Permitting Decisions- Variation

We have decided to grant the variation for Garston Distillation Services operated by Veolia ES (UK) Limited.

The variation number is EPR/FP3133GL/V006.

The variation is for the addition of two fractional distillation columns (28 ktpa capacity total) with 3 new cooling towers. Associated with this is the requirement for additional storage of solvent waste (17 new tanks, totalling 3,450m^3). This amounts to the variation of two Activities, the S5.3 (a)(v) Hazardous Waste Treatment Activity and the S5.6 Hazardous Waste Storage Activity. This increases the treatment capacity of the site by an additional 28,000 tpa for the solvent reclamation process.

Two MCP boiler units (2 x 9.925MWth) have been added to the permit, which provide heat to the fractional distillation columns, thus fuelling the treatment Activity. These boilers are added to the permit as Directly Associated Activities (DAAs). They will be fuelled by Natural Gas, Gas Oil or by solvent distillate fuel derived from the treatment process. The latter is under the condition of agreement of the Environment Agency that the solvent distillate fuel meets criteria for end-of-waste.

One final element of the initial variation is to increase the discharge of surface water from the site from emission location W1. The previous permit allowed for 30m^3 of water to be discharged from site over a 7-day period, this variation will allow for 100m^3 to be discharged over a 7 day period.

During the determination period of the Application, the Operator submitted information and a request for a partial surrender of the permitted Activities for the site. The S5.1 A1(a) Activity for the incineration of the solvent wastes was never carried out on site, this Activity is now deemed surplus to requirements on site and, following the submission of information around this, the Activity and all associated conditions and DAAs can be removed from 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 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

Confidential information

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

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

Identifying confidential information

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

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

Consultation

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

We consulted the Liverpool City Council (local authority) in regard to the Air Quality Management Area.

No response was received.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

- Food Standards Agency;
- Liverpool City Council (Local Authority) – Environmental Health Department;
- Health and Safety Executive;
- Local Sewerage Authorities (United Utilities);
- Natural England;
- Natural Resources Wales; and
- Director of Public Health at UKHSA.

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', Appendix 1 of RGN 2 'Interpretation of Schedule 1', guidance on waste recovery plans and permits.

The operator has provided the grid reference for the emission points from the medium combustion plants. These are provided in Application Form Part C2.5, as a response to question 2.

The extent of the facility is defined in the site plan attached at Schedule 7 of the permit. The activities are defined in table S1.1 of the permit.

The combined net rated thermal input of the plant, excluding spark ignition gas engines, is greater than 20 MW. In accordance with the Environmental Permitting (EP) Regulations (England and Wales) 2016 the activity could be considered to be an aggregated Part B activity under section 1.1 of schedule 1.

However, we are permitting the activity as one described in schedule 25A as Best Available Techniques (BAT) does not apply to aggregated section 1.1 Part B activities in accordance with schedule 8 of the Environmental Permitting (EP) Regulations (England and Wales) 2016.

The combined net rated thermal input of the plant is above 20 MW. Because the plant are spark ignition gas engines, they are not considered to be a section 1.1 Part B activity as spark ignition gas engines, based on the Environmental Permitting (EP) Regulations (England and Wales) 2016.

The site

The operator has provided plans which we consider to be satisfactory.

These show the extent of the site of the facility including the discharge points (Drawing Reference VEO-20-113-1005 submitted as appended in the Supporting Statement).

The plan is included in the permit.

Air Quality

This variation includes the addition of an additional two boilers which are MCPs. The two multi-fuel steam generating boilers each of 9.925 MWth thermal input, which will be fired initially on natural gas and gas oil. However, once confirmed that the distillate fuel has achieved end of waste status and is suitable for use this will also be used to fuel the boilers. The combustion gases released from these boilers have been assessed in the applicant submitted Air Quality Assessment (AQA) Modelling Report, which used ADMS-5.2 to predict the impacts at human health receptors and designated conservation sites. The applicants AQA is referenced as 'S2985-0030-0006SMN', dated

14/05/2021. This report and the methodology used has been audited by our Air Quality Monitoring and Assessment Unit.

We are satisfied that the assessment has taken into account all relevant human health receptors, that the model and its inputs are appropriate and that the assessment has been carried out in accordance with our guidance. We agree with the applicant's conclusions that the plant is unlikely to exceed the environmental standards at human health receptors.

The site is in screening distance of the Liverpool Bay / Bae Lerpwl SPA, Mersey Estuary SPA, Mersey Estuary Ramsar, Mersey Narrows and North Wirral Foreshore Ramsar and Mersey Estuary SSSI. We agree with the applicant's conclusions that there is no adverse effect alone and in combination on the European sites and that emissions are unlikely to damage the interest features of the SSSI.

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 consulted Natural England and Natural Resources Wales on our Habitats Regulation assessments 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.

Operating techniques

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

General operating techniques

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

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

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.

Fire prevention plan

We haven't requested a Fire Prevention Plan at this time, but we will request one in the future if we consider the site poses a risk of fire.

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.

The main change in the permit conditions is the addition of a waste list to Schedule 2 of the permit, where the main solvent treatment condition previously had no agreed EWC waste code list associated with it. This has now been rectified with the acquiescence of the Operator.

Raw materials

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

These limits are present in Table S2.1 of the permit, which include the solvent reclaimed fuel from the waste treatment process (on the condition it meets End of Waste status).

Waste types

We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.

We are satisfied that the operator can accept these wastes for the following reasons:

- they are suitable for the proposed activities
- the proposed infrastructure is appropriate; and
- the environmental risk assessment is acceptable.

We made these decisions with respect to waste types in accordance with the chemical waste appropriate measures and hazardous waste regulations.

Pre-operational conditions

Based on the information in the application, we consider that we need to include pre-operational conditions. The purpose of the Pre-Operational Condition (PO5) added to the permit to enable use of the solvent distillate fuel produced from the waste treatment Activity on site is to ensure that a fuel is produced appropriate for use and one which achieves end-of-waste status in line with the EA's Guidance.

Previous Pre-Operational Conditions present in the permit variation have been cancelled, as a result of a partial surrender of the permit.

The waste combustion treatment of the solvents (a S5.1 Activity) was surrendered as part of this variation, therefore all associated POs have been removed.

Improvement programme

The Improvement Programme present in the previous variation has been removed from requirement by this variation, as the Activity which they were related to (the combustion of solvent wastes) has been removed.

These ICs have been retained as a reference in the permit for this variation to enable traceability but can be removed from future variations of the permit once this record is logged.

Emission limits

Emission Limit Values (ELVs) and equivalent parameters or technical measures, based on Best Available Techniques (BAT) have been amended.

Emissions points A8a and A8b have been added with the following parameters (based on the fuel source used during operation);

Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Existing/new medium combustion plant which are engines and gas turbines fuelled on Natural Gas	100 mg/m^3
Sulphur dioxide	Existing/new medium combustion plant which are engines and gas turbines fuelled on Natural Gas	No limit set
Dust	Existing/new medium combustion plant which are engines and gas turbines fuelled on Natural Gas	No limit set
Carbon monoxide	Existing/new medium combustion plant which are engines and gas turbines fuelled on Natural Gas	No limit set
Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Existing/new medium combustion plant which are engines and gas turbines fuelled on Gas Oil	200 mg/m^3
Sulphur dioxide	Existing/new medium combustion plant which are engines and gas turbines fuelled on Gas Oil	No limit set
Dust	Existing/new medium combustion plant which are engines and gas turbines fuelled on Gas Oil	No limit set
Carbon monoxide	Existing/new medium combustion plant which are engines and gas turbines fuelled on Gas Oil	No limit set
Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Existing/new medium combustion plant which are engines and gas turbines fuelled on Solvent Distillate Fuel	300 mg/m^3
Sulphur dioxide	Existing/new medium combustion plant which are engines and gas turbines fuelled on Solvent Distillate Fuel	350 mg/m^3
Dust	Existing/new medium combustion plant which are engines and gas turbines fuelled on Solvent Distillate Fuel	20 mg/m^3
Carbon monoxide	Existing/new medium combustion plant which are engines and gas turbines fuelled on Solvent Distillate Fuel	No limit set

Emissions point A9 has been added for the new solvent distillation treatment infrastructure. The limit is 30 mg/m^3 for Total Volatile Organic Compounds from the scrubber unit emissions point.

All emissions limits and emission point A6 have been removed from the permit.

Emissions limits have been added as a result of this variation. It is considered that the numeric limits described below will prevent significant deterioration of receiving waters. These limits were added to be in accordance with BAT. The associated monitoring and reporting is updated for these parameters too.

For water discharge (at W1)

Metals

Arsenic	0.05 mg/l
Cadmium	0.05 mg/l
Chromium	0.05 mg/l
Copper	0.5 mg/l
Lead	0.1 mg/l
Nickel	0.5 mg/l
Mercury	5 µg/l
Zinc	1mg/l

We have included an increased limit on the volume of the discharge. This is set at 100m^3 over 7 days, as per the Application from the Operator.

Monitoring

We have decided that monitoring should be deleted for the following parameters:

All process monitoring requirements in Table S3.3 (related to emissions point A6 for the solvent combustion process which has been removed in this variation) including exhaust gas temperature, pressure, oxygen content and water vapour content.

All monitoring of residue quality in Table S3.4, monitoring composition of APC Residues for metals (Sb, Cd, Tl, Hg, Pb, Cr, Cu, Mn, Ni, As, V, Co & Zn), Dioxins, Furans and dioxin like PCBs (including soluble fractions). These monitoring requirements were also removed due to the surrender of the combustion Activity.

Reporting

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

- Total Organic Carbon / Loss on Ignition (in Boiler Ash);
- Metals/Dioxins/Furans and Dioxin like PCBs (in Boiler Ash);
- Total Soluble Fractions of Metals etc (in Boiler Ash, as above); and
- Functioning and monitoring of the incineration plant;
- The Annual production and treatment of:

    - Total Secondary Liquid Fuel incinerated;
    - Electrical energy produced;
    - Thermal energy produced as steam;
    - Electrical energy exported;
    - Electrical energy used on installation; and
    - Fuel Gas used on installation.
- Performance parameters including:
    - Electrical energy exported, imported and used at the installation;
    - Fuel gas consumption;
    - Mass of Boiler Ash produced;
    - Mass of APC residues produced;
    - Mass of other solid residues produced;
    - Ammonia consumption;
    - Activated carbon consumption;
    - Lime consumption; and
    - Water consumption.
- Reporting Forms for Residues.

Technical competence

Technical competence is required for activities permitted.

The operator is a member of the CIWM/WAMITAB scheme**.**

We are satisfied that the operator is technically competent.

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 UKHSA.

Brief summary of issues raised: Concerns surrounding the Air Quality submission and some limitations of the information provided. Despite these limitations on the modelling and information, no significant concerns were raised by the Application or proposed Activities on site.

Summary of actions taken: Our Air Quality modelling experts (AQMAU) were consulted on the Air Quality Modelling and to establish any issues with the information provided by the Applicant. Based on the information provided, there are no additional concerns raised and the technology and Activity is deemed to comply with the relevant guidance and with the BAT for this sector. All monitoring and limits set within the permit will be in line with BAT and any changes to the operations or exceedances of ELVs will require further information and work from the Applicant.

Response received from Natural England.

Natural England responded to ask for the Environment Agency to consider the in-combination effects in the Habitats Risk Assessment (HRA2) – this work done had been done by the EA based on the initial work in HRA1, it was concluded that none would act in combination. This work was transferred to the appropriate section of HRA2 and the same conclusion was reached; that it would not have an adverse effect on the designated sites. Natural England had no further comments, therefore the final assessment was sent to them for information only.