

Environment Agency permitting decisions

Surrender

We have decided to accept the surrender of the permit for The Laboratory operated by Multivalent Limited.

The permit number is EPR/BP3936TH.

The surrender number is EPR/BP3936TH/S002.

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.

Summary of the decision

We have decided to accept the surrender of the permit.

A non-technical description of the installation is included in the introductory note to the permit, however key points considered relevant to the decision to accept the surrender of the permit are outlined below.

A permit was issued under the Pollution Prevention and Control (PPC) Regulations to World Solutions Limited on 16/02/2006 (WP3138SA). The permit was varied in 14/09/2007 to allow additional raw materials, anhydrous chlorides of antimony, gallium and indium, to be used in the activity process. The permit was transferred to Multivalent Limited on 15/07/2010 with a new permit number BP3936TH.

The operator is permitted to carry out the following activities, listed under Schedule 1 to the PPC Regulations (now the Environmental Permitting Regulations (EPR)):

- Section 4.2 A (1) (a) (iv) - "Producing Inorganic Chemicals such as: salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate, cupric acetate, ammonium phosphomolybdate".
- Section 4.2 A (1) (b) - " Unless falling within another section of this Schedule, any manufacturing activity which uses, or which is likely to result in the release into the air or into water of, any halogens, hydrogen halides or any of the compounds mentioned in paragraph (a)(iv), other than the treatment of water by chlorine"

The permit also authorised the operation of the following directly associated activities (DAAs):

- Raw materials storage and handling.
- Storage and handling of waste.

During the initial application for an environmental permit it was determined to be a low impact installation.

The main features of the installation when operational were as follows (reproduced from the non technical description in the permit and Surrender site report (SSR)):-

- The research and synthesis of niche inorganic chemical compounds on a laboratory scale for use in microelectronics, lasers, fuel cells, medical devices and inkjet printing.
- Two different processes will be employed. The first process is the synthesis of metal alkoxides or metal amides or metal diketones via filtration, centrifugation, concentration, crystallisation, distillation and fractionation.
- The second process is the synthesis of less common salts by double decomposition.
- The processes are to be conducted in a specially designed glass equipment of 30 litres in capacity with Polytetrafluoroethylene (PTFE) accessories.
- The total amount of production will vary from 10 to 50 kgs per month with a maximum annual production of 500 kgs.
- Toxic elements of the family antimony, arsenic, cadmium, gallium etc will not be used. Solvents such as aliphatic alcohols, esters and hydrocarbons plus water will be used in the process.

The Operator has applied to surrender the Permit. The permitted activities carried out by Multivalent Limited ceased on 09 November 2013.

The application was determined as a low risk surrender.

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

The test for the surrender of permits is given in paragraph 14 of Schedule 5 to the EPR 2010, where it states that:

The regulator must accept an application to surrender an environmental permit in whole or in part under regulation 25(2) if it is satisfied that the necessary measures have been taken –

(a) to avoid a pollution risk resulting from the operation of the regulated facility; and

(b) 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.

The factors that we have taken into account in determining whether to accept the application for surrender of the permit are described below.

Pollution Risk

There were air emissions from the installation but no process emissions to controlled water; sewer and land from the installation. The installation was assessed and determined to have a low impact on the environment.

All sinks were disconnected from the external drainage system prior to permit issue and floor drains were sealed with concrete. The external drainage system has only been used for surface/rainwater collection for the duration of the permit.

The site has no history of accidents or pollution.

Decommissioning and Removal of Pollution Risk

The Operator has confirmed in their site surrender report (SSR) that;

- all waste have been removed from site and the storage area has been cleaned down;
- all permitted activities have ceased;
- the pollution risk has been removed; and
- the condition of the land has not deteriorated during the lifetime of the permit.

The operator's surrender SSR shows that there has been no change in the condition of the land and that pollution prevention measures have worked during the life of the permit.

We are satisfied that the 'test' for the surrender of permits under paragraph 14 of Schedule 5 to the EP Regulations has been met. Based on our analysis

and consideration of the application to surrender the permit, we have concluded that:

- the necessary measures to avoid a pollution risk during the operation of the regulated facility were undertaken, which has protected the site from deterioration;
- all potential polluting activities associated with site activities have been removed; and
- the site of the regulated facility is in a satisfactory state for surrender.

Annex 1: decision checklist

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

Aspect considered	Justification / Detail	Criteria met
		Yes
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.	✓
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.	✓