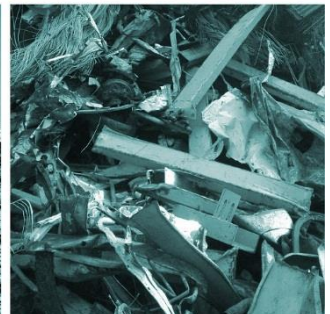
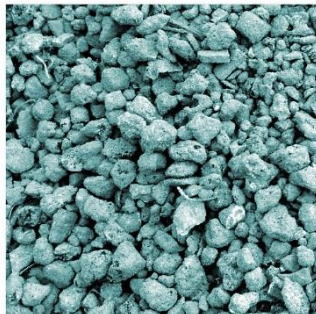
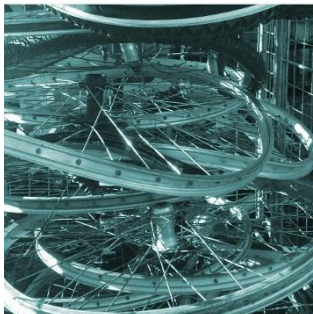
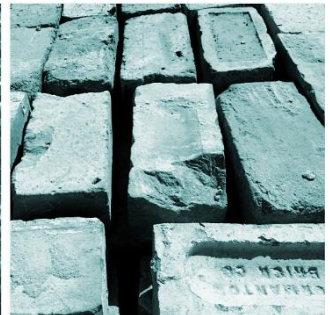
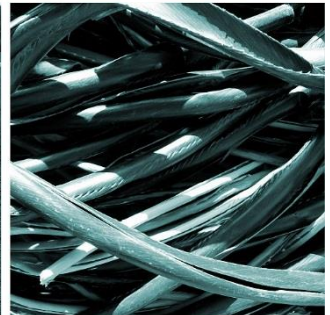
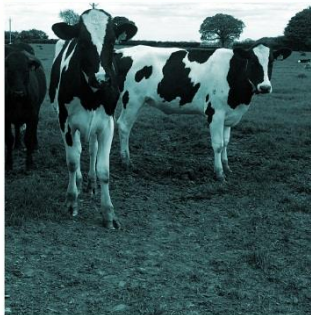
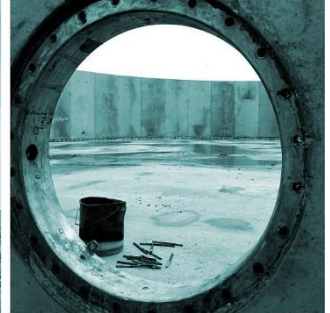


# **BROCKLESBY LIMITED**

## **PERMIT VARIATION**

### Summary of Proposed Changes

June 2021



Client: Brocklesby Limited  
Document Reference: HC1676-02

# REPORT SCHEDULE

**Client:** Brocklesby Limited

**Operator:** Brocklesby Limited

**Project Title:** Brocklesby Limited - Permit Variation Application

**Document Title:** Summary of Proposed Changes

**Document Reference:** HC1676-02

**Report Status:** Final 1.0

**Project Director:** Joanna Holland

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## 1. BACKGROUND TO PROPOSED CHANGES

### 1.1. Background to Proposed Changes

- 1.1.1. In December 2019 a fire occurred at the Brocklesby Limited waste processing facility, causing damage to parts of the site to a degree whereby areas of the plant would need replacement and refurbishment.
- 1.1.2. This variation application is being made to the Environment Agency to allow for changes at the site arising from the site refurbishment plan to be reflected in the site permit.
- 1.1.3. Whilst undertaking to replace significant parts of the site infrastructure, the operator has taken the opportunity to review operations at the site, and to consider where improvements and operationally desirable changes can be made as part of the proposed redevelopment plan.
- 1.1.4. Below is a summary of the proposed changes that are to be considered in this permit variation application.



## 2. PROPOSED CHANGES

### 2.1. Replacement of Boilers

- 2.1.1. The two boilers that formerly served the site (operating on fuel oil) will be replaced with two new units.
- 2.1.2. The two new boilers will be 10 tonne per hour capacity, 10 bar, gas fired steam boilers. A new dedicated mains natural gas line will be installed at the site to allow for operation of the boilers in this way.
- 2.1.3. The new boilers to be installed will incorporate improved energy efficiency and environmental performance measures, including installation of flue gas economisers to recover heat, variable speed drives (VSD) on pumps, a reverse osmosis (RO) plant, condensate recovery system, and steam, gas and water meters to be fitted to monitor utility usage. The new boilers will be meet the air emission limits specified in the Medium Combustion Plant Directive (2015/2193/EU).

### 2.2. Removal of Hazardous Waste Treatment Operations from the Permit

- 2.2.1. Activity reference A5 of the current permit allows the operator to carry out chemical treatment of up to 25,000tpa of hazardous wastes, as listed in table S2.7 of the permit. There is one permitted hazardous waste code listed in this table which is 07 01 01\* - *aqueous washing liquids and mother liquors (limited to soap wastes from the manufacture of bio diesel)*. The operator no longer wishes to carry out this activity for this waste type at the site and proposes that the facility to accept this hazardous waste stream be removed from the permit.
- 2.2.2. The operator proposes to continue to carry out chemical treatment as specified currently on the permit for hazardous wastes, but under this variation this chemical treatment is to occur for non-hazardous wastes only.
- 2.2.3. The operator is applying to increase the total non-hazardous waste treatment capacity at the site as outlined below.

### 2.3. Increase of Annual Treatment Capacity and Chemical Treatment of Non-Hazardous Wastes

- 2.3.1. The operator is applying to increase the total processing capacity of non-hazardous waste at the site to a total annual treatment capacity of 225,000tpa.
- 2.3.2. The operator is applying to undertake chemical treatment of non-hazardous wastes to achieve oil recovery via pH correction in addition to the physical and heat treatments currently stated for non-hazardous wastes on the existing permit. pH correction is the same chemical treatment activity already undertaken at the site and included on the site permit with respect to treatment of hazardous wastes.
- 2.3.3. There will be no changes to the waste processing capacity of the activity A1 stated in Schedule 1, Table S1.1 of the current permit. This is the activity listed under Schedule 1 Section 4.1 A(1) (a) (ii) of the EP regulations and described as 'production of esters'. The part of the site where processing of esters takes place was not damaged in any way during the site fire, and no refurbishment activities or changes to the process of production are scheduled for this part of the site. The processing capacity remains the same, at a capacity of 50,000 tonnes per annum. Feedstocks for the process will continue to be derived from onsite A4 activities as specified in

Table S1.1 of Schedule 1. In addition, some feedstocks are received at the site which are suitable for immediate processing under the A1 activity without the need for prior treatment at the site.

## **2.4. Addition of Two New Waste Codes at the Site**

- 2.4.1. The operator is applying to add two new non-hazardous waste codes to the permit for inclusion for hazardous waste treatment at the site. These might be for waste recovery purposes, or as raw material in the esterification process with or without pre-treatment. These EWC's are 19 02 10 and 19 08 09. Their suitability for inclusion on the permit has been considered and can be found in the site Environmental Risk Assessment HC1676-08.

## **2.5. An Increase in Waste Storage Capacity at the Site**

- 2.5.1. In order to accommodate the increase in annual tonnages of wastes processed at the site, the operator proposes to increase the available storage capacity at the site when installing a new tank farm at the site to replace the tanks destroyed in the recent fire. The new tank farm will consist of sixteen 150 tonne tanks, each 3.8m in diameter and 14.5m in height. There will also be four 500 tonne tanks, each 8m in diameter and 10m in height. The new tank farm total operational capacity will be 4,400 tonnes which represents an increase from the previous tank farm capacity of 1,500 tonnes. The new tank farm will be housed in a newly constructed concrete foundation with an impermeable containment bund around all tanks, which will achieve the necessary secondary containment capacity for the tanks. Additional tertiary containment measures will also be installed at the perimeter of the site.
- 2.5.2. The total storage capacity at the site (tank farm and other pre-existing tanks) will be approx. 6,000m<sup>3</sup>, compared to the former total storage capacity of approx. 3,000m<sup>3</sup>.
- 2.5.3. The new tank farm will have a dedicated odour abatement system, using carbon filters to abate odours from air displaced from the tanks on filling.
- 2.5.4. Adjacent to the tank farm will be a new tanker loading/unloading area. This area will incorporate a drainage gully, leading to a 3m<sup>3</sup> concrete pit for containment of any leakage or spills during loading/unloading. The general loading/unloading area has been sized in order to achieve containment should the contents of a full tanker be lost during loading/unloading.
- 2.5.5. There will be a new system of level controls within the new tank farm which will prevent over filling during delivery and allow continuous monitoring of tank levels via a central SCADA Control System.

**2.6. Changes in the Proposed Odour Abatement Equipment**

- 2.6.1. New odour abatement equipment will be installed in the factory building to replace the system that was damaged in the fire.
- 2.6.2. There will be new carbon filters installed to abate odorous emissions arising from displaced air generated on filling of tanks in the new tank farm.
- 2.6.3. A re-evaluation of the odour abatement measures at the whole permitted site has been undertaken and is presented with the Environmental Risk Assessment HC1676-08.
- 2.6.4. The odour management plan for the site has been updated to reflect these changes.

**2.7. Changes to the Site Layout and Drainage Arrangements**

- 2.7.1. The permitted boundary of the site will remain unchanged, but there will be changes to the overall plant layout and drainage at the site.
- 2.7.2. New Welfare facilities (for approx. 60 employees), a new engineering workshop, offices and boiler house building will be installed, all similar to the previous facilities in size and provision.
- 2.7.3. The addition of a second weighbridge will allow for a one-way traffic system to be operated at the site with an 'in' weigh point and an 'out' weigh point. This will allow the operator to manage the increase traffic movements at the site associated with the increased processing capacity.
- 2.7.4. A new trade effluent discharge consent has been issued to the site by Yorkshire Water to allow discharge of boiler blowdown water to the main public sewer.
- 2.7.5. There will be a new bund arrangement constructed to provide adequate containment arrangements for the new enlarged tank farm.
- 2.7.6. Additional tertiary containment arrangements will be installed at the perimeter of the site.

**2.8. Changes to the Location and Number of Emissions Points at the Site**

- 2.8.1. There will be a new discharge point to main sewer in line with the trade effluent discharge consent issued by Yorkshire Water.
- 2.8.2. There are new discharge points associated with the odour abatement units for the tank new tank farm
- 2.8.3. There is a pre-existing surface water discharge point via an interceptor at the site that has been evident for some time and is currently controlled and monitored via the site EMS. This discharge point is not currently reflected in the site emissions points plan and will be added as part of this

variation. Details of the site monitoring schedule for surface water discharged from the site is included in HC1676-18, Measures to Demonstrate BAT.

- 2.8.4. Similarly, pre-existing emissions points from the extraction and abatement system in the waste processing building are not currently included on the site emissions points plan. The site emissions points plan has been updated to include these emissions.

## **2.9. Other Changes**

- 2.9.1. Several updates and additions have been made to the site Environmental Management System to accommodate the changes that have taken place, learning points from the recent fire incident, and recent changes to Best Available Techniques for waste treatment operations.
- 2.9.2. The current permit still includes six improvement conditions which were scheduled to be completed in June 2013. These have been completed and the Operator now requests that they be removed from the permit.
- 2.9.3. The operator requests that Schedule 2 of the permit showing the list of permitted wastes be decoupled from specific processing equipment at the site. The reason for this request is further explained in HC1676-10 waste types to be accepted.





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