Permitting decisions - Surrender

We have decided to accept the surrender of the permit for Margate Speciality Biocides operated by Thor Group Limited.

The permit number is EPR/BV3898IR.

The decision was issued on 14/07/2026.

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 permit was originally issued (23/12/2003) to Thor Overseas Limited for the manufacture of speciality biocides. However issues with site contamination had been noted during permit determination, and during the operation of the site there were three incidents of pollution with the potential to contaminate groundwater and/or mobilise existing contamination. Consequently, the production of organic chemicals (speciality biocides) ceased in 2005 and a ‘pump and treat’ groundwater remediation system was operated from 2006 to reduce the contamination plume.

In 03/10/2013 a varied and consolidated permit was issued in modern condition format (which also updated the company name to Thor Group Limited). This permitted the groundwater treatment plant treating the contamination on site and discharging the treated effluent to foul sewer under a trade effluent consent.

Ongoing phases of investigation works since 2003 identified that groundwater contamination comprises of mono-aromatic hydrocarbons and mercury beneath the former main processing area (MPA). Benzene concentrations were used as a marker compound for the contaminant plume and were found at several orders of magnitude over the Drinking Water Standards (DWS). A combination of in-situ and ex-situ remediation works were recommended in the Remediation Strategy to reduce source area contamination consisting of:

• Phase 1: pump and treat system supplemented by air sparging to reduce the source and minimise risks to controlled waters; and

• Phase 2: excavation of soils and soakaways across the former MPA to remove the source and provide a cover system to mitigate human health risks and minimise leaching potential during rainfall events.

The pump and treat system operated between 2006 and 2018 reduced benzene concentrations from a maximum of 102,759µg/l in 2006 (borehole ref. DW14), to a maximum of 1,980µg/l in 2018 (borehole ref. DW16). During the final monitoring round in December 2018, average concentrations beneath the former MPA were 27µg/l.

Phase 2 excavation works successfully removed bulk contamination from the former MPA and a low permeability clay capping layer was installed. Verification reports for each phase of works have previously been submitted to the EA as part of the initial permit surrender application submitted in 2019. Subsequent rebound monitoring rounds carried out by the Environment Agency and Thor Group Ltd in 2019 found benzene concentrations to fluctuate between 100µg/l and 5,400µg/l, with a general increasing trend over time. Therefore, concerns were raised over the extent to which benzene would rebound overtime and consequently the requirements for permit surrender could not be met at that time.

To determine the remaining remediation requirements, additional soil and groundwater monitoring were carried out in 2020 and 2021 to assess benzene concentrations on-site and off-site. Results found that benzene concentrations had increased to a peak of 10,600µg/l in the source area (recorded in borehole DW14) and were found to extend to a monitoring borehole approximately 80m from the site boundary (356µg/l in DW11). Additionally, the point of loss was confirmed to be east of DW8, which detected high concentrations of VOCs (benzene and trimethylbenzenes) in the unsaturated soil requiring treatment. The recommendations were set out in an Addendum Remediation Strategy, which included two additional phases of works to mitigate remaining soil and groundwater contamination risks:

- Phase 3: groundwater remediation across the former MPA to minimise risks to controlled waters, including a combination of in-situ thermal heating, soil vapour extraction, dual phase extraction, steam injection and air sparging in the saturated zone.

- Phase 4: soil remediation to mitigate human health risks, including source removal of mercury contaminated soils from identified hotspots, and in-situ remediation of benzene contaminated soils within the unsaturated zone close to the original point of loss.

The site closure report (ref EES 00.141.54, dated 10/09/2026) submitted by the operator presents verification of the works required to complete Phase 3 and Phase 4 remediation, including rebound monitoring and the updated Detailed Quantitative Risk Assessment (DQRA) used in the predictive modelling.

The report provides evidence that the following work has been completed. Phase 3 and Phase 4 remediation works have achieved the following objectives:

- Bulk mercury contamination from Area 1 and Area 2 excavated and disposed of at a licensed waste facility (total of 230.64 tonnes). A low-permeability cap has been installed across both areas to minimise the potential for future infiltration from any residual contamination.
- During the final round of remediation monitoring, groundwater benzene concentrations had reduced by >99% compared to the baseline assessment in 2020/2021.
- The combined mass recovery following remediation works has significantly exceeded the initial calculations by 114%; estimated mass of 619.09kg vs actual mass of 1,323.59kg.
- Post-remediation drilling in June 2024 (DW20 and DW21) confirmed a significant reduction in organic contamination at depth in the unsaturated zone of >99%.
- Rebound monitoring has been undertaken between Jan 2023 – Jan 2025 (over 24 months).
    - Benzene concentrations correlate to fluctuations in groundwater levels. The trend is mostly stable / asymptotic when groundwater levels remain below 22m bgl. When groundwater levels rise between 20-22m bgl, higher concentrations are present in DW14, DW16 and DW19 (former MPA) however lower than the baseline concentrations. This is potentially evidence of a small contaminant release from the unsaturated zone at the POL during periods of prolonged rainfall but there is not enough remaining contaminant mass to sustain high concentrations.
    - A significant percentage reduction is calculated for the maximum concentrations for VOCs (benzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene and toluene) of between 79-99%.

The report concludes that based on the most conservative predictive model, using worst case conditions, in approximately 2.5 years' time benzene concentrations are below the DWS of 1µg/l. Therefore, no significant impacts are predicted at a 50m compliance point, at a 30-year timescale.

EA assessment of decommissioning and pollution risk

Following preapplication engagement, a full surrender application was submitted on 12/09/2025 and duly made on 22/10/2025. There has been ongoing engagement and discussions with the operator during the site surrender process.

Given the nature of the site, we requested additional information from the operator to confirm that all boreholes had been decommissioned and capped in accordance with Environment Agency guidelines to ensure pollution pathways were broken. The confirmation report that borehole wells have been decommissioned and capped (ref EES 00.141.64, dated 01/07/2026) was provided by the operator following completion of the works.

As stated, the site has been running remediation activities under this permit since around 2005, acknowledging that this was required to address contamination of soils and groundwater. This contamination occurred as result of the industrial activities occurring on site.

Soil and groundwater reference data supplied with this application has confirmed that the agreed remediation strategy has now been completed to the agreed criteria and have severed all relevant pollution linkages in line with established guidance and good practice.

The applicant has provided suitable information in the surrender application. It must be acknowledged that remediation has been risk-based and has returned the site to a suitable condition for the extant land use of the site (an industrial site). Should the site be redeveloped, particularly if this includes changing the land use to a more vulnerable category (such as housing), further contamination assessment and possibly further remediation work would be necessary to ensure it is fit for this new use. This would be addressed through usual development control processes, and the site is not exceptional in that context.

Decision considerations

Confidential information

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

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.