

Permitting decisions

Bespoke permit

We have decided to grant the permit for Sandysike Mill operated by NWF Agriculture Limited.

The permit number is EPR/DP3036JK.

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 <u>decision checklist</u> to show how all 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. The introductory note summarises what the permit covers.

Key issues of the decision

Air quality assessment

The applicant submitted an air quality risk assessment using the Environment Agency's H1 risk assessment tool. The applicant assessed emissions of sulphur dioxide, nitrogen dioxide, carbon monoxide and particulate matter (PM10 and PM2.5) from the single steam generating boiler, fuelled by Kerosene, and emissions of particulate matter (PM10 and PM2.5) from the two cooler vents.

Assessment of emissions criteria

The Environment Agency considers emissions to be insignificant if process contributions (PC) are:

- Less than 1% of the environmental standard for long term PCs; and
- Less than 10% of the environmental standard for short term PCs.

Where the PC is above the insignificance threshold, but the predicted environmental concentration (PEC) (sum of PC and the pollutant background concentration) is below the relevant environmental standard the impact from air quality can be considered to be not significant and no further action needs to be taken.

For SPAs, SACs or Ramsar sites:

If emissions meet both of the following criteria, they're insignificant and don't need further assessment:

- the short-term PC is less than 10% of the short-term environmental standard for protected conservation areas
- the long-term PC is less than 1% of the long-term environmental standard for protected conservation areas

PEC is not calculated for short-term targets. If short-term PC exceeds screening criteria, emissions are significant.

Where the long term PC is greater than 1% and the PEC is less than 70% of the long-term environmental standard, emissions are insignificant.

For local nature sites:

If emissions meet both of the following criteria they're insignificant and don't need further assessment:

the short-term PC is less than 100% of the short-term environmental standard

the long-term PC is less than 100% of the long-term environmental standard

PEC is not calculated for local nature sites. If PC exceeds screening criteria emissions are significant.

The predicted air quality impact as detailed in the applicants' air quality assessment are shown in Table 1 below.

Pollutant	EQS/EAL	Background	Process contribution (PC)		Predicted environmental concentration (PEC)	
	µg/m³	µg/m³	µg/m³	% of EAL	µg/m³	% of EAL
NOx	¹ 40	4.5	2.0	5	6.5	16.25
	² 200	9.0	195.0	97.5	204	102
NOx	³ 30	12.5	2.0	7	14.5	48.3
	⁴ 75	25.0	230.1	307	255.1	340
PM10	¹ 40	10.4	1.6	4	12	30
	⁵ 50	10.4	31.0	62	41.4	82.8

Table 1 – H1 Air quality screening results

PM _{2.5}	¹ 25	6.8	0.3	1.2	7.1	28.4
SO ₂	⁶ 266	2.2	731.6	276	733.8	275.8
	² 350	2.2	546.0	156	548.2	156.6
	⁵ 125	1.1	322.1	258	323.2	258.6
	³ 20	-	2.8	14	2.8	14
СО	¹ 30,000	-	156.0	0.52	-	-
	⁷ 10,000	-	109.2	0.01	-	-

Notes

¹ Annual mean

²1 hour mean

³ Annual mean (conservation)

⁴ Daily mean (conservation)

⁵24 hour mean

⁶15 minute mean

⁷8 hour mean

The results from the applicant's H1 risk assessment indicated that the application could not be screened out as insignificant, specifically short term emissions of NOx and SO₂. It should be noted that the H1 tool is very conservative and as such the predicted concentration is calculated at the point of maximum impact.

Ordinarily the applicant would submit detailed modelling at this stage but in this instance we were able to assess the risk further using the Air Quality Modelling and Assessment Unit (AQMAU) screening tool. The AQMAU screening tool uses modelling based on several very conservative assumptions but it is more accurate than the H1 screening tool and provides effective screening. As such, further assessment of air quality impact has been completed using the screening tool, using different building set ups to establish the worst case configuration (for example, amalgamating on-site buildings, assuming different building heights) and inputting additional sensitive receptors. As the applicant did not provide reference or actual oxygen and moisture conditions for the sources and did not include pollutant concentrations (in mg/m3) for the boiler source, we were unable to check the emission rates provided by the applicant for the sources. As a result we completed checks using potentially higher emission rates for the boiler based on assumed conditions and pollutant concentrations we would expect for the boiler.

Based on the results of the AQMAU screening tool, impacts at the closest sensitive human health receptors are assessed as 'insignificant' for each pollutant.

There are five statutory sites within 10 kilometres of the site; three Special Areas of Conservation (SAC) one Special Protection Area (SPA) and one Ramsar site. There are two local nature sites within 2 kilometres of the site; one Ancient Woodland (AW) and one Local Wildlife Site (LWS).

Process contributions (PCs) of daily and annual NOx are insignificant, and are less than 1% and 10% of the respective critical levels, at all of the statutory sites. PCs are not significant, and are less than 100% of the relevant critical levels, at the LWS and AW. PCs for annual SO2 are insignificant for all the statutory sites and not significant at the LWS and AW. Based on PCs from both NOx and SO2, Nutrient Nitrogen and Acid deposition will be insignificant at all of the statutory sites, at less than 1% of the site relevant annual critical loads, and will not be significant at the LWS and AW.

Emissions from the grinder vent are not considered to be significant because they are typically characterised by low volume flows. The grinder is fitted with a bag filter, which is considered a suitable BAT option for dust control.

In conclusion, we can confirm that the risk of air quality impacts at the closest sensitive human health receptors and ecological sites within the screening distances is low and no further assessment is required.

<u>Noise</u>

Due to the potential for the site to cause noise pollution and historic noise complaints, the operator was required to submit a noise impact assessment (NIA) and noise management plan (NMP) to demonstrate that the site is not causing an adverse impact at sensitive receptors. The NIA was completed in line with BS4142

2014 '*Methods for rating and assessing industrial and commercial sound*'. The NIA identified four noise sensitive receptors within the vicinity of the site; NSR01, NSR02, NSR03 and NSR04.

The NMP lists the key potential risks of noise pollution beyond the installation boundary. These activities are identified as follows:

- Tanks; intermittent noise from engines during filling
- Product loading bays
- Raw material intake
- Blend shed
- Milling/processing building
- Vehicles on site; movement, engine idling during loading/unloading and reversing alarms
- Storage silos; enclosed conveyors, enclosed elevators and motors running during material offloading

We have audited the NIA and NMP and conclude that the operator has followed the guidance set out in BS4142 2014, TGN EPR 6.10 and PGN 6/26(13).

Based on our assessment of the information provided, we agree with the operator's conclusions; during the night-time we agree that noise generated by the site will have either no impact or a low impact at all sensitive receptors. During the day-time we agree that noise generated by the site will have either no impact or a low impact at sensitive receptors NRS01 and NRS02 and is unlikely to have an adverse impact at sensitive receptors NRS03 or NRS04.

In addition, the operator has confirmed the following measures to reduce noise:

- Daily audits of all plant and full daily site inspections
- Daily audits to include observational monitoring along the length of the site boundary, to identify locations of potential increases in noise emissions, i.e. daily 'noise checks
- An increase in observational monitoring and noise checks, to at least twice daily, following a complaint to assess the effectiveness of corrective actions
- Noise monitoring will be undertaken annually by an independent consultant
- The proper use and maintenance of plant and equipment to minimise noise; maintenance carried out away from sensitive receptors
- Implementation of site policy with respect to the manual changing of JCB buckets within the site's yard
- Internal roads will be kept clean and maintained in a good state of repair, to avoid unwanted rattle from vehicles
- Careful driving within the site speed limit at all times, specifically at 5mph or less for vehicles manoeuvring in and out of the Blend Shed and around the Product Loading Bays
- Roller shutter door from the site's yard into the Milling/Processing Building is kept closed unless in use (for infrequent pedestrian access), to minimise noise break-out
- Plant and materials will be handled in a manner that minimises noise, e.g. minimisation of drop heights, no unnecessary revving of engines
- Positioning of any mobile machinery to reduce noise emissions
- Avoidance of unnecessary noise when operating plant and equipment
- Good working practice instructions for site staff, managers and contractors to help minimise noise
 within the site

We have assessed the NMP and NIA and are satisfied that all sources and receptors have been identified, and that the proposed mitigation measures will minimise the risk of noise pollution/nuisance.

Improvement Programme

The permit contains an improvement programme which the operator must complete within the specified timescales given in the permit. The improvement programme has been set to address the remaining deficiencies within aspects of the operator's proposals.

The site has been in operation since 1977 and historically air compressor condensate and boiler blow down water was discharged to surface water. In order to meet the requirements of the relevant Best Available Techniques the operator has installed a temporary storage tank to store the boiler blow down water and compressor condensate prior to off-site disposal. We have included IP1 which requires the operator to submit a written report to the Environment Agency for approval detailing the specification and design of the permanent tank for the storage of boiler blow down water and compressor condensate. IP2 requires the operator to install the approved tank in accordance with the agreed timescales.

Decision checklist

Aspect considered	Decision		
Receipt of application			
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			
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.		
	The application was publicised on the GOV.UK website.		
	We consulted the following organisations:		
	Environmental Health - Carlisle City Council		
	The Food Standards Agency		
	The Health and Safety Executive		
	Sewerage Undertaker - United Utilities		
	Public Health England		
	Director of Public Health		
	The comments and our responses are summarised in the <u>consultation</u> <u>section</u> .		
Operator			
Control of the facility	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 facility			
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' and Appendix of RGN 2 'Defining the scope of the installation'.		
	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			
Extent of the site of the facility	The Operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. The plan is included in the permit.		

Aspect considered	Decision		
Site condition report	The Operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.		
Biodiversity, heritage, landscape and nature conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process. We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified. A Stage 1 Habitats Regulation Assessment has been sent to Natural England 'for information only'.		
	See <u>key issues</u> section.		
Environmental risk assessn	nent		
Environmental risk	We have reviewed the Operator's assessment of the environmental risk from the facility.		
	i ne operator's risk assessment is satisfactory.		
Operating techniques			
General operating techniques	We have reviewed the techniques used by the Operator and compared these with the relevant guidance notes (TGN 6.10 and PGN 6/26(13)) 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.		
	The key operating techniques are as follows:		
	 Unloading procedures are followed so that accidental releases of raw materials are minimised during delivery. 		
	 Fugitive emissions are minimised through minimisation of vehicle movement, cleaning and maintenance procedures and sealed or enclosed storage of bulk materials. 		
	 Cooler vents and grinder vent are fitted with cyclones or bag filters to reduce fugitive emissions. 		
	Spill containment procedures are invoked following any spill.		
	 Secondary containment is provided for all above ground tanks containing liquids whose spillage could be harmful to the environment. 		
	 Boiler blow down water and air compressor condensate is channelled to a collection tank and exported off-site for disposal at a licensed treatment facility. 		

Aspect considered	Decision		
Operating techniques for emissions that screen out as insignificant	Emissions of sulphur dioxide, oxides of nitrogen, carbon monoxide and particulate matter (PM_{10} and $PM_{2.5}$) have been screened out as insignificant, and so we agree that the applicant's proposed techniques are BAT for the installation.		
	We consider that the emission limits included in the installation permit reflect the BAT for the sector.		
	See <u>key issues</u> section.		
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.		
	See <u>key issues</u> section.		
Permit conditions			
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.		
Improvement programme	Based on the information in the application, we consider that we need to impose an improvement programme.		
	 IP1 requires the operator to submit details of the specification and design of the permanent tank for the storage of boiler blow down water and compressor condensate at the Installation. 		
	 IP2 requires the operator to install the permanent tank for the storage of boiler blow down water and compressor condensate following approval of IP1. 		
	See <u>key issues</u> section		
Emission limits	ELVs have been set for the following substance in accordance with TGN 6.10 and PGN 6/26(13) for emission points A1, A2 and A3:		
	Particulate matter		
	We have not set emission limits for the combustion plant as the plant is considered small and the emissions are likely to be insignificant.		
	See <u>key issues</u> section		
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 imposed in order for the Operator to demonstrate compliance with the emission limits specified in the permit.		
	We made these decisions in accordance with TGN EPR 6.10 and PGN 6/26(13).		
	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.		

Aspect considered	Decision
Reporting	We have specified reporting in the permit.
	We made these decisions in accordance with TGN EPR 6.10 and PGN 6/26(13).
Operator competence	
Management system	There is no known 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.
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared.
	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	
Section 108 Deregulation Act 2015 – 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

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

Public Health England (PHE)

Brief summary of issues raised

The response highlights potential emissions of concern to air associated with feed derived dusts and products of combustion from the kerosene boiler, and nuisance issues from site operations associated with noise, odour or pests.

Areas of uncertainty with the applicant's H1 assessment of emissions to air are highlighted and PHE suggest future site-specific monitoring data should be used to confirm the input parameters. Concerns are raised with regards to potential fugitive releases to ground and groundwater from the kerosene tank transfer pipework. PHE note that it is unclear whether or not interceptors or other systems are in place on discharges to surface water from the site, consisting of site drainage and boiler water treatment chemicals, that no specific control measures are proposed for firewater runoff and that mitigation measures for other risks identified in the accident risk assessment appear limited.

PHE conclude that the EA should ensure that sufficient measures are in place to prevent off-site impacts from emissions to air, ground or groundwater (both spills, run-off and discharge) and nuisance associated with noise, odour and pests. It is also suggested that the Health and Safety Executive should be contacted with regards to occupational exposures due to emissions to air.

Summary of actions taken or show how this has been covered

The applicant has submitted a revised H1 Air Emissions Risk Assessment and further supporting information which we have assessed. All emissions have screened out as insignificant.

The applicant has submitted a Noise Impact Assessment and a Noise Management Plan which have been assessed. We are satisfied that the proposed measures will minimise the potential for noise emissions from the installation.

The applicant has submitted an Odour Management Plan and we are satisfied that the proposed measures will minimise the potential for odour emissions from the installation.

The applicant has submitted procedures for minimising fugitive dust emissions, including material handling procedures and cleaning procedures. Coolers and grinders are fitted with cyclones or bag filters to minimise fugitive dust emissions. We are satisfied that the necessary measures are in place to minimise emissions of dust.

The applicant has submitted an assessment of container vessels and associated containment facilities against Best Available Techniques (BAT). Resurfacing works have been undertaken and large areas of the site are now impermeable, including the area housing a number of the sites' fuel tanks. We are satisfied that the necessary measures are in place to minimise emissions to ground or groundwater.

Surface water runoff from site surfaces and roofs of buildings to the north of the site plus vehicle wash down water discharges to a ditch via an interceptor. The operator has confirmed that they have stopped using detergents for vehicle washing and so the interceptor should be effective in removing oil or grease from vehicles prior to discharge to surface water. Surface water runoff from roofs of buildings to the south of the site discharges directly to a ditch. The applicant has confirmed that boiler blow down water and air compressor condensate will be collected and disposed of off-site at a licensed treatment facility. We are satisfied that the proposed measures will minimise the potential for impact to surface or ground/groundwater.

The applicant has submitted revised procedures for the control of firewater and we are satisfied that the proposed measures will minimise the potential for impact to surface or ground/groundwater.

The applicant has submitted an Accident Risk Assessment and Management Plan and further details have been submitted with regards to spill containment measures, measures to minimise vehicle collision and contingency measures in the event of failure/breakdown of abatement systems. We are satisfied with the proposed measures.

Standard conditions 1.1.1, 3.1.1, 3.2.1, 3.2.3, 3.3.1, 3.4.1, 3.6.1 and 3.7.1, concerning accidents, fugitive

emissions, containment, odour, noise, pests and fire prevention are contained within the permit.

No responses were received from the Food Standards Agency, the Health and Safety Executive, the Sewerage Undertaker - United Utilities, Environmental Health – Carlisle City Council or the Director of Public Health.

No public representations were submitted to the Environment Agency in response to the web advert which was placed on GOV.UK between 06/12/18 and 08/01/19.