Environment Agency permitting decisions

Variation

We have decided to issue the variation for LIS (North Western) Limited, Unit 20, Haydock Lane operated by LIS (North Western) Limited.

The variation number is EPR/EP3835PU/V006

The application was duly made on 21/03/2014 and determined as a significant variation to the Permit.

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:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

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

Structure of this document

- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation responses

Key issues of the decision

Introduction

The purpose of this variation is to add a new operation to enable the treatment of cobalt nitrate and the addition of a transfer station for storage and repacking of wastes. The transfer station will be able to operate as a standalone activity accepting third party waste and also in connection with waste associated with the listed activities. The following operations are added to the permit:

- pH adjustment utilising a mixing tank
- Dewatering using a filterpress and associated equipment
- Operation of a transfer station including waste storage and repacking area

The site plan has also been updated to reflect the changes made to the site. There is no change to the installation boundary as a result of this variation.

Treatment of Cobalt Nitrate
The existing mixing tank (T8) will be utilised for pH adjustment of the cobalt nitrate generated from the existing cobalt recovery process. The pH adjustment will be carried out utilising either sodium hydroxide or calcium hydroxide in order to convert the cobalt nitrate to insoluble cobalt hydroxide. The resulting cobalt hydroxide slurry will be dewatered using a plate and frame filter press to produce a cobalt hydroxide filter cake. This filter cake will be recycled/recovered at a suitably licensed third party facility. The liquid waste will be stored in Intermediate Bulk Containers (IBCs) within the transfer station and sent offsite for disposal. We are satisfied the proposed plant designs can process the waste materials as described above.

This activity has been added to the existing listed activity with table S1.1 for 'disposal or recovery of hazardous waste involving oil refining and other reuses of oil' because the waste received for the pH adjustment and filter press are a by-product of the existing process to remove cobalt from oil. We are satisfied that procedural controls and preventative maintenance procedures are in place to minimise the environmental risk of the activity. The treatment of cobalt nitrate is to be carried out utilising an existing stainless steel tank and infrastructure. Controls will be in place to ensure common lines are flushed in-between each addition and the tank cleaned after each treatment.

We consider the plant has suitable containment for accidents, leaks and spillages as described below. The site plan illustrates the location of the T8, separator and filter press, all of which are located on non-permeable hardstanding within a walled area with a controlled drainage system. Any materials for either the oil treatment or cobalt nitrate treatment including the reagent chemicals will be stored within a designated area in the transfer station when not in use. Wastes produced from the cobalt nitrate treatment namely cobalt hydroxide filter cake will be sent to a third party where the cobalt can be recovered from the filter cake.

We have incorporated an improvement condition (IC5) into the permit for the operator to submit a post commissioning report for the cobalt nitrate treatment process, to ensure the operator has reviewed the performance of the new activity and developed operating procedures for process control.

Emissions to Air
Emissions from the new pH adjustment tank will primarily be breathing losses. This will occur when the tank is being filled due to air displacement and as such will be a low volume.

The Environment Agency's H1 risk assessment has been completed for nitrogen dioxide (NO_2) emissions from the pH adjustment tank (existing mixing tank T8). The Environment Agency guidance document 'H1 Annex F – Air Emissions' states that process contributions can be considered insignificant if:

- the long term process contribution is <1% of the long term environmental standard

- the short term process contributions is <10% of the short term environmental standard.

Substance		Short Term			Long Term	
	Statutory Limit Value	PC	% of EAL	Statutory Limit Value	PC	% of EAL
Nitrogen Dioxide	200 µg/m^3 Emission Limit Value	2.414 µg/m^3	1.2%	40 µg/m^3 Emission Limit Value	0.092	0.23%
	30 µg/m^3 Critical Level	2.414 µg/m^3	8.04%	30 µg/m^3 Critical Level	0.092	0.31%

Using the information provided by the operator the nitrogen dioxide emissions screen out for long and short term process contributions for both the ambient air directive and protection to vegetations and ecosystems, shown in the table above. We can therefore consider the nitrogen dioxide emissions as insignificant and no further assessment is required.

Waste transfer station

The transfer station will be built inside the existing warehouse/garage area and will be designed to allow storage of packaged waste materials. There will be a separate storage area for flammable waste materials in packages.

Waste to be stored within the transfer station will be predominantly those produced as part of the cobalt process, or accepted from the tank cleaning part of the business. The transfer station will process up to 20 tonnes per day of waste material, with a maximum capacity of 250 tonnes. Approximately 15 tonnes will be from material directly related to the activities carried out at the installation and the remaining 5 tonnes will be material from a third party waste activity.

Within the transfer station wastes will be stored and repackaged. There will be some bulking up taking place as a part of the repackaging operations. Oil and water from packages will be bulked into existing tanks. Oily sludges from the existing tanks and packages will be bulked onto a road barrels for transfer offsite.

The transfer station is located on non permeable concrete hardstanding. Each storage row will contain a maximum of 28 tonnes, with a minimum of 0.5m segregation between each row. The quarantine area will contain a maximum of 28 tonne. Each storage bay is bunded to 110% of the total capacity within the bund. The storage design follows COMAH, HSG71 ‘ Warehousing Chemicals Safely’ and HSG51 ‘ The storage of flammable liquids in containers’ requirements. We consider the containment and bunding of the transfer station is suitable for the materials and quantities stored.

Emissions to surface water, land and sewer

There are no direct point source emissions to surface water. There will be no emissions to groundwater or land associated with the proposed new activity. There is an existing trade effluent consent with United Utilities for discharges from the effluent plant to sewer, the changes to the site will not result in a change to the trade effluent consent, the existing limits will remain.

Environmental Risk and Accident Management
Within operational areas any spillages would be retained and directed to the effluent treatment plant for treatment via an interceptor prior to subsequent discharge to sewer. The transfer station will be located on non-permeable concrete hardstanding and will contain bunds and drains for containment of any spillages in each discrete area as shown on the site plan.

The flammable wastes storage area will be separated from the rest of the transfer station with a firewall built to the standards within HSG51, this will also have a separately managed spill/drainage system.

We consider the operator has identified appropriate measures for mitigation and management of environmental risk and accidents from the new activities proposed at the installation. We have incorporated a new improvement condition (IC4) to ensure the accident management plan is updated to reflect the changes made to the site within 6 months of permit issue.

Annex 1: decision checklist
This document should be read in conjunction with the Duly Making checklist, the application and supporting information and permit/ notice.

Aspect considered	Justification / Detail	Criteria met Yes
Consultation		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.	✓
Responses to consultation	The consultation responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
Operator		
Control of the facility	We are satisfied that 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 EPR RGN 1 Understanding the meaning of operator.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
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 A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary. The site plan illustrates the location of the cobalt nitrate treatment area (T8, separator and filter press), the transfer location and the relocation of T10, compressor, air blowers and gas oil.	✓
Biodiversity, Heritage, Landscape and Nature	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.	✓

Aspect considered	Justification / Detail	Criteria met Yes
Conservation	One Local Nature Reserve (LNR) is located within 2,000m of the installation (Stanley Bank). 12 Local Wildlife Sites (LWS) are located within 2,000m of the installation boundary. A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process. Nitrogen dioxide emissions screen out as insignificant using our H1 risk assessment, see key issues for further information. We consider that the application will not affect the features of the site. We have not formally consulted on the application. The decision was taken in accordance with our guidance.	
Environmental Risk Assessment and operating techniques		
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory. The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment, nitrogen dioxide emissions may be categorised as environmentally insignificant. There is no significant change to odour or noise as a result in this variation.	✓
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. • How to comply with your environmental permit • Sector Guidance Note SGN S5.06: Recovery and disposal of hazardous and non-hazardous waste The proposed techniques/ emission levels for priorities for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs. The operator proposes to following techniques to	✓

Aspect considered	Justification / Detail	Criteria met Yes
	minimise to risk to the environment from the activities carried out at the installation: • Integrity of impermeable surfaces will be monitored and maintained. • Storage of packaged wastes will be in fully covered areas • A waste pre-acceptance, acceptance and rejection procedure (L01) is in place to control the waste streams arriving at the installation, which includes receiving a representative sample of the waste prior to acceptance to determine suitability for treatment at the site. • Level indicators are fitted to bulk storage vessels with audible and visible alarms.	
The permit conditions		
Raw materials	We have specified limits and controls on the use of raw materials and fuels. Additional raw materials will be 47% Sodium Hydroxide solution or powdered calcium hydroxide (lime). These have been added to table S3.1 'Raw Materials and Fuels'	✓
Waste types	We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility. Table S3.2 has been updated to include 31 new wastes. We are satisfied that the operator can accept these wastes for the following reasons treatment/storage/repackaging/transfer within the new activities added to the permit and the waste codes are suitable for the operations and treatment being carried out at the site. We made these decisions with respect to waste types in accordance with SGN S5.06: Recovery and disposal of hazardous and non-hazardous waste.	✓
Improvement conditions	Based on the information on the application, we consider that we need to impose improvement conditions.	✓

Aspect considered	Justification / Detail	Criteria met Yes
	We have imposed improvement conditions to ensure that: ➢ appropriate measures are in place to ensure that accidents that may cause pollution are minimised. The Accident Management Plan (AMP) submitted with the application is dated March 2010. An improvement condition (IC4) has been incorporated into the Permit to ensure the AMP is revised to include the new activities within 6 months of permit issue. We have incorporated an improvement condition (IC5) into the permit for the operator to submit a post commissioning report for the cobalt nitrate treatment process, to ensure the operator has reviewed the performance of the new activity and developed operating procedures for process control.	
Incorporating the application	We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process. These descriptions are specified in the Operating Techniques table in the permit.	✓
Monitoring	There is no change to the monitoring requirements as a result of this permit variation.	✓
Reporting	There is no change to the reporting requirements as a result of this permit variation.	✓
Operator Competence		
Environment management system	There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓
Technical competence	Technical competency is required for activities permitted. The operator is a member of an agreed scheme.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	A WAMITAB certificate of technical competence has been submitted with the variation application.	

Annex 2: Consultation responses

Summary of responses to consultation and the way in which we have taken these into account in the determination process.

Response received from
Local Sewerage Undertaker (response received 25.4.14)
Brief summary of issues raised
United Utilities have no objection to the discharge to foul sewer specified in the application. The discharge is covered by the consent to discharge trade effluent held by the operator. Adequate sewerage and sewage treatment facilities exist, no significant pollution is caused by acceptance of the trade effluent and treatment of the trade effluent in admixture with domestic sewage represents BAT.
Summary of actions taken or show how this has been covered
No action required.

Response received from
Public Health England (response received 25.04.14)
Brief summary of issues raised
PHE has no significant concerns regarding the risk to health of the local population from this providing the operator takes appropriate measures to prevent or control pollution. Recommendations to additionally consult with the LA.
Summary of actions taken or show how this has been covered
Consultation sent to LA, no further actions required.

Response received from
Local Authority
Brief summary of issues raised
No response received.
Summary of actions taken or show how this has been covered
N/A

Response received from
Food Standards Agency
Brief summary of issues raised
No response received.
Summary of actions taken or show how this has been covered
N/A

Response received from
Health and Safety Executive
Brief summary of issues raised
No response received.
Summary of actions taken or show how this has been covered
N/A

Response received from
Local Fire Service
Brief summary of issues raised
No response received.
Summary of actions taken or show how this has been covered
N/A