

Permitting decisions- Surrender

We have decided to accept the surrender of the permit for **ICI Paints Slough** operated by **ICI Chemicals Industries Limited**

The permit number is **EPR/BU1318IY**

We are satisfied that the necessary measures have been taken to avoid any pollution risk and to return the site to a satisfactory state. We consider in reaching this decision that 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
- summarises the decision-making process in the decisions considerations section to show how all relevant factors have been taken into account

Read the permitting decisions in conjunction with the environmental permit

Key issues of the decision

Background

The installation was a paint factory operating an activity listed under Section 4.1 of the Regulations (Producing organic chemicals such as plastic materials). While the site has a hundred-year-old history as a paint factory, no environmental permit was required until 2003. The installation area is only a small part in the northern section of the ICI facility; the Regulations do not apply to the larger area. There was a single permit variation issued in 2009 to reduce solvent content within the paints, without changing the installation boundary.

Operations continued until early 2018 and final decommissioning was completed by late 2018. A surrender application made in 2019 was withdrawn pending site remediation activities.

Soil & Groundwater Quality Monitoring

Soil and groundwater quality data around the installation was obtained in 2003 when the permit first came into effect [Data provided in surrender report dated 14th April 2022 project No 0614380], revealing contamination with organic solvents. This set the baseline against which the principle of that there should not be significant deterioration in land quality in the permitted area as a result of permitted operations could be assessed.

Groundwater samples were collected in December 2018 to compare against the original 2003 baseline sampling. Whilst many of boreholes showed reductions there were elevated levels of organic solvents at two boreholes.

Remediation activities were undertaken in the northern area of the site between 2019 and 2021. These included:-

- targeted abstraction and off-site disposal of identified localised sources of light non-aqueous phase liquids (LNAPL);
- excavation and segregation of historical disposed waste and associated contaminated soils from identified hotspots in the unsaturated zone;
- ex-situ bioremediation of excavated soils to agreed re-use criteria; and
- direct injection treatment of dissolved phase groundwater plumes with Oxygen Release Compound and RegenOx to enhance aerobic degradation of organic contaminants within groundwater plumes.

Further sampling was undertaken in 2021 and 2022, both for the EPR permit surrender and linked to the planning / redevelopment process under jurisdiction of the local authority planning team. [EPR application report reference is surrender report dated 14th April 2022 project No 0614380]

Planning site condition report references in 2021 are as follows:

- Remediation Completion and MMP Verification Report, (BGCL-C19019/007/v3) Buckingham Group Contracting Ltd. November 2021.
- Remediation Completion Report Phase 3 Residential Area, (BGCL-C19019/006/v2) Buckingham Group Contracting Ltd. June 2021.

Final Planning site condition report reference in 2022 is as follows:

- Final Quarterly Post Remediation Groundwater Monitoring Report: October 2022. (BGCL-C19019/013/v1). Buckingham Group Contracting Ltd. November 2022.

Operations

We have reviewed the spill and incident history linked to the installation during the permitted period. There are no records of any major spills, or incidents of site contamination. We have reviewed all the reports from site inspections and audits carried out while the permit was in place and have found no records of spillages which could have caused land contamination.

The operator has confirmed that the buildings linked to the installation were constructed prior to the mid-1970's and all hard standing and plant was completed by this time. No groundworks were carried out at the installation during the life of the permit.

We have reviewed the drainage system that was in place during the permitted period. All trade effluent drains were routed above ground level. Rainwater and (domestic) foul drains were subject to a program of inspection required by the permit and there are no records of significant problems found. Drainage plans indicate that there are no soakaways within the installation (or the larger site).

During the remediation works, significant quantities of buried wastes were found including chemical drums, these coinciding with hotspots of contamination. The operator has confirmed that no materials were buried on the installation land after the completion of this hard standing in the 1970s.

Land Quality Assessment

Given the comprehensive source removal and treatment activities, we consider that land quality in the installation area is now in a generally better condition that it was in 2003. Most recent data (2021 and up to October 2022 for the downgradient parts of the wider site show generally declining trends and limited mobility for the remaining contaminants. However, it will take years/decades for contaminants to degrade enough to meet the relevant Environmental Quality Standard concentrations in all areas.

The key identified sources of contamination have been removed during the remediation work and the migration of contamination from remaining sources has been reduced/prevented by the installation of a Permeable Reactive Barrier (PRB). Downgradient boreholes have demonstrated the protection provided by the barrier and we consider that the risks to controlled waters from the permitted site have been reduced.

The Cadent site to the south/southeast across the PRB from the permitted installation may have been subject to historical impacts from the permitted site. However, any off-site impacts from the permitted site in this direction are not constrained with empirical data. The remediation works within the permitted site will have reduced/severed the source/pathway linkage to the Cadent site, but only future investigation of the Cadent site will provide evidence of the relationship with the installation. While there is no land quality data downgradient of the PRB, the remedial works, declining trends in contaminant concentrations at the perimeter boreholes, and the PRB provide confidence that any risks of ongoing migration have now been controlled. We have reviewed report into remediation of the Cadent site as follows

Cadent reports:

- Desk Study Report for Cadent Gas, Uxbridge Road, Slough (Northern Site). AG3317-21-AN07-Issue 3. Applied Geology. February 2022.
- Factual Report on Ground Investigation at Cadent Gas, Uxbridge Road, Slough (Northern Site). AG3317A-21-AO20 Applied Geology. June 2022.
- Geo-environmental Interpretative Report and Outline Remediation Strategy for Cadent Gas, Uxbridge Road, Slough. AG3317A-21-AO66. Applied Geology. July 2022.

We consider that based on this data they have not identified or made strong claims about any specific issues relating to the migration of contaminants from the installation to the north towards Cadent site.

Conclusions

Overall, for the installation area as a whole, we consider that potential ongoing risks are limited and being managed. There is no evidence that the contamination occurred during the time the permit was in place and the infrastructure, operations, maintenance and inspection work carried out under the permit effectively prevented such contamination from occurring. The contamination found is therefore likely to be historic in origin, being in place prior to the permit being issued.

There are likely to be some remaining pockets of contamination within the installation boundary which the remediation activity missed or was less effective at clearing. However, a clean-up to full 'greenfield site' status is not the objective or practicable. Instead, future users of the installation area should be considerate of the potential for residual pockets of contaminants within the permitted area and manage their activities accordingly.

Given the history of the site, the activities that took place during the lifetime of the permit, the verified remediation activity and post-remediation monitoring, we consider the regulated

facility to be in a *'satisfactory state, having regard to the state of the site before the facility was put into operation'*

We have reviewed the 2022 report submitted with the EPR surrender application and also additional groundwater and soil monitoring reports linked to meeting final planning conditions.

Hence we consider site is in a satisfactory state to allow the installation permit to be surrendered.

Decision considerations

Confidential information

A claim for commercial or industrial confidentiality has not been made.

The decision was taken in accordance with our guidance on confidentiality.

Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

Pollution risk

We are satisfied that the necessary measures have been taken to avoid a pollution risk resulting from the operation of the regulated facility.

Satisfactory state

We are satisfied that the necessary measures have been taken to return the site of the regulated facility to a satisfactory state, having regard to the state of the site before the facility was put into operation.

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 110 of that Act in deciding whether to accept this permit surrender.