



U M B R E L L A
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Non-Technical Summary

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Figure 4 Product procedure process flow diagram..... **Error! Bookmark not defined.**

1 INTRODUCTION

This Non-Technical Summary (NTS) accompanies the application for variation to an bespoke waste permit to modernise in accordance with legislation from a waste permit to an installation permit and to add an additional waste code. Site is located at 54 Caswell Road Brackmills Industrial Estate Northampton NN4 7PW.

In approx. 2012 Installation Emissions Directives (IED) was issued and those applicable bespoke waste permits that fell within the remit as defined by the IED regulations had a transition period to apply and vary their operations to be compliant. Unfortunately permit EPR/AP3398LQ was not varied to an IED permit in 2012 and now needs to be varied under a substantial variation application rather than a normal variation as described in the pre application advice received in section 01 of this application pack.

MISWA Chemicals Limited was established in 1979 and has operated in around Northamptonshire creating and exporting products worldwide. An bespoke environmental permit was applied for and issued On 28th April 2009 however to date the site has not operated this permit fully.

The existing permit enables the operation of;

The main features of the facility are as follows. Glycol and water are recovered from waste glycol streams using filtration, settlement, flocculation, and distillation. The recovered glycol and water are then used as raw materials in other downstream processes.

2 APPLICATION

The original waste activities on site are shown in Table 1 Original waste activities below, the new permitted activities being applied for under IED are shown in Table 2 Permitted Operations. The disposal and recover codes remain the same but the activity reference changes from A17 to S5.3 A(1)(ii) Physico – chemical treatment. The variation also seeks to add one waste code to the existing list of waste shown in section 09 of this application pack.

- 16 01 13* Brake fluids

Table 1 Original waste activities

| Activity Reference | Description of activities for waste operations | Limits of activities |
|--------------------|---|--|
| A17 | R3 – Recycling/Reclamation of organic substances which are not used as solvents R5 – Recycling/reclamation of other inorganic materials R13 – Storage of wastes pending any of the operations R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) | R5 operation is to be limited to the separation of water from the waste glycol Treatment consisting only of screening, flocculation, centrifuging, filtration, distillation condensing and storage of waste |

2.1 Site Location

The National Grid Reference (NGR) is SP 77565 58276, Eastings and Northings 477565 , 258276 and What Three Words saving.abode.cove.

Site is accessed by the A 45 and Caswell Road, Site is located south west of Northampton Town center.

Figure 1 Aerial Image



(Showing location of site)

3 PERMITTED OPERATIONS

Table 2 Permitted Operations

| Activity Reference | Disposal and Recovery Codes | Limits of activities |
|--|---|---|
| S5.3 A(1)(ii) Physico – chemical treatment | R3 – Recycling/Reclamation of organic substances which are not used as solvents R5 – Recycling/reclamation of other inorganic materials R13 – Storage of wastes pending any of the operations R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) | R5 operation is to be limited to the separation of water from the waste glycol Treatment consisting only of screening, flocculation, centrifuging, filtration, distillation condensing and storage of waste Glycol (24 hour period) Processing capacity of up to 150 tonnes per day. Brake Fluid Processing capacity of up to 20 tonnes per day. |
| Section 5.6 - temporary or underground storage of hazardous waste. | R13 – Storage of wastes pending any of the operations R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) | Storage |

There is no change to the existing on site waste activities (which have never been operational and will continue to be non-operational) proposed the application covers the additional activities.

3.1.1 Directly Associated Activity

- Storage of non-hazardous waste (any amount) prior to treatment.

3.2 Total Annual Tonnage

The total quantity of waste accepted at the site shall be up to 45,000 tonnes per annum.

3.3 Waste Acceptance

Waste accepted at the site is restricted to that described in the List of Wastes, Section 09, 012.1_05_007 List of Waste of this application pack.

As a minimum, the waste acceptance procedure will include.

- address/location
- amount of waste being accepted
- identity of the producer
- identifiable EWC Code

- the physical appearance of the waste

Site will only accept waste that is permitted and complies. Non-conforming wastes will be rejected or if identified after delivery, isolated and returned to producer.

Incoming waste will be brought to the site by registered waste carriers. Each load would be subject to the waste acceptance procedure and would be inspected by the Technically Competent Manager (TCM) or appropriately trained individual prior to being stored and prior to treatment.

3.4 Waste Storage and Handling

All incoming waste break fluid will be received and stored in Intermediate Bulk Containers (IBC containers as per MD22024 - BERP Project Site Drawing - Rev B - Dated 30-10-2023. No IBCs will be stored externally. Full IBCs are unloaded in to the building at which point they are stored in designated locations. When placed in the process they are drained using gravity once empty they are placed back in to an internal storage area in a rotational manner.

As the break fluid is processed it is pumped through a series of pipes. Once the process is completed it is transported via a pipe network to a tank farm where it is stored with secondary containment. This storage is in addition to the existing tank farm under the original permit however, the tanks being used are being brought in to scope of the waste activities and are existing infrastructure from previous operations.

Waste will arrive at site in IBC. It will go through the waste acceptance procedures detailed in the Environmental Management System (EMS) 012.1_05_003 contained within section 06 of this application pack.

Table 3 Total Storage at Any One time

| 05 | Wastes from Petroleum Refining, Natural Gas Purification and Pyrolytic Treatment of Coal | Storage volumes | Storage Type |
|-----------|--|-----------------|----------------|
| 05 07 | 05 07 | | Tank Farm/IBCs |
| 05 07 99 | wastes not otherwise specified (wastes containing glycol only) | Up to 500 tonne | |
| 16 | Wastes not otherwise specified in the list | | |
| 16 01 | end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08) | | Tank Farm/IBCs |
| 16 01 14* | antifreeze fluids containing dangerous substances | Up to 500 tonne | Tank Farm |
| 16 01 15 | antifreeze fluids other than those mentioned in 16 01 14 | | |
| 16 03 | off-specification batches and unused products | | |

| | | | |
|-----------|--|-------------------------------|----------------|
| 16 03 05* | organic wastes containing dangerous substances (wastes containing glycol only) | | |
| 16 03 06 | organic wastes other than those mentioned in 16 03 05 (wastes containing glycol only) | | |
| 16 10 | aqueous liquid wastes destined for off-site treatment | | Tank Farm/IBCs |
| 16 10 01* | aqueous liquid wastes containing dangerous substances (wastes containing glycol only) | Up to 500 tonne | IBCs |
| 16 10 02 | aqueous liquid wastes other than those mentioned in 16 10 01 (wastes containing glycol only) | | |
| 16 10 03* | aqueous concentrates containing dangerous substances (wastes containing glycol only) | | |
| 16 10 04 | aqueous concentrates other than those mentioned in 16 10 03 (wastes containing glycol only) | | |
| 16 13* 01 | Brake Fluids | Up to 50 tonnes 50,000 litres | |

3.5 Waste Processing

3.5.1 Waste Delivery and Storage

- Both driver and Miswa Yard Co-Ordinator must be in attendance at all times.
- All drivers/operators must hand the documentation to the Yard Co-Ordinator for verification.
- The Yard Co-Ordinator will instruct the driver where to position his vehicle.
- On receipt of the delivery documentation the Yard Co-Ordinator shall hand the driver the internal delivery procedure which they will read and sign it. The Yard Co-Ordinator will read and sign the driver's paperwork and retain a copy.
- The Yard Co-Ordinator will wear a suitably charged gas monitor at all times during the delivery.
- The Yard Co-Ordinator will secure the site by closing the entrance gates, not locking.
- The Yard Co-Ordinator will place physical barriers across entrances to the operational area to prevent unauthorized staff members and vehicles accessing the unloading point.
- The driver must be shown to the location of the Safety Shower in case of accidental contact
- Each individual Waste brake fluid IBC shall be identified with a unique internal code which shall be noted down on the list report.
- A one litre sample will be extracted from each IBC, it is important that the sample is labelled with the same unique identifier as the IBC that it was extracted from.
- Each 1 litre sample will be taken over to the laboratory, along with the list report. Here the QC lab technician will follow the Waste Acceptance QC working instruction.

- If any of the samples are to fail the QC process then this will be noted on to the list report and a non-conformance will be raised listing the results leading as to why that particular IBC failed.
- The now completed list report can be handed over to the Yard Co-Ordinator so that he/she will be able to identify which IBC's have passed the pre-acceptance tests and which have failed.
- The failed IBC's will remain on the HGV and will return to the waste provider. The waste provider will receive a report including the results as to why the IBCs in question have been rejected.
- The IBC's that have passed the waste acceptance procedure can now be unloaded, by use of fork lift truck. These will be placed into the designated waste storage area, highlighted in the permit boundary extension.

3.5.2 Waste Treatment Summary

1. Using the "waste batch sheet" fill out the necessary information:
 - Name of Batch Mixer
 - Time of start
 - The Date
 - The waste IBC identifier
2. Use a forklift truck to place the Waste Brake fluid IBC on to IBC 0. When ready slowly open the tap on the bottom of the IBC. The waste Brake Fluid will begin to flow into IBC 0. It is important that a slow sensible flow rate is achieved so that the top layer is not reached too quickly.
3. The valve connecting IBC 0 and the plant can now be emptied and the double diaphragm pump can begin to operate. This will push the spent brake fluid through a multi-filtration process.
4. The re-claimed brake fluid will then be stored in PR23 until required.
5. Once all of the IBC's from the delivery have been reclaimed, all IBC should be decanted into one single IBC.

3.5.3 Residual waste

As part of contractual arrangements all residual waste is returned to Enva for onward treatment/disposal at another appropriately authorised facility.

Waste rejected will be noted in the site diary including a description, volume and type of container. Appropriate duty of care paper work will be completed.

3.5.4 Waste Rejection

Non conforming waste is rejected and returned to Enva. The waste acceptance procedures detailed in section 012.1_05_003 EMS.

Waste rejected will be noted in the site diary including a description, volume and type of container. Appropriate duty of care paper work will be completed.

description, volume and type of container. Appropriate duty of care paper work will be completed.

There are no emissions points as apart of the process. As described in the EMS the process is completely closed and material is moved from IBCs to tank farm through the process via pipe work.

Drainage is compliant wit CIRIA C736. All clean water is separated out to reduce the risk of pollution to the environment.

3.6 New permitted areas

The increase in permit boundary is to encompass the new on site process of 'Brake fluid processing' storage locations of IBCs, transmitting pipe work and storage tanks. The remainder of the storage tanks included in previous permit do not change.

3.7 Site Management

A Technically Competent Manager (TCM) manages the operation and attends site in compliance with the regulatory defined attendance requirement. Individuals such as site supervisors or yard managers can be trained to carry out ongoing site operations, office and plant operations in lieu of the TCM when not in attendance.

During hours of operation there will be a minimum of one member of staff on site, who will be fully conversant with the requirements of the Environmental Permit and the Environmental Management System regarding the following:

- waste acceptance and control procedures
- operational controls and environmental monitoring
- maintenance
- record keeping
- emergency action plans
- Fugitive Emissions

4 TECHNICAL STANDARDS

The following technical standards have been utilised in the design and development of the proposed activities, the preparation of this Environmental Permit application, and will govern permitted site activities:

- Sector Guidance Note IPPC S5.06 'Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous waste' May 2013 European Directive 2010/75/EU — on industrial emissions
- Noise and vibration management: environmental permits¹
- Develop a management system: environmental permits.²
- Integrated Pollution Prevention and Control Reference Document on Best Available Techniques on Emissions from Storage July 2006
- Control and monitor emissions for your environmental permit³
- Containment systems for the prevention of pollution (C736)⁴
- Best Available Techniques (BAT) Reference Document for Waste Treatment Industrial Emissions Directive 2010/75/EU (Integrated Pollution Prevention and Control); EUR 29362 EN; Publication Office of the European Union, Luxembourg, 2018
- Chemical Waste Appropriate Measures⁵

As an 'installation' under the Industrial Emissions Directive the permitted site must achieve 'BAT'. Best Available Techniques (BAT) means the available techniques which are the best for preventing or minimising emissions and impacts on the environment. Techniques include both technology used and the way the installation is designed, built, maintained, operated and ultimately decommissioned.

¹ <https://www.gov.uk/government/publications/noise-and-vibration-management-environmental-permits/noise-and-vibration-management-environmental-permits>

² <https://www.gov.uk/guidance/develop-a-management-system-environmental-permits>

³ <https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit>

⁴ <https://www.ciria.org/>

⁵ <https://www.gov.uk/guidance/chemical-waste-appropriate-measures-for-permitted-facilities/4-waste-storage-segregation-and-handling-appropriate-measures>

5 RISK ASSESSMENT AND MANAGEMENT

An Environmental Risk Assessment (ERA) (012.1_05_002) is located in section 05 of this application pack. The ERA identifies the sites setting, environmental hazards caused by the waste activity and the operators mitigation methods whether than be hard engineering or managerial procedures. This mitigation is designed to protect the environment from fugitive emissions or point source emissions if stated.

The site is operated by **MISWA Chemicals Limited** An Environmental Management System (EMS) has been created detailing the sites operations and any environmental controls. The EMS explains the sites operations, maintenance procedures and describes the emergency response in the event of an accident and or incident

5.1 Noise and Vibration Management Plan

During the pre application stage the EA were requested to identify if an Noise and Vibration Management Plan (NVMP) was required. An Noise Impact Assessment was carried out and it shows no adverse impact at receptors. The requirement for an Noise and Vibration Management Plan has been screened out the monitoring results are included in the Environmental Risk Assessment (ERA 012.1_05_002).

5.2 Odour Management Plan

During the pre application stage the EA were requested to identify if an Odour Management Plan (OMP) was required. The EA identified that it was not the ERA 012.1_05_002 presented in section 05 further supports this.

5.3 Dust Management Plan

During the pre application stage the EA were requested to identify if an Dust Management Plan (DMP) was required. The EA identified that it was not the ERA 012.1_05_002 presented in section 05 further supports this.



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