Acoustic Louvre	4	7	9	13	14	12	12	8
N2T07C – Rectangular Attenuators with Tapered Splitters	8	12	21	34	44	42	32	19

Or

- the acoustic barrier which has been installed is of the technical specification identified by the applicant in their technical addendum to the NIA, specifically:
 - has a minimum height of 2.5m
 - has a minimum surface mass of 24 kg/m²
 - is constructed continuously (without gaps beneath) around or between individual panels or slats
 - fully screens the enclosed plant
 - removes any direct line of sight between the units and the nearest noise-sensitive receptors
 - is manufactured in a way that ensures its long-term acoustic integrity.

With these measures in place, we consider that the site will meet BAT for noise.

Site condition report

The applicant has submitted a site condition report (SCR) with Stage 1 to 3 assessment and supporting information for baseline conditions for the sites Borealis and BIC-UK.

We have reviewed these and agree that the information is largely acceptable. Although reports for baseline conditions have been provided, we do not agree that a baseline has been established as the investigations and monitoring do not include all the substances detailed in the Stage 1 to 3 assessment. There is insufficient information on any pre-existing contamination or pre-existing concentrations of these substances in the soil and waters for each site area. The reports were generated to suit planning purposes with a general contamination suite being undertaken. We have informed the applicant about our position regarding this.

The applicant's stage 1 to 3 assessment concluded that baseline reference data is not required for the substances identified and we have accepted the justification provided and conclusion. However, we have advised the applicant that establishing baseline data for those substances may assist in demonstrating site condition at the time of permit surrender.

As the environmental permit has not previously been varied since the Industrial Emissions Directive (IED) came into force, routine soil and groundwater monitoring will be required in accordance with permit conditions. The applicant has agreed to develop a standalone soil and groundwater monitoring plan for this purpose.

Secondary containment

The applicant has submitted an environmental risk assessment (ERA) in which they have considered environmental risk resulting from emissions, amenities, vandalism, fire, spillage and climate change. We are satisfied with the ERA. The details specific to containment are provided below.

The site has a sealed drainage system, and the majority of the site is covered with well-maintained hard standing to prevent contamination of soil and groundwater, should spillage or leakage occur. The site follows CIRIA C736 for storage arrangements. All tanks are inspected visually on a daily basis and the site's EMS includes a Spill Response Procedure, with spill kits maintained around the site.

It has been noted that the site does not have necessary drainage infrastructure to contain firewater. The operator has proposed to carry out a full review of the site's drainage infrastructure and assess the options to ensure containment can be achieved. We have included this as an improvement condition (IC7) in the permit.

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.

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.

We consulted the following organisations:

- Stockton-on-Tees Borough Council – Environmental health
- Health and Safety Executive
- UK Health Security Agency

The comments and our responses are summarised in the consultation responses section.

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.

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 not satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.

We have advised the operator that establishing baseline data for the identified substances may assist in demonstrating site condition at permit surrender. Further information is covered under the key issues for the decision section.

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, 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, 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.

The following operational controls have been placed on the permit to protect the following SPA (Special Protection Area), Ramsar, SSSI Sites of Special Scientific Interest - Teesmouth & Cleveland Coast. We have included pre-operational conditions in the permit for surface water risk assessment and nutrient neutrality. The applicant will tanker their effluent off site for disposal until these pre-operational conditions are satisfactorily discharged. They will be permitted to discharge their effluent into the River

Tees only if their risk assessment demonstrates that the impact on the receiving waters is not significant and that there will be no addition of nutrient in the Tees.

We have consulted Natural England on our Habitats Regulation assessment and taken their comments into account in the permitting decision.

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 used by the operator and compared these with the relevant *Common Wastewater and Waste Gas Treatment/Management Systems in the Chemical Sector BAT Conclusions* and *How to Comply with your Environmental Permit – Speciality Organic Chemicals EPR 4.02* and we consider them to represent appropriate techniques for the facility.

The operator has provided information to support compliance with the BAT Reference document. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with the BAT Conclusions and Indicative BAT Requirements.

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

Operating techniques for emissions that do not screen out as insignificant

Emissions of Oxides of Nitrogen (NO_x) and acetonitrile cannot be screened out as insignificant. We have assessed whether the proposed techniques are Best Available Techniques (BAT).

The proposed emission levels for emissions that do not screen out as insignificant are in line with the techniques and benchmark levels contained in the technical guidance and we consider them to represent appropriate techniques for the facility. The permit conditions enable compliance with relevant Medium Combustion Plant Directive (MCPD) and Speciality Organic Chemicals Technical Guidance Note EPR 4.02 Emission Limit Values (ELVs).

Operating techniques for emissions that screen out as insignificant

Emissions of acetone, methanol and ethanol 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.

Noise and vibration management

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

We consider that the activities carried out at the site have the potential to cause noise and/or vibration that might cause pollution outside the site and consider it appropriate to include specific measures.

We have included an improvement condition in the permit for the operator to update the noise management plan (NMP). For further information, please refer to 'Noise impact assessment and noise management plan' under the key issues of decision above.

The plan has been incorporated into the operating techniques table S1.2 of the environmental permit.

Updating permit conditions during consolidation

We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permits.

Raw materials

We have specified limits and controls on the use of raw materials and fuels.

Raw materials and fuel description	Specification
Gas oil or an equivalent substitute to be agreed in writing with the Environment Agency.	Less than 0.1% sulphur content

Pre-operational conditions

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

POC 1: This pre-operational condition requires the operator to submit a detailed risk assessment for their effluent from emission point S1 in accordance with the Environment Agency guidance for [Surface water pollution risk assessment for your environmental permit - GOV.UK](#). The indirect discharge of treated effluent to Dabholm Gut, Tees Estuary via the Northumbrian Water Limited shall not commence until insignificant impact to Teesmouth and Cleveland Coast has been demonstrated, and written approval has been received from the Environment Agency under this pre-operational condition.

POC 2: This pre-operational condition requires the operator to demonstrate that the discharge of treated effluent from the permitted process will either result in zero net nutrient nitrogen by reduction in additions to the Teesmouth and Cleveland Coast SPA, Ramsar site or result in zero net nutrient nitrogen by offsetting nutrient nitrogen additions to the Teesmouth and Cleveland Coast from other contribution sources. The indirect discharge of treated effluent to these receiving waters via the Northumbrian Water Limited shall not commence until a zero net nutrient nitrogen addition to Teesmouth and Cleveland Coast has been demonstrated, and written approval has been received from the Environment Agency under this pre-operational condition.

Improvement programme

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

We have included an improvement programme to validate the risk assessment provided within the application and to ensure environmental protection.

IC 6: This improvement condition is to validate the H1 air emissions risk assessment provided by the applicant for emissions of VOCs from the Borealis dispensing booth stack (A5) and monitor particulate matter emissions and assess their impact through an H1 risk assessment. The operator must provide a written report to the Environment Agency for assessment and written approval, with any proposals identified within the report to be implemented within the approved timescales.

IC 7: The site does not have proper infrastructure to fully contain firewater in the event of a fire. The operator has proposed to carry out a full review of the site's drainage infrastructure and assess the options to ensure sufficient containment can be achieved. This improvement condition requires the operator to submit a written report to the Environment Agency for assessment and written approval of their firewater containment and drainage assessment for the whole site. Any proposals identified within the report must be implemented with the Environment Agency's written approval and within the approved timescales.

IC 8: This improvement condition requires the operator to update their noise management plan to include the proposed mitigation measures, evidence confirming the conclusions within the technical addendum to the NIA (dated 29/09/2026) and confirmation that the testing of the emergency plant will take place for no longer than 35 minutes per month, between 09:00 and 15:00 Monday to Friday. The updated NMP must be submitted within 3 months from the date of permit issue, for the Environment Agency's assessment and written approval.

Emission limits

Emission Limit Values (ELVs) or equivalent parameters or technical measures have been added for the following substances:

NO_x – 100mg/Nm³ (at emission points A6 & A7 – Clayton boiler 1 & 2)

VOC total Class A – 20mg/Nm³ (emission point A5 – Borealis dispensing booth)

VOC total Class B – 75mg/Nm³ (emission point A5 – Borealis dispensing booth)

ELVs for emission point S1 will be set on completion of POC 1 & 2.

Monitoring

We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified in table S3.1 of the permit:

NO_x – at emission points A6, A7, A14 & A18

VOC total Class A & Class B – at emission point A5

These monitoring requirements have been included in order to demonstrate compliance with the emission limit values and to ensure environmental protection.

Monitoring for emission point S1 will be set on completion of POC 1 & 2.

We made these decisions in accordance with the 'Medium Combustion Plant Directive' and the Environment Agency's guidance 'How to comply with your environmental permit – Additional guidance for Speciality Organic Chemicals sector'.

Based on the information in the application we are satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.

Reporting

We have added reporting in the permit for the following parameters:

NO_x – at emission points A6, A7, A14 & A18

VOC total Class A & Class B – at emission point A5

For NO_x, we made these decisions in accordance with the Medium Combustion Plant Directive. For VOCs, we have included reporting to assess compliance against the permitted ELVs.

Emission point S1 – reporting parameters will be set on completion of POC 1.

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.

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 variation.

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 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: No significant concerns raised.

Summary of actions taken: N/A

Response received from Stockton-on-Tees Borough Council – Environmental Health.

Brief summary of issues raised: The consultee has commented on land contamination, air quality and noise. We have addressed the comments below.

Summary of actions taken:

Air emissions - The consultee has requested post-installation verification to confirm the plant operates in accordance with the assumptions used in the assessment. We have audited the air emissions risk assessment and have included an improvement condition for validating the conclusions of the H1 risk assessment for the Borealis dispensing booth (A5). The emissions from the boilers have been modelled at the MCPD ELVs, and we have set these limits in the permit, as controls. The monitoring and reporting requirements will provide adequate protection to the environment from the air emissions.

Noise - Regarding impact of noise on the nearby residential receptors, the consultee raised concerns regarding the impact of testing the emergency systems and requested further mitigation measures to be built into the NIA. We have audited the BS 4142: 2014 +A1: 2019 (BS 4142) noise impact assessment. For typical site operations, we have reviewed the applicant's background sound data, sound source data and noise modelling file, comparing to our knowledge of similar sites and sound source data and have undertaken modelling sensitivity analysis. We agree with the conclusions of the NIA, i.e. adverse BS 4142 impacts during day-time hours and low BS 4142 impacts during night-time hours. In line with the aims of the Noise Policy Statement for England, the Environment Agency's guidance and standard permit condition for noise, adverse impacts are acceptable, but only if the site is working to Best Available Techniques (BAT). We have reviewed the applicant's noise management plan (NMP) and are satisfied that it demonstrates sector-specific BAT. For emergency testing operations, an additional assessment was requested during the permit determination, with the applicant setting out additional mitigation measures in Technical Addendum report 2064003-RSKA-TN-001-(02) dated 29/09/2026. We have reviewed this technical addendum and are satisfied that the proposed mitigation measures will ensure low or below adverse BS 4142 impacts occur during testing, depending on the specific mitigation measure implemented. The BS 4142 impacts presented in the NIA do not prevent a permit being

issued on noise grounds. Compliance is managed through standard permit condition for noise.

Land contamination - Under permitting regulations, the applicant has undertaken a Stage 1 to 3 assessment as required under the Industrial Emissions Directive to identify the non-hazardous, hazardous, and relevant hazardous substances used onsite and to determine if a baseline is required to be established. Stage 3 of the assessment concluded that a baseline is not required to be determined for the substances used on site. We have accepted their conclusion and agree with the justification provided. We have informed the applicant that since a baseline has not been established for the substances which will be used, we would be taking the approach that contamination associated with the substances was absent in soil or groundwaters at the site prior to the permit activities as per our H5 Permitting Guidance (i.e. we would be taking a zero-contamination approach). However, we have recommended that it is in their interest to carry out appropriate site investigation works to establish a baseline for all substances which they are using onsite to support their evidence bank at the time of permit surrender and ascertain what they will be responsible for to bring the site back to a satisfactory state.

We are not aware of any remediation works which have historically been undertaken at the existing site or the proposed variation areas. The applicant has provided site investigation reports for these areas which provide some information on pre-existing environmental conditions prior to the proposed permit variation works.

Health and Safety Executive – No response received.