SCR evaluation (Low Impact Installation)

Name of activity, address and NGR	Southwark Biodiesel. Unit 2, King James Court, King James Street, Southwark, London, SE1 0DH. NGR of the centre of the site is TQ 319 796. Environmental Permit Surrender Reference is EPR/ZP3233HS/S002.

Document reference, date and version of application SCR	Document 5 – H5 'Site Condition Report Southwark Biodiesel (Uptown Biodiesel Ltd.)' dated 08 May 2018. Document 6 – Closure Notice 'Application Site Report for PPC Application Southwark Biodiesel, Uptown Oil Limited Application Number PP3336XV' dated 07/04/2008 and updated 08/04/2018. Document 8 – 'EPR Compliance Assessment Report Pre-Surrender Inspection' dated 03 April 2018, ref: ZP3233HS/0304849.

1.0 Site details

Has the applicant provided the following information as required by the application SCR template?

Site plans showing site layout, drainage, surfacing, receptors, sources of emissions/releases and monitoring points.

The Operator provided a Site Condition Report (SCR) at the time the original application was made. Drawings and plans were provided by the Operator and reviewed and accepted by the Environment Agency at the original application stage.

2.0 Condition of the land at permit issue

Has the applicant provided the following information as required by the application SCR template?

a) Environmental setting including geology, hydrogeology and surface waters.
b) Pollution history including:
- pollution incidents that may have affected land
- historical land-uses and associated contaminants
- visual/olfactory evidence of existing contamination
- evidence of damage to existing pollution prevention measures.

c) Evidence of historic contamination (i.e. historical site investigation, assessment, remediation and verification reports (where available).
d) Has the applicant chosen to collect baseline reference data?

A Conceptual Site Model was provided in the original application SCR in Section 6.7 and reviewed and accepted by the Environment Agency at the original application stage. No previous land or groundwater pollution events were identified by the desk top study or from the site reconnaissance.

The underlying geology of the site is likely to consist of:
Made Ground – predominantly consisting of concrete or asphalt overlain on cobbles. In some areas there is a layer of sand and gravel below this.
Kempton Park Gravels – course stony material with a high leaching potential. Classed as a minor aquifer and is upto 10m thick.
London Clay Formation – sandy, fine grained silt and clay between 2m and 28m thick, and an undivided layer of silty clay between 80m and 140m in thickness.
Harwich Formation – sandy pebbly bed upto 20m thick, mottled in parts with beds of sand and shelly clay.
Thanet Sand Formation – 8m to 28m thick. Is a minor aquifer.
Upper Chalk Formation - Chalk with flints 68m to 105m thick. Is a major aquifer.

According to the Environment Agency, the groundwater at the site is expected to be shallow due to the underlying London Clay Formation. The facility is approximately 3km from the nearest groundwater protection zone. There are no groundwater abstractions nearby due to the close proximity of the tidal River Thames. No surface water features existed on or close to the site (only within 10km of the site). The existing surface water drainage system was only used to capture uncontaminated hardstanding rainwater runoff.

3.0 Permitted activities

Has the applicant provided the following information as required by the application SCR template?	Response (Specify what information is needed from the applicant, if any)
a) Permitted activities. b) Non-permitted activities undertaken at the site.	

The scheduled activity was S4.1 Part A(1)(a)(ii) – producing organic chemicals such as organic compounds containing oxygen such as alcohols, aldehydes, ketones, carboxylic acids, esters, ethers, peroxides, phenols and epoxy resins. Directly Associated Activities at the site included raw materials handling and storage, finished product handling and storage, waste handling and storage, waste and process effluents. Waste generated on site included effluents and packaging.

The installation was designed to produce biodiesel from used cooking oil. The facility met the low impact installation (LII) criteria as follows:

- low maintenance, low environmental impact plant design and low odour potential (rancid oils rejected)
- process doesn't rely heavily on water and therefore creates minimal waste water discharges
- no active abatement, discharges to ground, hazardous or dangerous substances produced
- <10% of COMAH lower tier substances on site (methanol)
- limited handling of raw materials and wastes on site as per EA LII requirements
- no operator or site historical compliance issues.

3.0(a) Environmental Risk Assessment

The H1 environmental risk assessment should identify elements that could impact on land and waters, cross- referenced back to documents and plans provided as part of the wider permit application.

The Environment Agency reviewed the Operator's assessment for LII criteria at the time of the original permit determination and this was accepted as satisfactory.

3.0(b) Will the pollution prevention measures protect land and groundwater?

Are the activities likely to result in pollution of land?

The Environment Agency reviewed the Operator's assessment for LII criteria at the time of the original permit determination and this was accepted as satisfactory.

For dangerous and/or hazardous substances only, are the pollution prevention measures for the relevant activities to a standard that is likely to prevent pollution of land?

N/A.

Application SCR decision summary	Tick relevant decision
Sufficient information has been supplied to describe the condition of the site at permit issue	Yes.
Pollution of land and water is unlikely	Yes.
Date and name of reviewer:	**Liz Ebbs (NPS) – 14/06/2018.**

Operational phase SCR evaluation (Low Impact Installation)

4.0 Changes to the activities	
Have there been any changes to the following during the operation of the site?	**Response (Specify what information is needed from the applicant, if any)**
a) Activity boundaries b) Permitted activities c) "Hazardous pollutants" used or produced.	

Methanol recovery unit - due to the potential risk of methanol vapour within this building, the following was added after a site inspection from the Fire Service.

5.0 Measures taken to protect land

Has the applicant provided evidence from records collated during the lifetime of the permit, to show that the pollution prevention measures have worked?

Compliance with LII criteria was reported to the Environment Agency. There was no evidence that the facility breached this criteria during the lifetime of the permit.

A number of minor non-compliances were identified following a site visit on 14 February 2014. A review of the Duty of Care (waste transfer notes) showed only one EWC code (20 01 25) was within the permit. Therefore, other wastes shouldn't have been accepted on site. The waste transfer notes showed that the site had accepted EWC 02 02 99 Rendered animal fat (tallow). The operator was asked to review their management system to ensure that they were maintaining compliance with Duty of Care. The operator was required to make improvements and ensure that related control procedures within their management system ensured that the risks were adequately managed.

An accident and spill management and recovery procedure was in place for waste oils, bio-diesel, glycerol, methanol and methoxide spills.

6.0 Pollution incidents that may have impacted on land and their remediation

Has the applicant provided evidence to show that any pollution incidents which have taken place during the life of the permit and which may have impacted on land or water have been investigated and remediated (where necessary)?

Site defects were noted in the CAR form dated 14 February 2014 comprising:

Unit 1: oily liquid on other side of partially completed brick bund. Required to ensure that the liquids were adequately contained and cleaned up. No adequate secondary containment.

Unit 2 - pipes travelling through wall between units and positioned outside of the bund (brick bund). Should a pipe burst the bund would not contain a spill. Waste observed stored outside the bund. It was unclear where the drainage went from the drainage channel outside of this unit. According to drainage plans appears to drain to foul sewer and the operator was required to mark drains as either 'foul' or 'surface water'.

Unit 3 - methanol and methylate storage had an incomplete brick bund, the bund was not joined to the wall or across the doorway. Failure to have adequate secondary containment for liquids that could cause pollution.

Rear yard area - storage of lead acid batteries (WEEE) should be within a sealed container.

7.0 Soil gas and water quality monitoring

Where soil gas and/or water quality monitoring has been undertaken, does this demonstrate that there has been no change in the condition of the land? Has any change that has occurred been investigated and remediated?

N/A.

Surrender SCR evaluation (Low Impact Installation)

8.0 Decommissioning and removal of pollution risk

Has the applicant demonstrated that decommissioning works have been undertaken and that all pollution risks associated with the site have been removed? Has any contamination of land that has occurred during these activities been investigated and remediated?

The following reports and information were submitted by the Operator as part of the surrender application:

- Document 5 – H5 'Site Condition Report Southwark Biodiesel (Uptown Biodiesel Ltd.)' dated 08 May 2018.

- Document 6 – Closure Notice 'Application Site Report for PPC Application Southwark Biodiesel, Uptown Oil Limited Application Number PP3336XV' dated 07/04/2008 and updated 08/04/2018.

- Document 8 – 'EPR Compliance Assessment Report Pre-Surrender Inspection' dated 03 April 2018, ref: ZP3233HS/0304849.

Site Closure Plan:
The site was successively closed down and cleared of machinery and liquids as follows:

- all process machinery, metal containers and drums were scrapped through a local scrap metal recycler
- all plastic containers and other plastics ware was scrapped through a local plastics recycler
- unrecyclable materials (card and wood) were disposed of at the local municipal waste disposal station.

List of potential sources of pollution risk:
- all fresh vegetable oil was sold out to existing buyers
- the final batch of UCO was processed into biodiesel which consumed the final batch of methanol. Methanol drums containing residues and vapours were return to the methanol supplier
- all biodiesel was sold to existing buyers and cleared out of tanks or IBCs. Process equipment was fully drained to ensure all biodiesel was collected
- residual glycerol was sold to the existing buyer.

The decommissioning process had no impact on the land. The hardstanding and bunding remained intact during the decommissioning. Subsequently and after decommissioning, the bunding was removed. Wastewater washings from the decommissioning were discharged to foul sewer via the interceptor tank in case of oil contamination.

9.0 Reference data and remediation (where relevant)

Has the applicant provided details of any surrender reference data that they have collected and any remediation that they have undertaken?

No remediation has been undertaken. No reference data has been collected and submitted as part of this LII surrender application.

10.0a and 10b Statement of site condition

Has the applicant provided a statement, backed up with evidence, confirming that the permitted activities have ceased, decommissioning works are complete and that pollution risk has been removed and that the land and waters at the site are in a satisfactory state?

A site visit was undertaken by the Environment Agency to inspect the premises ahead of permit surrender. All raw materials and biodiesel had been removed along with manufacturing equipment and associated plant. Some final cleaning was taking place.

The permitted scheduled activity has been removed from the installation therefore the site no longer falls under Environmental Permitting Regulation. The Environment Agency confirms that the site has been returned to a satisfactory state.

Surrender SCR decision summary	Tick relevant decision
Sufficient information has been supplied to show that pollution risk has been removed and that the site is in a satisfactory state – accept the application to surrender the permit.	✓
Date and name of reviewers: **Liz Ebbs (NPS) – 14/06/2018.** **Laura Mellor (NPS) – 25/06/2018.** **Martin Smith (Area) – 03/04/2017.**	