Environment Agency permitting decisions

Surrender

We have decided to accept the surrender of the permit for **Huyton Surface Treatment** operated by **Goodrich Actuation Systems Limited**

The permit number is **EPR/BX4232IA/S003**

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 of the decision

This installation was permitted for a surface treatment activity 2.3 A (1) (a) with a vapour degreasing activity (Section 7B) using trichloroethylene. The initial permit was determined in 2005.

The main surface treatment activities include anodising, abrasive blasting, hard chrome, bronzing, cadmium plating, chromate conversion, copper plating, degreasing, nickel plating, passivation and silver plating.

In 2012 the permit was varied to remove the use of trichloroethylene and increase the surface vat volume linked to the surface treatment activity.

Key dates linked to the surrender are as follows:

- The installation operations ceased in December 2014.
- The installation de-commissioning and removal of wastes and raw materials was completed in June 2015.

The operator has completed the H5 Site Condition Report template for this installation, including the sections linked to the site surrender.

Of specific interest is an incident in 2009 linked to the chromium air emissions scrubber. There was a scrubbing liquor fugitive emission and an associated uncontrolled discharge to surface water of scrubbing liquor containing chromium. Whilst the immediate discharge was to surface water, this incident indirectly led to ground water and land contamination in the local area.

The surrender application includes

- Site Protection and Management Plan – for controls and monitoring to minimise risk of emissions to ground water and contaminated land linked to permitted activities
- Site Closure Plan.
- H5 completed template – including sections 7 to 10 linked to the surrender.
- Initial intrusive sampling after permitted activities ceased; sampling took place in April 2015; appendix I application supporting information document. It should be noted that no baseline intrusive sampling was completed within the application Site Condition Report. In light of the 2009 incident detailed above the operator completed intrusive sampling after installation activities ceased to provide evidence for the final condition of ground water and land linked to the installation. The results highlighted elevated chromium VI ground water levels. Specifically the results were linked to elevated levels in well WS123. Levels of chromium VI were found above the Environmental Quality Standard from samples taken in December 2014 plus again samples taken in February and March 2015.

- Remedial work carried out – appendix K application supporting information document. This appendix summarised the options for remedial work and the final choice of over drilling and further localised ground water and soil monitoring carried out in May 2015.
- Final intrusive sampling report – appendix L application supporting information document. The results showed Chromium VI levels in soil samples collected below the Scrubber Yard and Process Department to be low and most cases below the analytical detection limit.

  This final report asserts that although drilling took place below the anticipated depth of the water table, sufficient groundwater was not present in replacement wells installed adjacent to bore well WS123 to yield a ground water sample.

The operator concluded after the remedial work and final intrusive sampling that they have returned the installation to a satisfactory state with regard to ground water and land condition linked to the installation.

Conclusion

We conclude that in terms of the groundwater plume which may exist under the installation the above reports do not initially provide satisfactory data as to the extent or severity of the plume, only that it is likely to be present.
We advised the operator that a scheme is developed to delineate the plume and deploy a suitable remediation technique as required which will address the highly suspected groundwater contamination which is potentially present.

Operator final actions

We required the operator to pursue the following final actions:

- Produce further investigation as to the delineation of the contamination plume, an appropriate remediation plan, subsequent validation report that addresses our comments and can also demonstrate that operator has met the our site surrender test to return the land to a satisfactory state.

The application includes a further report appendix L addendum 2 entitled Remediation Validation Report Ref 49328022-004-Rev0 received in August 2015. The operator has also provided the following information:

o *Email from Richard Wood (acting on behalf of operator) relating to RPD sampling technique accuracy calculation* - received 7th August 2015
o *Email from Richard Wood (acting on behalf of operator) relating to* details of building footings - received 10th August 2015

Final conclusions

We have reviewed the final information detailed above. We are now more confident that the loss to ground (into borehole WS123) fortunately appears to be limited to the area immediately adjacent to WS123. The loss of liquid to ground does not appear to have extended laterally or vertical in the ground and those pathways which we originally considered possible were in fact inactive and therefore not viable.

On the basis of the information that has been presented including addendum 2 as detailed above, we are now satisfied that the application for permit surrender can proceed and the operator has returned the site to a satisfactory condition.

Annex 1: decision checklist

This document should be read in conjunction with the application and supporting information and permit/ notice.

Aspect considered	Justification / Detail	Criteria met
		Yes
Receipt of submission		
Confidential information	A claim for commercial or industrial confidentiality has not been made.	✓
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. The installation boundary is unchanged from original permit BX4232IA (EPR/BX4232IA) issued in 2005.	✓
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. The details of our review are provided in the key issues section of this document.	✓
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.	✓