

Application SCR evaluation template

Name of installation, address and NGR	<p>GlaxoSmithKline Research and Development Limited</p> <p>Harlow Boilers and Generators, New Frontier Science Park, 3rd Avenue, Harlow, Essex, CM19 5AW</p> <p>At NGR TL 430 095</p> <p>Application reference EPR/FP3633LA/S004</p>
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Document reference of application SCR Date and version of application SCR	Document entitled 'Surrender Site Condition Report', project number UK11-23754, dated 19 July 2017 and prepared by Ramboll Environ.
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Supporting documents	<ul style="list-style-type: none"> • Appendix 1 – Figures. • Appendix 2 – Photographic logs. • Appendix 3 – Permit and variation. • Appendix 4 – CAR and pre-surrender meeting. • Appendix 5 – Pre-permit site investigation. • Appendix 6 – Chemical storage and tank details. • Appendix 7 – Protection and Monitoring Plan and Application Site Report. • Appendix 8 – Annual reporting. • Appendix 9 – Checklists and procedures. • Appendix 10 – Decommissioned plant labelling. • Appendix 11 – Improvement programme documents. • Appendix 12 – Discharge Consent termination. • Appendix 13 – Example PPM Jobsheets and Checklists. • Appendix 14 – Accident Management Plan.
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1.0 Site details

Has the applicant provided the following information as required by the application SCR template?

Site plans showing site layout, drainage, surfacing, receptors, sources of emissions/releases and monitoring points

Provided in support of Environmental Permit application EPR/FP3633LA; accepted and determined on 14/12/2006 as part of the original application submission.

2.0 Condition of the land at permit issue

(Receptor)

Has the applicant provided the following information as required by the application SCR template?

- a) Environmental setting including geology, hydrogeology and surface waters
- b) Pollution history including:
 - pollution incidents that may have affected land
 - historical land-uses and associated contaminants
 - visual/olfactory evidence of existing contamination
 - evidence of damage to existing pollution prevention measures
- c) Evidence of historic contamination (i.e. historical site investigation, assessment, remediation and verification reports (where available))
- d) Has the applicant chosen to collect baseline reference data?

The Application Site Report (ASR) contained details of:

- a) *The environmental setting: geology, hydrogeology and hydrology (Made Ground, superficial deposits of Lowestoft Formation, Glaciofluvial Deposits and superficial Head deposits, overlying London Clay and Woolwich, Reading Beds and Thanet Beds of the Lambeth Group,*

2.0 Condition of the land at permit issue

(Receptor)

Has the applicant provided the following information as required by the application SCR template?

and Upper Cretaceous Chalk; unproductive aquifer in the London Clay, secondary aquifer in the Lambeth Group, secondary aquifer in the Glaciofluvial Deposits, and a principal aquifer (Chalk); shallow discontinuous groundwater; small pond approximately 100m south-east of the site, Pardon Brook approximately 185m east of the site, and Canons Brook located approximately 275m east of the site).

b) *Pollution history:*

- *Site history – Prior to the 1950's the installation is thought to have been a Greenfield site. The Beecham Group acquired different parts of the site in the period 1960 to 1990. The different parts of the site had been used for:
 - o *Chemicals development (Berk Chemicals);*
 - o *Warehousing and packaging fruit;*
 - o *Medical gases and gas bottle component assembly (included a metal treatment facility and cyanide sump);*
 - o *Conference facilities; and*
 - o *Photographic and Radiographic films R&D labs.**
- *There were four incidents of loss of containment at the site prior to the issue of the permit.*
- *The Surrender Site Condition Report (SCR) states that there were four National Rivers Authority (NRA) reports from 1994 for incidents associated with the site's chilled water system due to the release of glycol solution to an off-site pond. A number of recommendations were made regarding the system, however, it was decommissioned in the late 1990's. There are no reports of any impact on the soil or groundwater at the site.*
- *The Surrender Site Condition Report (SCR) states that approximately 17 pollution incidents were identified within a 250m radius of the site, all of which occurred prior to the issue of the permit, and none were attributed to the site.*
- *A list of substances used, stored and manufactured in the installation was provided in Appendix D1.*

c) *Information on historic contamination was provided in section 4 through the undertaking of site reconnaissance on 24th January 2006. Two site investigations were undertaken in 2002 and 2004, which found little contamination with only trace quantities of VOC's and methanol located in three locations.*

d) *No baseline data was collected for the application for Environmental Permit EPR/FP3633LA. However, as stated above, two site investigations were undertaken in 2002 and 2004.*

3.0 Permitted activities

(Source)

Has the applicant provided the following information as required by the application SCR template?

Response
(Specify what information is needed from the applicant, if any)

a) Permitted activities

b) Non-permitted activities undertaken at the site

The site was permitted under Section 1.1 A(1) (a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more. The purpose of the installation was to provide steam, high temperature hot water and emergency electricity backup to the facility.

The installation comprised of the following listed boilers and generators:

- *Harlow North and Fourth Avenue Site
 - o *Building H4, Old Boiler House: Boiler 1 – 6.6MW; Boiler 2 – 3.3MW; and Boiler 3 – 6.6MW;*
 - o *Building H39, Energy Management Centre: Boiler 2 – 10MW; Boiler 3 – 10MW; and Boiler 4 – 6.6MW;**

3.0 Permitted activities (Source)	
Has the applicant provided the following information as required by the application SCR template?	Response (Specify what information is needed from the applicant, if any)
	<ul style="list-style-type: none"> ○ Building H39: Two Emergency Generators of 3.5MW each and one Emergency Generator of 3.7MW; ○ Building H15: Emergency Generator of 1.2MW; ○ Building H17: Two Emergency Generators of 1.8MW each; ○ Building H35: Emergency Generator of 1.7MW; and ○ Building H45 (forming part of the former Forth Avenue GSK site): Emergency Generator of 1.1MW. <ul style="list-style-type: none"> ● Harlow South <ul style="list-style-type: none"> ○ Building H84: Emergency Generator of 2.3MW; ○ Building H87, HTHW Boiler House: Three boilers of 3.75MW each; ○ Building H87, South Side Boiler House: Boiler 1 and Boiler 2 of 6.6MW each; ○ Building H87: Four Emergency Generators of 1.7MW each; ○ Building H89: Emergency Generator of 1.8MW; ○ Building H92: Two boilers of 0.73MW each (installed in 2010 permit variation FP3633LA/V002); and ○ Building H92: Emergency Generator of 1.0MW (installed in 2010 permit variation FP3633LA/V002). <p>With the Directly Associated Activities of:</p> <ul style="list-style-type: none"> ● Oil storage. ● Effluent balancing. ● Boiler feed-water treatment.

3.0(a) Environmental Risk Assessment (Source)
The H1 environmental risk assessment should identify elements that could impact on land and waters, cross- referenced back to documents and plans provided as part of the wider permit application.
<i>The Environment Agency reviewed the applicant's environmental risk assessment and assessment of the effectiveness of pollution prevention measures. The information submitted indicated that there was a reasonable possibility of future pollution of the land. Therefore it was determined that a Site Protection and Monitoring Programme (SPMP) would be required for assessment and approval, and improvement conditions were included within the permit.</i>

3.0(b) Will the pollution prevention measures protect land and groundwater? (Conceptual model)
Are the activities likely to result in pollution of land?
<p>As stated above, it was identified in the original Application Site Report that there was a reasonable possibility of land pollution. The permit was issued with conditions requiring the implementation and operation of a SPMP and improvement conditions relating to the protection of the environment from the permitted activities as follows:</p> <ul style="list-style-type: none"> ● Improvement Condition 2 required the operator to undertake a drainage survey of the Fourth Avenue section of the installation. ● Improvement condition 3 required the operator to carry out improvements to the hardstanding and bunding within the installation. <p>The operator had an Environment, Health and Safety Management System (EHSMS) which covered the installation, and also had a computerised Planned Preventative Maintenance (PPM) system.</p>

<i>Overall it was considered that the application adequately described the condition of the site and in particular identified any substance in, on or under the land that may constitute a pollution risk.</i>	
For dangerous and/or hazardous substances only, are the pollution prevention measures for the relevant activities to a standard that is likely to prevent pollution of land?	<i>The submitted information did not provide adequate detail in relation to the pollution prevention measures in place at the site. Therefore, improvement conditions were added to the permit as discussed above.</i>

Application SCR decision summary	Tick relevant decision
Sufficient information has been supplied to describe the condition of the site at permit issue	Yes
Pollution of land and water is unlikely with the conditions set within the permit	No
Historical contamination may be present- advise operator that collection of background data may be appropriate	Yes
Date and name of reviewer: (signature of authorising officer on permit)	J Henderson 14 December 2006

Operational phase SCR evaluation template

Sections 4.0 to 7.0 may be completed annually in line with normal record checks.

4.0 Changes to the activities (Source)	
Have there been any changes to the following during the operation of the site?	Response (Specify what information is needed from the applicant, if any)
a) Activity boundaries b) Permitted activities c) "Dangerous substances" used or produced	<p><i>Environmental Permit EPR/FP3633LA was issued to GlaxoKlineSmith Research and Development Limited in December 2006. Since then there have been a number of changes to operations, primarily associated with the decommissioning of a number of permitted boilers and generators. The main changes were as a result of variation application EPR/FP3633LA/V002, which comprised the following:</i></p> <ul style="list-style-type: none"> • <i>Minor corrections to the site boundary.</i> • <i>Decommissioning of the three boilers in Building H4 (totalling 16.5 MWth) and the subsequent demolition of Building H4; and</i> • <i>Addition of two natural gas fired 0.73 MWth boilers and one fuel powered emergency generator (1 MWth) at Building H92.</i> <p><i>Additional changes since the permit was granted are detailed below:</i></p> <ul style="list-style-type: none"> • <i>Building H45 – In 2012 the emergency generator (1.1 MWth) was decommissioned and dismantled. The building was subsequently demolished and the plot has since been redeveloped as a warehouse.</i> • <i>Building H15 – In 2010 the emergency generator (1.2 MWth) and the associated external gas oil tank were decommissioned, and the tank was removed from the site.</i> • <i>Building H39 – Boiler 2 (10 MWth) and Boiler 3 (10 MWth) were decommissioned in August 2012 and March 2013 respectively.</i> • <i>Building H84 – In 2010 the emergency generator (2.3 MWth) was decommissioned and dismantled and the building was subsequently demolished.</i> • <i>Building H87 – Boiler 1 (3.75 MWth), Boiler 2 (3.75 MWth) and Boiler 3 (3.75 MWth) were decommissioned in January 2011. Emergency Generator 1 (1.7 MWth) and Emergency Generator 4 (1.7 MWth) have since been decommissioned.</i> <p><i>The decommissioning and decontamination of the aforementioned boilers and generators located within Building H45, Building H15, Building H39, Building H84 and Building H87 has given rise to an additional overall reduction in the thermal input of the installation from approximately 83 MWth (following the 2010 permit variation) to 43.46 MWth which is below the >50 MWth threshold for the current permit.</i></p> <p><i>A summary of the current status of the boilers and generators covered by the permit is shown in Table 1 on pages 13 and 14 of this document.</i></p> <p><i>No relevant dangerous substances were known to have been used, produced or released as a result of the permitted activities that were not documented in the original ASR.</i></p>

5.0 Measures taken to protect land

(Pathway)

Has the applicant provided evidence from records collated during the lifetime of the permit, to show that the pollution prevention measures have worked?

The surrender application provided information on the preventative measures taken to protect the land, air and groundwater. A SPMP was devised by ABB Limited (ABB) for the GSK Harlow Boilers and Generators in February 2007. The SPMP included an infrastructure monitoring programme (IMP) which has been in operation, without break, throughout the life of the permit. The IMP was designed to:

- *Monitor the effectiveness of pollution prevention infrastructure and provide early warning of the release of any polluting substances to ground or groundwater.*
- *Review, and if necessary, amend the inspection, testing and maintenance programme for pollution prevention infrastructure at the installation to ensure continued integrity.*

The installation infrastructure has been managed and monitored by GSK through the process of regular planned inspections, testing and maintenance, and included a system of assessing, recording and reporting the results within the IMP. Further details are summarised below:

- *Inspection of boilers including a daily in-house check, tri-weekly chemical dosing checks, weekly evaporation tests and a 6 monthly service by competent persons.*
- *Oil tanks, bunds, ancillary equipment and the surrounding hardstanding were subject to a weekly check and a more thorough check every 13 weeks by in-house engineers and an annual inspection.*
- *The generators were tested every 4 weeks by in-house engineers and also serviced every 6 months by competent persons.*
- *Inspection of the drainage system including a daily in-house check, 6 monthly maintenance checks and an integrity check via CCTV survey every 10 years.*

In support of the IMP, there was a formalised training process in place, which also ensured that all contractors and visitors received adequate training and/or information. There was also a PPM system in place and internal personnel also undertook ad hoc visual inspections of infrastructure elements.

The site had an EHSMS which was designed to be compatible to ISO 14001, although formal accreditation had not been gained. The system focused on legal compliance, continuous improvement and the management of key environment, health and safety (EHS) related risks.

The site also had procedures in place for spills and the storage of chemicals.

6.0 Pollution incidents that may have impacted on land and their remediation

(Sources)

Has the applicant provided evidence to show that any pollution incidents which have taken place during the life of the permit and which may have impacted on land or water have been investigated and remediated (where necessary)?

The Surrender SCR confirms that there have been no potential pollution incidences associated with the boiler and generator installation during the lifetime of the permit.

7.0 Soil gas and water quality monitoring (where relevant)

Where soil gas and/or water quality monitoring has been undertaken, does this demonstrate that there has been no change in the condition of the land? Has any change that has occurred been investigated and remediated?

No soil, gas and water quality monitoring was undertaken at the site during its operational phase.

A SPMP was devised by ABB Limited (ABB) for the GSK Harlow Boilers and Generators in February 2007. As a result of the conclusions drawn from the assessment undertaken as part of the ASR, and taking into account various improvements implemented, and planned, to the pollution prevention infrastructure at the site, ABB was considered that there was little likelihood of pollution or leaks to land occurring during the future life of the boiler and generator installation. ABB discussed this with the EA and it was agreed that the collection of environmental reference data was not required. An Environmental Monitoring Programme (EMP) was therefore not developed in relation to the operation of the permitted boiler and generator installation.

Surrender SCR Evaluation Template

If you haven't already completed previous sections 4.0 to 7.0, do so now before assessing the surrender.

8.0 Decommissioning and removal of pollution risk

Has the applicant demonstrated that decommissioning works have been undertaken and that all pollution risks associated with the site have been removed? Has any contamination of land that has occurred during these activities been investigated and remediated?

The applicant submitted the report 'Surrender Site Condition Report', project number UK11-23754, dated 19 July 2017' to support their application to surrender the permit EPR/FP3633LA. The permit is being surrendered due to the site falling under the regulatory threshold of >50 MWth as a result of decommissioning a number of boilers and generators. A summary of the current status of the boilers and generators covered by the permit is shown in Table 1 on pages 13 and 14 of this document.

Prior to decommissioning all GSK equipment and plant (including flues, tanks and fuel lines) were decontaminated and cleaned in line with the relevant GSK EH&S Procedures. Associated plant rooms were also cleaned. All applicable equipment and associated plant were decontaminated and cleaned in line with relevant GSK procedures and best practice guidance. All decommissioned plant has been clearly labelled stating that the equipment is not to be recommissioned or restarted before seeking permission from the GSK EHS Team (as shown in Appendix 10 of the Surrender SCR). The decommissioned boilers and generators have been isolated from power supplies and, as such, cannot be easily restarted in the event of failure of the remaining operational installations.

A summary of the decommissioning works and removal of pollution risk undertaken at the site is as follows:

Generators

The following decommissioning works were undertaken for all the applicable generators:

- *Electrical isolation from the LV system;*
- *Disconnection of the start batteries;*
- *The contents of the bulk fuel oil storage tank and associated pipework were drained and redeployed on site. The tank and associated pipework were then washed and steam cleaned in line with GSK procedures, before being removed by an appropriately licensed contractor. The fuel supply can therefore not be reinstated. All materials were recycled where possible;*
- *Engine oil and lubricating oils were removed from the generator and re-used on site (where possible) or disposed of by a suitably licensed contractor;*
- *The generators were decontaminated and cleaned in line with GSK procedures and relevant best practice guidelines.*

Boilers

The following decommissioning works were undertaken for all the applicable boilers:

- *Electrical isolation at the local distribution board;*
- *Isolation and removal of ignition gas and cylinders;*
- *Isolation from the mains gas supply;*
- *The boiler steam outlets were blocked off;*
- *The boilers were drained of water and mechanically isolated from the water supply;*
- *The boilers were decontaminated and cleaned in line with GSK procedures and relevant best practice guidelines.*

The following generators remain in situ:

- *Building H15 – the Emergency Generator (1.2 MWth).*
- *Building H87 – Emergency Generator 1 (1.7 MWth) and Emergency Generator 4 (1.7 MWth).*

8.0 Decommissioning and removal of pollution risk

Has the applicant demonstrated that decommissioning works have been undertaken and that all pollution risks associated with the site have been removed? Has any contamination of land that has occurred during these activities been investigated and remediated?

The following generators and associated infrastructure have been removed from site:

- *Building H45 – the Emergency Generator (1.1 MWth).*
- *Building H84 – the Emergency Generator (2.3 MWth).*

The following boilers remain in situ and the fuel levels within the associated bulk fuel oil storage tanks are kept at a low level in order to minimise the pollution source risk:

- *Building H39 – Boiler 2 (10 MWth) and Boiler 3 (10 MWth).*
- *Building H87 – Boiler 1 (3.75 MWth), Boiler 2 (3.75 MWth) and Boiler 3 (3.75 MWth).*

A GSK representative ensured that no leaks or spills occurred during the decommissioning process.

Buildings H84, H45 and H4 have subsequently been demolished.

Demolition waste

Site waste management plans were produced for the demolition activities by the relevant contractors to ensure all wastes were appropriately handled in accordance with legislation. Details of materials reused, recycled, recovered and disposed of including tanks, vessels, plant and decommissioned equipment were recorded by the contractors in addition to the volumes of fluids reused and/or disposed. Copies of the associated waste transfer notes were obtained by the relevant contractors.

Waste plant and chemicals

The decommissioned boilers were sold for reuse. The fuel/oil storage tanks serving the decommissioned boilers/generators (both day and bulk storage tanks) were drained of fuel. The decommissioning operations were supervised by a GSK representative, ensuring no leaks or spills occurred. Where possible, the salvageable fuels, lubricants and oils were redeployed on the site. Any unusable fuels or oils were disposed of appropriately.

Drums and plastic containers of chemicals (including diesel, hydrochloric acid, sodium hydroxide solution and lubricating oils) were previously utilised in the boiler and generator installation. Any chemicals that could not be utilised elsewhere on site were appropriately disposed of during the decommissioning processes. Where possible, the chemicals were reused on the site. All off-site transport and treatment of wastes was undertaken by appropriately licensed waste management contractors.

Details of all the chemicals currently use at the facility, including the associated quantities, COSHH Assessments and Safety Data Sheets (SDS), are held by the local management as part of inventory management and control.

All waste removal activities completed by GSK at the site have been undertaken in line with the appropriate GSK EHS Procedure. All duty of Care waste transfer notes and any hazardous waste consignment notes are completed and the required checks are carried out on the licenses of the receiving facility and waste carrier. In addition, GSK has a policy of auditing the sites that receive our waste at a frequency determined by risk and agreed with our service partners (Sodexo and Veolia). Records of this type of document are retained for 2 years for waste transfer notes and three years for hazardous waste consignment notes. A transfer note from July was included within the application as an example.

8.0 Decommissioning and removal of pollution risk

Has the applicant demonstrated that decommissioning works have been undertaken and that all pollution risks associated with the site have been removed? Has any contamination of land that has occurred during these activities been investigated and remediated?

Drainage survey and cleaning

Whilst the decommissioning works were being undertaken, continual assessment of the effect of the decommissioning processes on the drainage system were undertaken. Appropriate actions, such as additional inspections, the provision of additional filters, cleaning, jetting and, where appropriate, drainage repairs, were undertaken to ensure that contamination as a result of the decommissioning processes did not occur.

The potential for the drainage system to have led to significant pollution over the lifetime of the permit is considered to be low, for the following reasons:

- There have not been any recorded pollution incidents at the site associated with the boiler and generator installation since the permit was sought;*
- Limited process effluent in the form of boiler blowdown, boiler feed water treatment plant effluent and potentially contaminated storm water from the bulk storage tank bunds is produced. This is balanced for pH before being discharged to sewer and subsequent treatment. Uncontaminated storm water is discharged to Canons Brook via a series of interceptors, retention tanks and isolation valves. Effluent is regularly tested, in relation to a discharge consent from Thames Water for Harlow South, and any exceedances recorded have not been attributed to the boiler and generator installation. The boiler and generators installation (including fuel storage tanks, interceptors, retention tanks and isolation valves) have been regularly serviced and maintained throughout the lifetime of the permit; and*
- An improvement condition within the permit concerned improvements to the hardstanding and bunding within the installation. These works were completed, acting to further reduce the likelihood of any leak or spill impacting the drainage network.*

On this basis the potential for transmission of boiler and generator related pollutants via the drainage system and thereafter to ground via the drainage system is not considered to be significant.

There is an expectation that much of the boiler and generator installation in Harlow North will be removed by the new owners, Public Health England, after the sale of this part of the GSK Facility, which is expected to be completed by mid-2018. The boiler and generator operations in Harlow North are currently minimal, and designed to maintain the fabric of the building whilst negotiations with the proposed owners of the site continue.

The Harlow South part of the site was sold in December 2016, and it is understood that much of the currently operational boilers and generators here will continue to remain active in the short term. GSK will continue to occupy and lease Buildings H92 and H97 for potentially 5-10 years, and Buildings H89 and H87 until the end of 2018. Once building H89 is handed back to the landlord (Mulberry Estates), support infrastructure to GSK buildings will only be provided by generator and boiler plant located within building H92. It is anticipated that the majority of the buildings on Harlow South will be demolished post-2018 and redeveloped by the landlord.

The inspecting officer has undertaken a number of site visits to confirm the decommissioning of the applicable boilers and generators, and that all potential pollution risks have been removed from the site as far as is practicable.

9.0 Reference data and remediation (where relevant)

Has the applicant provided details of any surrender reference data that they have collected and any remediation that they have undertaken?

No baseline data was required for the original determination in 2006, and no soil, gas and water quality monitoring was undertaken at the permitted site during its operational phase. Therefore the Surrender Report has been based upon IMP and EHSMS reporting, plant inspection and maintenance records and inspection forms.

NB: For information purposes – in October 2016, Ramboll Environ undertook a Phase II Environmental Assessment of GSK Harlow South in relation to the proposed sale of the site. The site investigation comprised the excavation of 24 window sample boreholes (WS01-WS24) to a maximum depth of 5.0m below ground level (bgl) and ten trial pits to maximum depth of 3.2m bgl, to facilitate the collection of shallow soil samples from Made Ground and the underlying superficial deposits. Dual gas and groundwater monitoring standpipes were installed in 15 locations. Overall, no evidence of significant contamination was found in areas of the site targeted by the investigation. Harlow North and the Fourth Avenue area were not covered by the investigation.

The incinerator at the site was surrendered in 2016 under application EPR/KP3430BL/S003 and it was confirmed by consultation with Groundwater and Contaminated Land that no intrusive investigation was required at that point. However, should the conceptual site model change then remediation may be required at a future date. It is considered that this is still applicable to the site.

10.0a Statement of site condition

Has the applicant provided a statement, backed up with evidence, confirming that the permitted activities have ceased, decommissioning works are complete and that pollution risk has been removed and that the land and waters at the site are in a satisfactory state?

The Surrender Report contained details of the IMP and EHSMS reporting, plant inspection and maintenance records and other pollution prevention measures in place at the site.

No areas of the boiler and generator installations were considered to have had the potential for a change in ground conditions during the permit lifetime, since no spills, leaks, or losses have been documented or are known to have occurred.

At the point of permit surrender, a number of the boilers and generators included within the permit will remain operational. Based on the current operational equipment, the aggregate thermal input falls below the threshold levels for the permit (>50 MWth). On this basis some of the boiler and generator installations will continue to operate outside of the scope of the Environmental Permitting Regulations presently, although the remaining plant will be coming under the Medium Combustion Plant (MCP) Directive for existing plant in 2025. The operator has been made aware of this. The operational boilers and generators will continue to be operated under GSK's PPM Programme, utilising current procedures. A summary of the current status of the boilers and generators covered by the permit is shown in Table 1 on pages 13 and 14 of this document.

The inspecting officer has undertaken a number of site visits to confirm the decommissioning of the applicable boilers and generators, and that all potential pollution risks have been removed from the site as far as is practicable.

The Environment Agency confirms that the permitted Harlow Boilers and Generators installation has been returned to a satisfactory state.

Surrender SCR decision summary	Tick relevant decision
Sufficient information has been supplied to show that pollution risk has been removed and that the site is in a satisfactory state – accept the application to surrender the permit; or	✓
Date and name of reviewers: Kirsty Hobbs (Permitting Officer – NPS) – 28/11/2017 Laura Mellor (Permitting Officer – NPS) – 30/11/2017 Howard Tee (Regulatory Officer – Combustion Sector) – 30/11/17	

Table 1: Current status of the boilers and generators at the site.

Area of Facility	Building Reference	Boiler/Generator Reference	Thermal Input (MWth)	Current Status
Boilers				
North	H4 – Old Boiler House	Boiler 1	6.6	Decommissioned and demolished in 2009
		Boiler 2	3.3	
		Boiler 3	6.6	
	H39 – Energy Management Centre	Boiler 2	10	Decommissioned in August 2012
		Boiler 3	10	Decommissioned in March 2013
		Boiler 4	6.6	Operational
South	H87 – South Side Boiler House	Boiler 1	6.6	Operational
		Boiler 2	6.6	
	H87 – HTHW Boiler House	Boiler 1	3.75	Decommissioned January 2011
		Boiler 2	3.75	
		Boiler 3	3.75	
	H92	Boiler 1	0.73	Operational
		Boiler 2	0.73	
Generators				
North	H39	Emergency Generator 1	3.5	Operational
		Emergency Generator 2	3.5	
		Emergency Generator 3	3.7	
	H15	Emergency Generator	1.2	Decommissioned in 2010
	H17	Emergency Generator 1	1.8	Operational
	H17	Emergency	1.8	Operational

		Generator 2		
	H35	Emergency Generator	1.7	Operational
	H45 (Fourth Avenue Site	Emergency Generator	1.1	Decommissioned and demolished in 2015
South	H84	Emergency Generator	2.3	Decommissioned and demolished in 2010
	H87	Emergency Generator 1	1.7	Decommissioned in 2017
		Emergency Generator 2	1.7	Operational
		Emergency Generator 3	1.7	
		Emergency Generator 4	1.7	Decommissioned in 2017
	H89	Emergency Generator	1.8	Operational
	H92	Emergency Generator	1	Operational

Remaining total thermal input of operational boilers and generators = 43.46 MWth