

Natural Resources Wales permitting decisions

J. Reid Trading Limited

Decision Document

(Sandycroft Refrigerant Transfer Operation)

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Bespoke Permit Variation

The application permit variation number is: EPR/MP3531MD/V006

The applicant/operator is: J. Reid Trading Limited

The Installation is located at: Refrigerant Transfer Operation, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ

We have decided to issue the variation for Refrigerant Transfer Operation operated by J. Reid Trading Limited.

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.

Key issues of the decision

How we reached our decision

Receipt of Application

The application for a normal variation was submitted to Natural Resources Wales on 28 February 2021. The application was duly made on 15 October 2021.

During the determination process a Schedule 5 Notice requesting for further information was issued to the Operator on 8 December 2021. A response to the notice was received on 6 January 2022 and the determination process was able to continue.

Confidential information

A claim for commercial confidentiality was made by the Operator as part of their response to the Schedule 5 Notice requesting further information submitted to NRW in January 2022. The Operator subsequently withdrew their claim. No other claims for commercial or industrial confidentiality have been made by the Operator.

Consultation

There was no requirement to carry out a consultation on this application, as this is a normal variation, and the site is not registered as a Site of High Public Interest (HPI Site).

Legislation

The variation will be issued, under Regulation 20 of the EPR. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is an installation as described by the IED.

We address the legal requirements directly where relevant in the body of this document. NRW is satisfied that this decision is consistent with its general purpose of

pursuing the sustainable management of natural resources (SMNR) in relation to Wales and applying the principles of SMNR. In particular, NRW acknowledges that it is a principle of sustainable management to take action to prevent significant damage to ecosystems. We consider that, in granting the Variation Notice and consolidated Permit a high level of protection will continue to be delivered for the environment and human health through the operation of the Facility in accordance with the permit conditions. NRW is satisfied that this decision is compatible with its general purpose of pursuing the sustainable management of natural resources in relation to Wales and applying the principles of sustainable management of natural resources.

The facility

The regulated facility covers an area of less than one hectare and is located on Sandycroft Industrial Site in Deeside at National Grid reference SJ 33266755. The River Dee is situated 270 metres North of the Site. The regulated facility is an installation permitted to accept up to 2,250 tonnes per annum of hazardous waste materials, with a maximum total storage capacity of 100 tonnes. The facility comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations as well as the following directly associated activities:

- S5.3 A1 (a)(iv) – Disposal or recovery of hazardous waste in a facility with a capacity exceeding 10 tonnes per day involving repackaging prior to submission to any of the other activities listed in this Section or in Section 5.1.

Directly Associated Activities include:

- R3 – Recycling / reclamation of organic substances which are not used as solvents (The reclamation and reuse of Hydrochloro fluorocarbons (HCFCs), Hydrofluorocarbons (HFCs) and Hydrocarbons (HCs) subject to analysis, using distillation separation techniques);

- R4 – Recycling / reclamation of metals and metal compounds (The reclamation for reuse of receptacles subject to satisfactory inspection. The return of receptacles to original owners. Venting of air gases to atmosphere and rendering receptacles unserviceable);
- R5 – Recycling / reclamation of other inorganic materials (The reclamation of inorganic products subject to analysis and using distillation separation techniques); and
- R13 – Storage of waste pending any of the operations numbered R1 to R12. (The storage of gases and receptacles for the above R3, R4 and R5 processes).

The dismantling of refrigeration units and incineration of waste gases collected takes place off-site and as such does not form part of these permitted activities.

The site

There are two designated Special Areas of Conservation (SAC) located within 10km of the installation. These are the River Dee and Llyn Tegid which is located 270 metres north of the installation and the Deeside and Buckley Newt site, located 3,347 metres from the installation. The proposed changes to the permit will not result in any new point source emissions from the installation, thus there is no significant risk of adverse impact on the identified sites from emissions from this installation.

Proposed Changes

This Variation Notice and consolidated Permit introduces two new Directly Associated Activities (DAAs) into the existing environmental permit. The DAAs incorporate a new SF6 Recovery System and the temporary storage of waste oils pending off-site recovery. An additional waste type (13 02 08 Other engine, gear, and lubricating oils) has also been added to the permit for the storage of waste oils DAA.

The changes will not result in any increase in the annual throughput capacity of the permitted site, which will remain at 2,250 tonnes per annum. Onsite storage will also remain as per existing permitted maximum quantity of 100 tonnes.

SF6 Recovery System

Sulphur hexafluoride (SF6) is a material used in electrical equipment because of its dielectric properties / electric polarization properties (i.e. very poor conductor of electricity). The global warming potential (GWP) of SF6 gas is extremely high with an estimated atmospheric lifespan in excess of 3,000 years.

The SF6 recovery system incorporates novel technology and is intended to process up to 1-2 tonnes per week of SF6 material via batch process. SF6 will arrive on site in liquid form stored in 1000kg drums. The maximum batch size to be processed will be 1,000kg (based on the maximum capacity of a single drum). The limitation in design will prevent the potential for overfilling of the system.

The newly proposed SF6 Recovery activity (Activity Reference A6) will be carried out inside a building, which is currently located outside the existing permitted boundary. A revised Site Condition Report and newly proposed permitted boundary plan were submitted in support of the application, to incorporate the additional land to be included within the permit boundary.

Waste Oil Storage

This variation also adds temporary storage of waste oil to the permit (Activity Reference A7). The storage area for waste oils will be located under cover. Wastes will be stored on drip trays providing appropriate secondary containment. The Operator has stated that waste oil will be stored in either 1,000litres IBCs (2 x 1,000L IBCs at any one time), in addition to individual 10-20l drums. The maximum storage capacity for all wastes to be stored on site at any one time will not increase as a result of this additional storage and will remain limited to 100 tonnes storage at any one time.

Table S1.1 within Schedule 1 of the permit is thus amended and replaced with the following:

Table S1.1 Activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
A1	S5.3 A1 (a)(iv) – Disposal or recovery of hazardous waste in a facility with a capacity exceeding 10 tonnes per day involving repackaging prior to submission to any of the other activities listed in this Section or in Section 5.1	D13 – Blending or mixing prior to submission to any of the operations numbered D1 to D12 D14 – Repackaging prior to submission to any of the operations numbered D1 to D13 D15 – Storage pending any of the operations numbered D1 to D14	Transfer of Chlorofluorocarbons (CFCs), Hydrochloro fluorocarbons (HCFCs), Hydrofluorocarbons (HFCs) and Hydrocarbons (HCs) from cylinders/drums into ISO tanks. The transfer of gases that fall within the definition of non-hazardous waste or hazardous waste H2 – H6, H8 and H14 of Schedule 3 to the Hazardous Waste (Wales) Regulations 2005 as amended. The storage of gases that fall within the definition of non-hazardous waste or hazardous waste H1 – H8 and H10 – H14 of Schedule 3 to the Hazardous Waste (Wales) Regulations 2005 as amended. The storage of liquids in lecture bottle cylinders for onward processing at a licensed site. Waste types specified in Table 2.2
Directly Associated Activity			
A2	HCFCs, HFCs and HCs Reclamation and recovery system	R3 – Recycling / reclamation of organic substances which are not used as solvents	The reclamation and reuse of Hydrochloro fluorocarbons (HCFCs), Hydrofluorocarbons (HFCs) and Hydrocarbons (HCs) subject to analysis, using distillation separation techniques
A3	Receptacle cleaning and reclamation	R4 – Recycling / reclamation of metals and metal compounds	The reclamation for reuse of receptacles subject to satisfactory inspection. The return of receptacles to original owners. Venting of air gases to atmosphere and rendering receptacles unserviceable.

A4	Reclamation of inorganic products	R5 – Recycling / reclamation of other inorganic materials.	The reclamation of inorganic products subject to analysis using distillation separation techniques.
A5	Storage of waste gases	R13 – Storage of waste pending any of the operations numbered R1 to R12.	The storage of gases and receptacles for the above R3, R4 and R5 processes.
A6	SF6 Recovery system	R5 – Recycling / reclamation of other inorganic materials.	SF6 Recovery using membrane, adsorption, techniques.
A7	Temporary storage of waste oils	R13 – Storage of waste pending any of the operations numbered R1 to R12.	The temporary storage of waste oils pending R3 or R5 processes

Waste types to be added

The following waste code for waste oils is to be added to Table S2.2 within Schedule 2 of the Permit.

Waste code	Description	Entry Type
13	OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19)	
13 02	Waste engine, gear and lubricating oils	
13 02 08*	Other engine, gear and lubricating oils	AH

Technical Assessment

This section of the decision document considers the potential environmental impacts posed by the new activities.

The new activities to be added to the permit will not result in a new point source emission to atmosphere, surface waters, sewer or land or groundwaters. Thus there have been no changes required to Emissions and Monitoring Tables listed within Schedule 3 of the permit.

The primary risks associated with the new activities relate to abnormal or emergency scenario conditions, and the potential for fugitive emissions release.

Soil

The operator has a duty to ensure that soil and groundwater are protected in order to meet the requirements of Articles 14 (1)(b), 14(1)(e) and 16(2) of the IED.

The operator has provided a description of the condition of the additional land to be included within the permitted boundary. The new land incorporates an existing building which is serviced with concrete impermeable floor.

We consider the description of the land provided within the Site Condition Report is satisfactory. The decision was taken in accordance with our guidance on site condition reports – guidance and templates (H5).

Odour

Based upon the supporting information included within the application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise odour emissions from the newly proposed activities.

Noise

Based upon the supporting information included within the application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise noise and/or vibration from the newly proposed activities.

Fugitive emissions

Based upon the supporting information the operator has provided within their application, we are satisfied that the control measures proposed can be considered as appropriate measures, and that these will be in place to prevent potential for fugitive emissions release.

In consideration that the SF6 Recovery System technology is novel, an Improvement Condition (IC17) has also been included within Table S1.3 of the permit to ensure that

operational procedures specific to the new system are reviewed, following commissioning, with updated documentation to be submitted to NRW for approval. This is to ensure that the operating procedures remain fit for purpose following commissioning.

Monitoring

As there are no additional emission points associated with the new activities, there is no requirement for any additional point source monitoring. Process monitoring of the SF6 Recovery System is described within the new Operating Procedures submitted in support of this variation application. These procedures have been included within Table S1.2 of the permit.

Reporting

Table S4.2 within Schedule 4 of the permit has been updated to require the Operator to report the total amount of SF6 Gas recovered at the site per annum.

Table S4.2: Annual production/treatment	
Parameter	Units
Chlorofluorocarbons (CFCs), Hydrochloro fluorocarbons (HCFCs) and Hydrofluorocarbons (HFCs)	tonnes
Inorganic gases speciated	tonnes
Organic gases speciated	tonnes
Metallic packaging	tonnes
Total amount of waste treated	tonnes
Tonnes of oil recovered	tonnes
Total amount of SF6 recovered	tonnes

Operating techniques

We have reviewed the techniques to be used by the operator and compared these with the relevant guidance notes and against relevant BAT Conclusions detailed within the Waste Treatment BREF Document (EU 2018) and in accordance with Sector Guidance Note S5.06 (Guidance for the Recovery and Disposal of Hazardous and

Non-Hazardous Waste). We consider that the Operators proposed techniques represent appropriate techniques for the new activities.

Raw materials

Both activated carbon and activated alumina raw materials will be consumed as part of the SF6 recovery system. Annual consumption will be dependent on the contamination levels contained within the SF6 gases to be treated.

Incorporating the application

As detailed above, we have specified that the applicant must operate the permit in accordance with descriptions and methodologies stated within the application, including all additional information received as part of the determination process.

Operating procedures for the new activities are specified within the Operating Techniques Table S1.2 of the permit. Table S1.2 Operating Techniques is thus amended and replaced with the following:

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The responses to section B2.1.4 to B2.1.24 of the application	14/12/2006
Notice requiring further information	Waste pre-acceptance, waste acceptance and waste storage procedures	22/02/2007
Application for variation	Waste pre-acceptance, acceptance, storage, and transfer operations	22/02/2009
Response to Schedule 5	Activities, infrastructure, security, risk, acceptance, storage and transfer	20/07/2009
Additional information	Consolidated submission	16/09/2009
Additional information	Additional	25/09/2009
Application for variation	The response to sections C3.1 to C3.7 and appendix 5	21/11/2011
Additional information	All	06/12/2011

Table S1.2 Operating techniques

Description	Parts	Date Received
Response to regulation 61(1) Notice – request for information dated 05/04/2019 detailing how the Operator will comply with the BAT conclusions for Waste Treatment, under Directive 2010/75/EU of the European Parliament and of the Council	All	27/09/2019
Additional information for regulation 61(1) Notice	All	13/03/2020
Application for variation EPR/MP3531MD/V006	The responses to section C2 to C3 of the application	28/02/2021
Application for variation EPR/MP3531MD/V006	JRT-DWG-WTO-01B - Layout Plan JRT-PVSR-2102 – Variation Report WTO-WP01r6 – Pre-acceptance of waste WTO-WP02r6 – Acceptance of waste WTO-WP03r6 - Storage of waste	15/10/2021
Response to Schedule 5 Notice – request for information dated 08/12/2022	JRT-PVSR-2201 2001-PID-02B-Layout1	06/01/2022

Environment management system

Updated and new Operational Techniques submitted with this variation application (as listed within Table 1.2 of the permit), along with documentation submitted in response to Improvement Condition 17 (IC17) will be incorporated into the Operators existing Environmental Management system for the permitted site.

Technical competence

Technical competency is required for the permitted activities. The Operator has provided evidence of continued technical competency to an approved scheme and has thus demonstrated technical competency.

OPRA

There are no changes to the Opra score for the site, as a result of this variation. The OPRA score at permit issue remains 45.