Environment Agency Permitting Decisions

Part surrender

The Environment Agency has decided to accept the surrender of part of the permit for Gaskill Road, Speke Vaccines operated by Novartis Vaccines and Diagnostics Limited.

The permit number is BS5401IK and the notice of partial surrender is EPR/BS5401IK/S005

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.

The part surrender allows for the closure of sites 1 and 2 with continuation of sites 3 and 4 within single installation boundary.

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
- justifies the specific conditions in the permit as a result of the partial Surrender

Structure of this document

Annex 1 the decision checklist and Key Issues

Annex 1: decision checklist

Aspect considered	Justification / Detail	Criteria met Yes
Receipt of submission		
Confidential information	There has been no claim for commercial confidentiality.	✓
Identifying confidential information	No confidential information has been identified.	✓
The facility		
The regulated facility	The permitted regulated facilities have changed as a result of the partial surrender. All the permitted activities on sites 1 and 2 have been discontinued. **During the site visit dated 13/04/11 a summary of progress on site surrender was confirmed as follows:** • Site 1 – All process equipment, pipe work and ancillary equipment with process contact have been cleaned out. Tank cleaning certificates have been provided in Appendix E of application partial surrender site report. Buildings have been cleared however the site is to be sold with key buildings and process equipment in place. Hence two mercury waste tanks plus Site 1 boilers have been cleaned out but are to remain. The rest of the process equipment and pipe work have been removed. Process drains have been cleaned out. The work on this site is complete and returned to a satisfactory state from site visit review • Site 2 – All process equipment, pipe work and ancillary equipment with process chemical contact have been cleaned out. This site is being cleared completely. All process equipment with chemical content have been removed, what remained were some water tanks due for imminent removal. The Technical Development department (not a permitted activity) still is in operation and has potential however unlikely for small releases of mercury to sewer emission point S4. The operator is to confirm the cessation of these activities and flushing of site 4 drains, allowing confirmation that the site is a satisfactory state. **This was completed 05/05/11.** Photographs provided evidence of tanks being cleaned out are provided in site surrender report Appendix G. The removal of all installation waste has been substantiated via submission of waste transfer notes (see Appendix F).	✓
The permit conditions		
Changes to permit conditions (part surrender only)	The permit conditions have changed as a result of the partial surrender. The following conditions have been deleted • Condition 2.3.2 referenced Table S3.1 • Table S3.1 specified the heavy fuel oil used on site 1 • Table S4.1a (Site 1) Specified the emission points in site 1 • Table S4.1b (Site 2) Specified the emission points in site 2 • Table S4.2 there are no emissions to surface water • Table S4.3a (Site 1) Specified emission limits for site 1 • Table S4.3b (Site 2) Specified emission limits for site 2 •	✓

Aspect considered	Justification / Detail	Criteria met Yes
	The following conditions have been amended: • Table S1.1 activities, as referenced in condition 2.1.1 was amended to remove the activities in sites 1 and 2. • Condition 3.1.1 was amended to remove reference to tables S4.1 (a-b) and S4.3 (a-b) • Condition 3.6.1 was amended to remove reference to tables S4.1 (a-b) and S4.3 (a-b) • Condition 3.6.4 was amended to remove reference to tables S4.1 (a-b), S4.2 and S4.3 (a-b) • Table S5.1 Reporting of monitoring data as referenced in condition 4.2.2 was amended to remove reference to emission points to air A3, A4, A7 and A8 from sites 1 and 2 plus update S5 sewer discharge to as requested by the Agency • Table S1.2 amended with update operating techniques Table S4.3 c) (Site 3) Point sources to sewer has been amended to reflect partial closure of site 3 to require S5 monitoring " as requested by the Environment Agency "	
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 and an amended site plan has been included in schedule 4 of the partial surrender notice which now covers the newer sites 3 and 4 only. Condition 2.2.1 is amended	✓
Pollution risk	A partial surrender site report was included with the application including an update site condition report relating to sites 1 and 2 for this partial surrender (report reference 49308339/MARP002) **The report included the following extra headings:** a) Changes to the permitted activities during the life of the permit since initial determination at the end of 2006 (negligible impact on sites 1 and 2 ; main changes relating to remaining site 4 covering in three Environment Agency variations). b) Measures taken to protect land – including improvements to bunding and material storage. c) Historic Pollution Incidents – Impacts and their remediation. Mention made of mercury breaches to sewer linked to sites 1 and 2 but confirmation of no incidents impacting ground water and land. Further details provided in key issues section below. A full listing of incidents has been provided since initial permit determination (2007) in Appendix C. This list provides responses and improvements linked to each incident. The site Protection and Monitoring Program actions plus evidence of completion are detailed in Appendix B of this report. d) Decommissioning and Removal of Pollution Risk. The decommissioning process is being managed by a specialist contractor under the supervision of Novartis staff. The site closure plan submitted with original permit application has been utilised and further detailed procedures developed along with risk assessments (see Appendix E of this report for details). This covers decontamination of tanks, drums/IBC's, washing down of site drainage and interceptors , asbestos containing materials removal via a licensed contractor and decommissioning of ancillary facilities including boilers.	

Aspect considered	Justification / Detail	Criteria met
	The site tour 13/04/11 and presentation given during the visit (submitted to the Environment Agency 18/04/11) provided evidence to substantiate claim that all process materials and process equipment contaminated with such materials have been removed from the two sites 1 and 2. Specifically this additional presentation provided additional photographic evidence of the complete decommissioning of the two sites. In addition, not for the purposes of this surrender determination but to advance the sale of site 1, intrusive sampling to ensure ground water and soil analysis was carried out. Intrusive sampling was not required at the application stage. ***There was no evidence of installation process materials remaining within installation;*** in particular what was of specific significance was no detection of mercury. The presentation gives a summary of organic contaminants in groundwater samples and arsenic in soil and groundwater samples , none of which are linked to installation process materials A summary of the borehole positions and sample data are provided in this presentation We are satisfied that the necessary measures have been taken to avoid a pollution risk resulting from the operation of the regulated facility.	**Yes**
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. This is based on final site inspection by Environment Agency dated 13/04/11, operator submission of progress review 18/04/11 and final confirmation of actions on site 2 to clean out S4 drain after Technical Development Lab cessation of activities (dated 05/05/11).	

Key Issues of the decision

Sites 1 and 2 are the original older production sites dating back over 30 years. It was always the long term aim of the operator that when sites 3 and 4 became fully operational and production /market restrictions allowed sites 1 and 2 would close.

Appendix E of site surrender report describes decommissioning and demolition plan. Presentation submitted 18/04/11 after site visit substantiated the decommissioning had been complete and the demolition for site 2 was in an advance state of progress.

The overall reduction in environmental impact due to this surrender is considerable, as within the last few years production was taking place on both sites 1 and 2 plus 3 and 4. The sites 3 and 4 have been designed for environmental control based on integral design and less dependant on manual operating techniques compared with sites 1 and 2. The minimisation of mercury discharge to sewer in particular has more controls based on engineering design on sites 3 and 4 relative to sites 1 and 2.

In particular the sites 1 and 2 included four boilers which are now redundant as follows:

- Site 1 (1.4 MW and 2.1 MW gas fired boiler)
- Site 2 (two 5.0 MW fuel oil-fired boilers)

Based on the response from improvement programme IP4 in original permit BS5401IK the environmental impact of the installation for combustion gases (carbon monoxide, sulphur dioxide and nitrogen dioxide) will be insignificant with sites 3 and 4 only operational. This is based on inclusion of additional boiler on site 4 introduced after original permit determination.

In consequence no heavy fuel oil will be utilised within installation boundary after the closure of site 2. Overall raw materials (e.g. bulk acids and sodium hydroxide, fuel and water treatment chemicals) and water use across the installation will be reduced due to the closure of these two sites.

As such the Environment Agency agrees that sites 1 and 2 have been returned to a satisfactory state after 13/04/11 site visit and final operator submission dated 18/04/11, with principle of sites 1 and 2 shutdown.

In addition with the closure of these sites the overall impact installation environmental impact of remaining sites 3 and 4 has reduced, particularly in terms of oxides of nitrogen emission to air and mercury discharge to sewer.

In light of site visit 13/04/11 and partial closure of site 3, beyond scope identified in the surrender application, S5 sewer monitoring has been modified as only as requested by the Environment Agency.

The exact scope of site 3 partial closure is likely to be the subject of a future application for partial surrender.