

Environment Agency permitting decisions

Surrender

We have decided to accept the full surrender of the permit for Queenborough Bar Mill operated by Invicta Merchant Bar Limited.

The permit number is EPR/KP3838SD.

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 that decision we have taken into account all relevant considerations and legal requirements.

Purpose of this document

This decision document:

- explains how the operator's application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account

Structure of this document

- Key issues
- Annex 1 the decision checklist.

Key issues

1) Pollution Risk

A report by Enviros Consulting Limited (March 2005) was produced for Istil (UK) plc for the PPC permit application site report (ASR). No intrusive investigation baseline data was reported as part of this report as the site was operational pre the Environment Agency permitting requirements for baseline data provision/consideration. Only a conceptual site model and a review of the site were undertaken based on a desk top study. A review of historical information was provided in this report. It details the potential for historical contamination at the site prior to the introduction of the permitting regulations.

As well as the main permitted scheduled activity several other potentially polluting activities were noted at the operational site including:

- fuel storage and handling
- handling and storage of associated wastes
- chemical treatment and dissolved air floatation
- mill scale
- settlement lagoons.

The main activities at the installation with the potential to cause emissions to groundwater were the mill lagoon, and diesel and liquid storage tanks. However, the lagoon was clay lined and there was no evidence or reports of any fuel tank/storage tank leakages. The only release to sewer was surface water run-off and domestic drainage. Inspection and maintenance records were kept for all pollution prevention measures and a summary of findings, repairs and replacements documented.

Improvement conditions were set within the permit to minimise the effect on the environment as well as improve environmental performance of the installation including:

- appropriate abatement measures for reducing releases to air of nitrogen oxides and particulate matter from the furnace
- oil skimming for removing oily residues on the lagoon part of the water recycling system
- a review of the liquid storage facilities that were not constructed in line with Sector Guidance
- automatic overflow prevention devices fitted to the two 40,000 litre diesel storage tanks
- alternative methodologies for the disposal of coarse and fine mills scale from the installation
- investigate the best disposal methodology for sedimentary wastes dredged from the lagoon.

A detailed assessment regarding the potential pollution risks at the installation during the application, operational and surrender stages of the permit is provided with the Site Condition Report Evaluation Template (SCRET) for EPR/KP3838SD/S003 which should be read in conjunction with this decision document.

2) Satisfactory State

Information from the original PPC permit ASR indicates that there were no direct releases of process water to ground or groundwater. A Site Closure Report (December 2013) was produced and included a surrender site condition report evidencing that all permitted activities had ceased and all sources of pollution risk had been removed from the site. A detailed assessment regarding pollution risks and mitigation measures associated with the site and permit surrender is provided with the SCRET for EPR/KP3838SD/S003.

All permitted manufacturing activities on the site ceased on 21 December 2012. Despatch of remaining finished goods ceased at the end of February 2013. The site was decommissioned between May and November 2013 and there was no contamination impacts on the land during the decommissioning works. Activities undertaken during the decommissioning works included:

- removal of compressed air systems, bulk oxygen tank, railway track, mobile plant, workshop building, warehouse building and machine shop contents
- dredging of the cooling water lagoon
- return the land surrounding the cooling water lagoon to pre permit application state
- cooling tower and water pipework decommissioned according to HSC L8 2001 and certificate provided
- removal of mineral oils, diesel fuel, general trade waste and waste oil
- cleaning and disposal of oil and fuel tanks as well as associated pipework by approved contractor
- mill scale removed and pits cleaned and chlorinated
- settling pits and gullies cleaned
- site incoming gas supplies terminated.

Boreholes with standpipes were already present on site during the operational phase and were sampled by Enviro Ltd on 14 August and 12 September 2013. Groundwater samples from these boreholes were analysed for a suite of determinands. The borehole test results indicated an improvement in the groundwater quality compared to results from a previous round of monitoring undertaken in 2006, with the exception of BH4. Therefore, the Environment Agency made a request to the Operator in the form of a Schedule 5 Notice to conduct a further round of monitoring at BH4 to establish the presence, if any, of identified potential hydrocarbon pollution of the groundwater in that area of the site.

On 16 December 2014 the position for BH4 had to be re-drilled in close proximity due to the original BH4 wellhead being buried beneath demolition rubble. BH1 and BH3 could not be located so were also re-drilled to allow the assessment of the groundwater regime. Additional groundwater data and results for BH4 were provided in the submitted report 'Queenborough Mill Addendum IPPC Surrender Report' dated March 2015. It comprised:

- a full suite of the original determinands tested for in 2006
- groundwater monitoring and groundwater flow diagram
- ground conditions encountered whilst re-drilling BH1, BH3 and BH4 (logged as BH1A, BH2A and BH4A)
- a suite of speciated poly-aromatic hydrocarbons (PAHs) and speciated volatile organic compounds (VOCs).

Basic level age estimation for any detectable hydrocarbons present was not undertaken due to the low level of hydrocarbon contamination present in the groundwater samples collected.

The conclusions in the report were that no discernible concentrations of metals, PAHs, total petroleum hydrocarbons and VOCs were encountered in the vicinity of BH4 (BH4a). The contamination previously identified in 2013 was probably due to the sampling strategy employed at the time not allowing for representative samples to be collected and not considered appropriate to determine acute changes in groundwater quality.

Contamination on site which cannot be attributed to the activities carried out under the Environmental Permit EPR/KP3838SD is considered largely to be limited to Made Ground. Recent laboratory testing has indicated minimal groundwater contamination in BH4a and the relatively low permeability of the Alluvium and underlying London Clay is considered to effectively inhibit significant migration of groundwater contamination. The additional sampling has not indicated that deterioration of groundwater quality has taken place since the previous monitoring in 2013.

The Environment Agency have reviewed the report and agree with its conclusions, that the presence of hydrocarbons in the vicinity of BH4 (BH4A) is not liable to cause pollution within the groundwater. The site has been returned in a satisfactory state and Environmental Permit EPR/KP3838SD can be surrendered.

Annex 1: decision checklist

This document should be read in conjunction with the Duly Making checklist, the application and supporting information, SECRET and the surrender notice/letter.

Aspect considered	Justification / Detail	Criteria met
		Yes
Receipt of submission		
Identifying confidential information	We have not identified any information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.	✓
The site		
Extent of the surrender application	The operator has provided a plan showing the extent of the site of the facility that is to be surrendered. We consider this plan to be satisfactory.	✓
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. Please refer to further details in the key issues section.	✓
Satisfactory state	We are satisfied that the necessary measures have been taken to return the site of the regulated facility to a satisfactory state. In coming to this decision we have had regard to the state of the site before the facility was put into operation. Please refer to further details in the key issues section.	✓