Permitting decisions- Refusal

We have decided to refuse the surrender for North Tyne Process Plant operated by Tradebe Solvent Recycling Limited.

The permit number is EPR/BV4665IG.

The facility location is Hayhole Road, North Tyne, Tyne and Wear, NE29 6DY

We consider that in reaching that decision we have taken into account all relevant considerations and legal requirements.

Purpose of this document

This decision document provides a record of the decision making process. It:

- highlights key issues in the determination
- gives reasons for refusal
- summarises the decision making process in the decision considerations section to show how the main relevant factors have been taken into account.

Read the permitting decisions in conjunction with the refusal notice.

Key issues of the decision

Structure of this document

Part A: Administration issues

Part B: Process description

Part C: Reason for refusal

Annex 1: Map showing location of the Installation boundary discrepancies

Part A: Administration Issues

Application history

This section includes administrative information relating to the application and information about the Applicant and the Installation.

The Application relates to the surrender of the following listed activities in Schedule 1 Part 2 of the Environmental Permitting (England and Wales) Regulations 2016 ("EPR 2016"):

> Section 5.3A(1)(ix)(a)(ii)
>
> Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving recovery of components from catalysts.

The Environment Agency ("the Agency") received the application on 17 January 2020. [1]A duly made letter was sent to Tradebe Solvent Recycle Limited ("the Applicant") on 29 May 2020.

On 6 June 2020, the internal consultation process on the application commenced and on 25 June 2020, the Agency sent the Applicants a Notice issued under Schedule 5 EPR 2016 ("the Notice") requesting that the Applicant provide:

- [2]A condition report or site investigation report covering up to 2017 when the site stopped operation.

On 26 June 2020, the Agency received the response to the Notice.[3]

The information provided by the Applicant was reviewed and the Agency notified the Applicant of the outcome of the review by telephone and [4]email on 9 July 2020. Key points from this communication were:

- The Agency highlighted the presence of some contamination on site. And,
- The Applicant acknowledged the presence of existing contamination on site.

A meeting was scheduled for 14 September 2020 to discuss the way forward to progress the surrender application. Prior to the meeting, on 8 September 2020 the Applicant provided further information for consideration namely:

- [5]Site monitoring data
- [6]North Tyne exploratory whole location plan illustrating the Light Non-Aqueous Phase Liquid ("LNAPL") thicknesses And,
- [7]Draft agenda for the meeting

---

[1] Appendix 1: Duly made letter dated 29 May 2020.
[2] Appendix 2: Schedule 5 Notice dated 25 June 2020.
[3] Appendix 3: Site condition report dated February 2019
[4] Appendix 4: Email from the Agency to the Applicant dated 09 June 2020.
[5] Appendix 5: Site Monitoring Data
[6] Appendix 6: North Tyne exploratory whole location plan illustrating the Light Non-Aqueous Phase Liquid thicknesses
[7] Appendix 7: Draft agenda for the meeting

The applicant was informed that the Agency would review the documents in conjunction with application documents and the Agency would send its comments to the Applicant in due course.

During the meeting, the Agency explained why the surrender application may not be surrendered in its current state, and stated that a second Schedule 5 Notice would be issued to the applicant. A [8]summary of the outcome of the meeting was compiled by RSK, the Applicant's environmental consultants ("the environmental consultants").

On 27 January 2021, the Agency wrote to the Applicants[9] regarding its review[10] of the Applicant's Site Condition Report.

On 12 February 2021, the Agency issued a second Notice of Request[11]. Given the large amount of information required, the Agency acceded to the Applicant's request for further time to comply with the Notice by 12 March 2021.

On 12 March 2021, the Applicant responded to the Notice. On the same day, the Agency [12]wrote to the Applicant informing them that we had reviewed the information submitted in response to the Schedule 5 Notice dated 12 March 2021 and the Agency would review the Applicant's new information regarding ground water contamination.

On 30 June 2021, the Applicant wrote to the Agency requesting an update on their application. On 13 July 2021[13], the Agency updated the Applicants on the current status of their application.

On 13 July 2021, the Agency updated the Applicant's regarding the review of information provided in response to the Schedule 5 Notice dated 12 February 2021. On 22 September 2021, the Agency wrote to the Applicant regarding the expected outcome of the determination.

---

[8] Appendix 8: Summary of the outcome of the meeting
[9] Appendix 9: Email from the Agency to Applicant dated 27 January 2021
[10] Appendix 10: Agency's comments on the Site Condition Report
[11] Appendix 11: Schedule 5 Noticed dated 12 February 2021
[12] Appendix 12: Email from the Environment Agency dated 12 March 2021
[13] Appendix 13: Email from the Environment Agency dated 13 July 2021
[14] Appendix 14: Map

Part B: Process description

This installation is centred on grid reference NZ 3442 6614 and is situated on the Northern side of the River Tyne. The Installation is a small compact site (0.3 hectares) bounded on three sides by a large storage site from whom the site is leased. This installation is a satellite of a main processing plant which situated at Hendon Dock in Sutherland about 15 miles distant.

The installation comprises of:

- 30 m^3 kettle, shell and tube reboiler
- 15 plate distillation column
- Condensers and associated vessels
- Control room (critical systems have alarms and interlocking shutdowns), And
- Two small boilers (1.5 MW – main boiler, 1 MW standby) to provide heat, as hot oil, for the reboiler.

The main activity undertaken at the Installation is the recovery of solvents from mixed or “spent” waste streams. Prior to arrival at the Installation, all waste solvents for recovery are tested and categorised to determine their nature and composition. Materials for recycling are received via bulk road tanker with the recovered solvents being despatched via bulk road tanker either back to the customer or for sale on the open market. Waste streams, process and run off waters, are collected and transferred offsite via bulk road tanker, usually to SRM Ltd Hendon Dock facility, for treatment prior to discharge to sea.

There is also a bunded tank farm for storage of raw materials, intermediates and finished product sited within a single concrete bund. The main tanks are fitted with a firewater deluge system, several smaller tanks and the process scrubber are also located within the bund. This bund is contained within the larger site bund providing tertiary containment.

Emissions to air are abated by collection and treatment either by incineration in the 1.5 MW boiler - boiler 2, or if this route is unavailable through a scrubber system venting to atmosphere. Boiler 2 is fired on recovered solvent fuel, deemed to be a waste incineration activity, the specification of which is quality controlled to ensure equivalence with gas oil. Gas oil is available as a back-up fuel. It should be noted that Boiler 1 is fired on gas oil only.

There is one release to controlled water, a blowdown stream from the cooling water system to the River Tyne - approximately 1.5m^3/day.

The nearest European Protected Site is the North Durham Coast which is about 3 km to the North East.

Part C: Reasons for Refusal

How we reached our decision

The legal framework

The Industrial Emissions Directive 2013 ("IED 2013") requires that facilities are regulated under the Environmental Permitting Regulations where there may be a significant risk to land or groundwater.

As part of this permit surrender application, the applicant was required to provide a baseline reference data. It is recommended by the Agency that an operator carries out monitoring of groundwater and soil and submit these results along with the Site Condition Report ("SCR"). If baseline data cannot be provided, an alternative would be for an operator to use good quality existing data, if it is available. This will quantify the levels of pollutants present which an operator compares to the levels they find when they cease operation and wish to surrender their permit. Article 16(2) IED 2013 states that:

> *"If you choose not to submit any monitoring data you should provide a justification for not doing so in your report".*

In the application made by the operator, a site-defined background or a more conservative 'zero' baseline was used as basis for comparison, and localised impacts on soils and wider impacts in groundwater and associated Light Non-Aqueous Phase Liquids were identified. As baseline study was not undertaken during the lifetime of the Applicant's operation, the Applicant has to demonstrate that the identified pollution is not as a result of their activities on the site. In the absence of this information, the operator is liable to clean up pre-existing contamination on site.

The information supplied in the surrender application did not satisfactorily demonstrate that the contamination found on site was not caused by the activities carried out by the operator. This is based on the information provided by the Applicant in the Environmental Permit Surrender Site Condition Report Ref. 355124-R1, Rev 03, dated March 2021, and itemised in section (a), (b) and (c) on pages 6, 7, and 8 of this decision document by the Agency.

Environmental issues: likelihood of pollution

It is necessary to clean up identified contamination/pollution on site before a surrender application is made. As identified in the Applicant's surrender documents and pages 19 and 29 of the Environmental Permit Surrender Site Condition Report, ref: 355124_R1_03), the presence of pollution on site was identified which has not been resolved.

In addition, page 30 of the same report states that:

"No intrusive investigation were known to be carried out to obtain soil or groundwater sampling relating to incidences reported".

An intrusive investigation should have been carried out to determine if pollution incidents reported during the lifetime of the permit posed any risk to soil and groundwater. If any pollution is identified, then remedial actions are to be put in place to tackle them.

The Application has been refused.

The reasons for refusal are:

Evidence that the site is not in a 'satisfactory state'.

The Environmental Permit Surrender Site Condition Report, ref: 355124_R1_03 states that:

> *"the closure site investigation and subsequent groundwater/NAPL monitoring and sampling has identified localised impacts in soils and wider impacts in groundwater and associated LNAPL".*

We therefore conclude that the site is not in a satisfactory state and that there has been impacts on soil and groundwater quality during the lifetime of the permit, requiring remediation to be undertaken. We have drawn this conclusion based on evidence presented in the documents submitted as part of the surrender application. These are itemised below:

(a) Evidence that SOILS have been impacted

The evidence that soils have been impacted is presented below and is taken from the Environmental Permit Surrender Site Condition Report Ref. 355124-R1, Rev 03, dated March 2021, Sections 10 and 11.

- Observations of visual and olfactory solvent and/or hydrocarbon impact to the soil were recorded in the majority of intrusive boreholes.

- RSK, the Applicant's environmental consultants ("the consultants") carried out a comparison between soil concentrations and reference data presented in section 10 the site condition report. This comparison shows that contaminants of concern were above the reference data. Exceedances were observed for Total Petroleum Hydrocarbons ("TPH"), Polycyclic Aromatic Hydrocarbons ("PAHs"), Volatile Organic Compounds ("VOCs") and Semi-Volatile Organic Compounds ("SVOCs") in at least one of the seventeen soil sample results compared against reference data.

- The consultants conclusions were that of these exceedances, Total Petroleum Hydrocarbons (“TPH“), Toluene and Tetrahydrofuran (“THF“) are associated with permitted activities.

- There is evidence of impact to soils beneath the site by compounds known to have been used at the site over the lifetime of the permit, specifically Toluene, Isopropyl Alcohol (“IPA“) and Petroleum Hydrocarbons (“TPHCWG“)

- There are two main areas with elevated concentrations of contaminants of concern namely
  - Gas oil Tank 1 (TPH, Toluene)
    And
  - Drum Bay and Loading area (distillation unit) (TPH, Toluene, Tetrahydrofuran(THF)

Based on a review of the compliance history of the facility, specifically in relation to the records regarding the pollution instances, the records have not always contained adequate details. During the lifetime of the permit, incidents at the site have not been fully explained, such as:

- In 2016, the uncontrolled release of an unknown quantity of an unknown substance in an unknown part of the site.
  Or
- In 2010, the leak from Tank F13.

The conclusion in the Environmental Permit Surrender Site Condition Report (Ref. 355124-R1, Rev 03, dated March 2021) regarding impacts to impact on soils at the site states:

> “…*considering the EP requirement to return the site to its original condition and to be in a ‘satisfactory state’ at the time of permit surrender, to meet this objective there is likely to be a requirement for some remedial action. Any remediation of soils there would need to take place alongside groundwater remediation*.”

(b) Evidence that GROUNDWATER has been impacted

1. **Dissolved-phase contamination**

- Assessment of dissolved-phase concentrations in groundwater shows evidence of site-wide impact to groundwater within made ground at the site, from compounds known to have been in use during the lifetime of the permit, specifically:

  - Total petroleum hydrocarbons criteria working group (“TPH CWG“)

- Isopropyl alcohol (“IPA“)
- Tetrahydrofuran (“THF“)
- Tertiary butyl alcohol (“TBA“)

- Two main areas with elevated concentrations of contaminants of concern;
  - Down-gradient of the Bulk Tank Farm;
  - Around the Drum Bay and Loading area - distillation unit.

- The environmental consultants carried out a comparison between groundwater quality concentrations and reference data. This comparison shows exceedances in concentrations of Total Petroleum Hydrocarbons (“TPH“), Polycyclic Aromatic Hydrocarbons (“PAHs“), Volatile Organic Compounds (“VOCs“) and Semi-Volatile Organic Compounds (“SVOCs“) in at least one of the twelve groundwater sample results compared against reference data.

- The environmental consultants concluded that, of these exceedances, TPH, IPA, THF and TBA are associated with permitted activities.

- Furthermore, the environmental consultants conducted a controlled waters risk assessment. This concluded that TPH concentrations within the groundwater presented a potential risk to the River Tyne. The environmental consultants have suggested that a Detailed Quantitative Risk Assessment (“DQRA“) would help confirm the risk to the River Tyne.

The conclusion in the Environmental Permit Surrender Site Condition Report (Ref. 355124-R1, Rev 03, dated March 2021) regarding impacts to groundwater at the site states:

> “Considering the permit requirement to return the site to its original condition and to be in a ‘satisfactory state’ at the time of permit surrender, to meet this objective there is likely to be a requirement for some remedial action of groundwater. However, as the up-gradient groundwater quality is impacted by contaminants of concern relevant to the site, the practicalities of undertaking such remediation would need detailed and careful consideration.”

(c) Free-phase contamination (Non-aqueous Phase Liquids (“NAPLs”) assessment)

- As part of the groundwater monitoring, the environmental consultants encountered Light Non-Aqueous Phase Liquid intermittently across the

site and the consultants concluded that this could be influenced by tidal fluctuations.

- LNAPL represents a secondary source of contamination via dissolution of constituents into groundwater and indicates dissolved-phase concentrations in groundwater will exceed reference concentrations over much of the site. Its presence therefore represents a risk to controlled waters. It is possible that incidents at the site during the lifetime of the permit could have led to LNAPL contamination of groundwater.

As an intrusive investigation was not undertaken, in addition to other gaps in the sampling and monitoring data, we are not satisfied that all necessary measures have been taken to prevent pollution on site.

Our conclusion is that, as a minimum, remediation work is required in order to return the site to a satisfactory state. This must include remediation to soil, groundwater and free-phase organics NAPL.

Until these issues are resolved, the permit cannot be surrendered.

Other relevant issues

Discrepancies over the installation boundary

There is discrepancy between the installation red line boundary as shown on the map[14] in the Environmental Permit and the operator's understanding of the permitted area.

- The permit installation 'red line' boundary as shown in the Environmental Permit has one area, edged in blue, which is excluded from the Permitted Installation. This excluded area is known as 'Simon Storage Boiler House' and the adjoining 'Compressor House' (see map below).

- Based on information provided by the operator, the site plan (Figure 2, Rev B) in the Environmental Permit Surrender Site Condition Report (Ref. 355124-R1, Rev 03, dated March 2021) shows two areas edged in blue which are considered to be outside the permitted installation boundary Appendix 14
    - Simon Storage Boiler House, but excluding the Compressor House, indicating this is considered part of the Tradebe Permit Installation;

[14] Appendix 14: Map

    - A large boiler fuel tank – located to the north of the Simon Storage Boiler House.
- Correspondence received from Tradebe and Inter Terminals, formerly Simon Storage, suggests agreement over the use and responsibility for the Simon Storage Boiler House, the Compressor House and the larger boiler fuel tank.

All boundary issues must be resolved before permit surrender application can be made.

The need to issue further Schedule 5 Notice

On consideration of the Applicant's response to our Schedule 5 Notice which was received on 12 March 2021, the Agency realised that not all elements within the Schedule 5 Notice of request for more information have been adequately addressed. Further explanation was required from the Applicant in relation to:

- An explanation as to why the ageing of organic compounds found below the site was limited to diesel fractions only.

- Provide more information to demonstrate that chlorinated solvents found during site investigation originated from a groundwater source and not a soil source.

- Provide further data evidence to support Applicant's suggestion that both sources of NAPL have come from off-site. There were data gaps within Applicant's submission to support this assertion.

- To date the groundwater sampling failed to adequately reflect the quality of the groundwater below the site because the Applicant had issues collecting and analysing groundwater samples.

In view of the fact that any further information the Agency requested under a Schedule 5 Notice on the points listed above would fail to address the remediation of contamination identified on site and would consequently not impact on the outcome of this determination, the Agency would have requested the Applicant to provide further information on the outstanding points. The Agency was mindful of the fact that by issuing another Schedule 5 Notice, this would increase the determination time and Applicant's costs liabilities associated with this surrender application without any benefit on the outcome of the decision.

Permitting decisions- Refusal

Appendix 14: Map showing boundary discrepancy

Permitting decisions- Refusal

Decision considerations

Section 108 Deregulation Act 2015 - 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 100 of that Act in deciding whether to accept the surrender of this permit.

Paragraph 1.3 of the guidance states:

> "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. 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.

Appendices

1. Duly made letter dated 29 May 2020
2. Schedule 5 Notice dated 25 June 2020
3. Site condition report dated February 2019
4. Email from the Agency to the Applicant dated 9 June 2020
5. Site Monitoring Data
6. North Tyne exploratory whole location plan illustrating the Light Non-Aqueous Phase Liquid thicknesses
7. Draft agenda for the meeting
8. Summary of the outcome of the meeting
9. Email from the Agency to the Applicants dated 27 January 2021
10. Agency's comments on the Site Condition Report
11. Schedule 5 Noticed dated 12 February 2021
12. Email from the Environment Agency dated 12 March 2021
13. Email from the Environment Agency dated 13 July 2021
14. Map