

Application SCR evaluation template

Name of activity, address and NGR	Trafford Park Wheat Milling and Ethanol Plant. Guinness Road, Trafford Park, Manchester, M17 1PA. SJ 782 979
-----------------------------------	--------------------------------------------------------------------------------------------------------------------

Document reference of application SCR	SCR site layout with partial surrender SCR site Layout Subsurface Analysis Cargill Partial Surrender RE_Cargill's Trafford Park, BOC - CO2 project
---------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------

Date and version of application SCR	EPR/BM0117IJ/S005 01/02/17 EPR/BM0117IJ/V004 25/03/13 EPR/BM0117IJ/V002 15/11/06 EPR/BM0117IJ/A001 07/08/05
-------------------------------------	----------------------------------------------------------------------------------------------------------------------

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

The operator has provided a plan for the whole site which the Agency considers is satisfactory for showing the Installation boundary and the site boundary to which this permit applies to on that site. A plan is included in the permit at Schedule 5, and the operator is required to carry on the permitted activities within the site boundary.

The nearest residential properties identified are at approximately 350m to the north of the site. The majority of the site is covered by hardstanding, bunding/containment measures are in place and are stated to meet required standards. Proposals to implement formal inspections and maintenance procedures, these are to be followed up in Improvement Condition 6. Concerns were raised over the condition of underground effluent drains, and hardstanding outside the HCl stock tank bund, these need to be inspected and any deficiencies remedied (to be included in the Site Protection and Monitoring Programme (SPMP)).

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

The whole of the installation covers an area of approximately 16 hectares located in the predominantly industrial area of Trafford Park, approximately 5km west of Manchester. It is centred on grid reference 378050, 397900 at an elevation of approximately 20m to 25m above Ordnance Datum and is generally level. The nearest residential properties identified are at a distance of approximately 350m to the north of the site. The Manchester Ship Canal runs adjacent to the northern installation boundary. The current process has been operating on the site since 1955.

There are no sensitive habitats that have been identified by English Nature including SSIs, Spas or SACs within 1km of the site.

The site is underlain by Late Glacial Flood Gravels which are described as variable water lain silts, sands and gravels. The thickness, distribution and lithology of the drift is highly variable. However, previous investigations have suggested the thickness to be in the region of 1.0 to 9.1m. The historical development on the site suggests that made ground is present beneath the Late Glacial Flood Gravels. The Late Glacial Flood Gravels are underlain by Sherwood Sandstone, with a thickness of 250-500m. Previous site investigations have shown that the Sherwood Sandstone is present at a depth of 9.1m, the thickness was not proven.

The Late Glacial Flood Gravels are classified as a minor aquifer, these may be important for local supplies and in supplying the base flow for rivers. The Sherwood Sandstone is classified as a major aquifer, it is highly productive and capable of supporting large abstractions for public supply and industrial use. Within 1km of the site, there are eleven locations holding ground water abstraction licenses and one licence which has been revoked. The site is not situated in a ground water protection zone.

Previous investigations have shown that ground water is typically 2.0-4.0mbgl, flowing in a north-westerly direction and is likely to be in hydraulic continuity with the Manchester ship Canal. Data from 2000 shows the ground water to be in the range of 1.8-3.0mbgl across the site and at 2.5-3.5 at the canal side. Previous reports have indicated that as a result of boreholes a pathway for saline groundwater has been made through the relatively impenetrable Manchester Marl. This has contributed to the derogation of the water quality within the Sherwood Sandstone, particularly by increasing the ground water salinity. There are no current discharge consents to ground water within 1km of the site.

The nearest surface water course is the Manchester ship canal located adjacent to the northern boundary of the site. The water quality is classified as grade E (poor) by the environment agency under the General Quality Assessment Scheme. The Manchester ship canal was constructed in 1893, it has been indicated that the sides are stone to prevent erosion but is unlikely that there is an engineered lining in place and it is considered to be in hydraulic continuity with groundwater. The site does not lie within an indicative fluvial or tidal floodplain.

Within 1km of the site, there are currently 21 licenced discharge consents to surface water and 2 licences with an unknown status. Potential pathways between the site and the Manchester Ship Canal have been identified via the site drainage and the shallow ground water flow. No surface water abstraction licenses are held within 1km of the site.

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

The Conceptual Site Model (CSM) was developed from data gathered in the Application Site Report (ASR) from desk studies, site reconnaissance and previous intrusive investigations. Uncertainties in the CSM were identified to be the possibility of undocumented pollution incidents. Potential pathways were identified as percolation through permeable ground and local abstraction boreholes. Reasonable possibility of pollution was identified via leakage from drains, bulk storage of hydrochloric acid and discharge of cooling water effluent.

2.0 Condition of the land at permit issue

(Receptor)

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

The site in 1890 is shown to consist of open fields with wooded areas to the east, north and north-west. The centre of the site is occupied by a cricket ground and a timber yard occupies part of the south-eastern corner. A large pond is shown just outside the southern boundary, by the 1970s this has been infilled.

By 1908 there are several unnamed buildings located on the eastern edge of the site and in the centre of the site the cricket ground has become a polo ground.

By 1929 a corn product works occupies the eastern portion of the site, comprising of several large buildings connected by rail lines in the north-eastern corner of the site and smaller outlying buildings further south. Embankments associated with canal encroach on the north-eastern and north-western boundaries of the site. The corn works continues to expand throughout the 1900s incorporating several large chimneys and tanks. By 1929 the polo ground is no longer evident on maps.

The current process has been operating on the site since 1955. By 1964 the corn works has expanded in a westerly direction covering the majority of the incorporating further rail links, chimneys, tanks and buildings. The site has operated as a food processing works since the early 1900s and has been operating the Cerestar (Cargill Company) name since April 2002.

The potential contaminants from historical and ongoing activities within the area of the installation and adjacent sites:

Potential contaminative process	Potential contamination source	Potential contaminates
INSTALLATION AREA		
Historical activities		
Timber Yard	Spillages/ leakages of raw materials/ chemicals from storage areas or poor handling	Heavy metals, coal tar, oils, hydrocarbon solvents and pesticides
Coal fired powerhouse	Leakage/ spillages from storage areas to ground	Coal, sulphide, PAHs, toxic metals
Oil and fuel storage	Spillage of oil or fuel during storage, handling or use	Hydrocarbons
Chemical and raw material storage	Spillage of chemicals during storage, handling or use	Acids, alkalis, hydrocarbons
Interconnecting rail lines and sidings	Leakage of oils	Hydrocarbons, solvents, toxic metals
Ongoing activities		
Raw material storage	Spillages of glucose, dextrose, caramel	Sugars- BOD, acids from oxidation
Bulk storage of diesel oil	Potential for diesel oil leakage into ground	Hydrocarbons
Chemical storage and use	Spillage of chemicals during storage, handling or use	Acids, alkalis, hydrocarbons
Foul and effluent drainage and pipes carrying product	Leaks from drains or pipes	BOD, COD
NEIGHBOURING SITES		
Nearby industrial activities	Leaks and spills to ground	Hydrocarbons, solvents, other contaminants
Historic sulphuric acid plant close to the western boundary	Spillage of chemicals during storage, handling or use	Acids, sulphur, oleum, sulphates, iron, vanadium

The information provided covered the whole of the site.

- c) Evidence of historic contamination (i.e. historical site investigation, assessment, remediation and verification reports (where available))

2.0 Condition of the land at permit issue

(Receptor)

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

The evidence of historic contamination was collected for the site as a whole.

Potentially polluting substances from current/future operations acids, alkalis and hydrocarbons. Acid, alkali and hydrocarbon contamination was identified as potentially being present due to historic operations, other potential historic contaminants identified include heavy metals and asbestos.

There are 24 recorded pollution incidences to controlled waters within 1km of the site in the last 10 years. Only 9 of which are known incidences, details show that none of them are related to the activities at the site.

There are 19 substantiated pollution incidences recorded within 1km of the site. Eighteen of which were category 3 (minor) and one was Category 2 (significant). The pollutants included sewage sludge, contaminated soils and sub-soils, tarry waste and diesel and hydraulic oils.

There has been 3 enforcement and prohibition notices within 1km of the site. They relate to the release of toxic gases caused by uncontrolled reactions due to manufacturing using a di-isocyanate process approximately 850m north of the site.

There has been 1 prosecution within 1km of the site. Approximately 630m north of the site relating to the keeping and treatment of chemical waste without a waste management licence.

d) Has the applicant chosen to collect baseline reference data?

The Conceptual Site Model (CSM) was developed from data gathered in the Application Site Report (ASR) from desk studies, site reconnaissance and previous intrusive investigations. Uncertainties in the CSM were identified to be the possibility of undocumented pollution incidents. Potential pathways were identified as percolation through permeable ground and local abstraction boreholes. Reasonable possibility of pollution was identified via leakage from drains, bulk storage of hydrochloric acid and discharge of cooling water effluent. The report does not identify baseline data specific to the part of the installation being surrendered.

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 permitted activities for the whole of the site are detailed below:

a) Section 6.8 A(1)(d)(ii) - Manufacture of maize based products

Section 1.1 A(1)(a) Combustion of natural gas or gas oil for energy generation and steam raising

Section 5.4 A(1)(a)(ii) Primary treatment of aqueous effluent.

b) Unlisted Directly Associated Activity - Provision of abatement, utilities and services to support all operations and raw material handling and storage.

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.

The Agency reviewed the operator's assessment of the environmental impact of emissions from the installation, which was satisfactory for the purposes of determination. The assessment shows that, applying the conservative criteria in H1 (see Appendix 8 of the Application), all emissions may be categorised as environmentally insignificant with the exception of particulate, sulphur dioxide, oxides of nitrogen and carbon monoxide emissions to air and Biochemical Oxygen Demand (BOD) emissions to sewer. The emissions deemed as being potentially significant have been identified as priorities for control and further assessment. The point source emissions to air were assessed separately according to the process area, whereas the point source emissions to water/sewer were assessed on a site wide basis as the issues and controls are more generic.

H1 significance criteria, PC >1% EAL (Environmental Assessment Level) long-term or >10% EAL short-term. Particulate emissions to air were shown to be significant in H1 when assessed against the EAL for PM₁₀ (particulate matter of particle size <10 micrometers, representing respirable ducts). The major source of particulate emissions is from handling of dry products starch, glucose and dextrose. The operator supplied data showing the typical particle size distributions of these products, showing that the proportion of product with a particle size comparable to PM₁₀ is minimal (<5% worst case). The H1 impact assessment, therefore, may be considered not to be entirely representative and so the levels of emissions have been compared to the benchmark given in the Agency TGN for the Food and Drink sector to provide an assessment of BAT, this approach is recognised by the Food and Drink Sector Co-ordinator.

The environmental risk assessment does not specifically detail the part of the site being surrendered.

3.0(b) Will the pollution prevention measures protect land and groundwater?

(Conceptual model)

Are the activities likely to result in pollution of land?

The majority of the site is covered by hardstanding, bunding/containment measures are in place and stated to meet required standards. Proposals to implement formal inspection and maintenance procedures, which are to be followed up in Improvement Condition 6 and need to be included in the SPMP. Concerns raised over the condition of underground effluent drains, and hardstanding outside HCl stock tank bund, which need to be inspected and any deficiencies remedied (to be included in SPMP).

Improvement conditions set in the permit and the dates to be completed by are listed below:

- 1) The Operator shall reduce particulate emissions from the gluten dryer and dextrose dryer to within the benchmark value of 50 mg m⁻³. 31st August 2007.
- 2) The Operator shall complete improvements to operating techniques to reduce particulate emissions from the refinery precoat filter dump tanks.
A report of the improvements shall be submitted in writing to the Agency together with emission monitoring data to demonstrate reductions in particulate emissions. 31st August 2006.
- 3) (Following completion of the above condition, Reference 2) the Operator shall submit proposals to extend the improvements to the HDx precoat filter dump tank.
The proposals shall be submitted in writing to the Agency for agreement prior to implementation. 28th February 2007.
- 4) The Operator shall develop and implement noise control measures for the Dextrose Tower Blower and ancillary plant to reduce the noise contribution from this source.
The proposed measures shall be submitted in writing to the Agency for agreement prior to implementation. 31st August 2006
- 5) The Operator shall review options for reduction of noise emissions from the Mitchell Rotary Drier fan.
The proposed measures and timetable for implementation shall be submitted in writing to the Agency for agreement prior to commencement. 31st August 2006

<p>6) The Operator shall complete improvements to the environmental management systems as identified in Section B9 of the Application. 28th February 2007.</p> <p>7) The Operator shall develop a written Site Closure Plan with regard to the requirements set out in the Agency Guidance Note IPPC S6.10.</p> <p>Upon completion of the plan a summary of the document shall be submitted in writing to the Agency. 28th February 2007.</p>	
<p>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?</p>	<p>The reasonable possibility of pollution was identified via leakage from underground effluent drains and bulk storage of hydrochloric acid and from cooling water effluent discharge.</p> <p>To ensure the continued effectiveness of pollution prevention measures to protect the land the Operator is required to implement and operate under a Site Protection and Monitoring Programme, (Conditions 2.1.2 and 2.10.9), the design of which must be reported to the Agency within two months from the date of permit issue, Condition 4.1.7.</p>

Application SCR decision summary	Tick relevant decision
<p>Information is missing- the following information must be obtained from the applicant.</p>	<p>Adequate information to enable the Agency to determine the Application has been provided in the Application Site Report, however certain data gaps do exist and further information or additional control measures, as described below, will need to be incorporated into the Site Protection and Monitoring Programme (SPMP):</p> <ul style="list-style-type: none"> • Where fill points are not within bunds, which tanks does this apply to, justification for not being located within bund and what additional measures are in place if the fill point is not relocated. • Inspection and maintenance of bunds and hardstanding. • Site drainage inspection and maintenance. • Improving bunding around hazardous substance storage tanks to include pumps.
<p>Pollution of land and water is likely</p>	<p>The Application indicates that there is a "reasonable possibility" of future pollution of the land and therefore reference conditions must be established. Collection of reference data is required (Conditions 2.10.10 - 2.10.10.2) and the data must be reported to the Agency within six months from the date of permit issue.</p>
<p>Historical contamination is present- advise operator that collection of background data may be appropriate</p>	<p>✓</p>
<p>Date and name of reviewer:</p>	<p>L.Mellor 26/04/17</p>

Operational phase SCR evaluation template

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)
<p>a) Activity boundaries b) Permitted activities c) "Dangerous substances" used or produced</p>	<p>The changes to the activities for the whole site are detailed below. Site plans throughout the variations do not show any infrastructure changing with in the area to be surrendered, it has been lying fallow since 2009.</p> <p>a) The installation boundary was increased in Variation EPR/BM01171J/V002 effective date 29/09/06. The use of and risks to this land are considered within an updated Application Site Report which is included as Appendix 2 of the Variation Application. Royal Nedalco UK own and operate the ethyl alcohol plant on land that is leased from Cargill PLC. The ethyl alcohol plant is located to the west of the Moist feed store. This activity will operate under a separate permit (EPR/HP3839LC) but will be within the same installation. Cargill PLC own the pipework (steam, wheat liquefact, stillage, power cables, condensate return, compressed air) up to the metering stations adjacent to the Royal Nedalco UK installation.</p> <p>The installation boundary was decreased in Variation EPR/BM01171J/V003 effective date 20/7/10. Site plan was updated to removing the area of the ethyl alcohol plant operated by Royal Nedalco UK from the permitted area.</p> <p>The variation EPR/BM01171J/V004 effective date 25/3/13 updated the site plan to include the ethyl alcohol plant in the installation boundary. The ethyl alcohol plant was transferred to Cargill PLC, effective date 30/8/11. This variation also consolidated the two permits on to the same permit. An updated SCR was submitted with the variation.</p> <p>b) Variation EPR/BM01171J/V002 effective date 29/09/06, the permitted activity changed, due to the conversion of the plant to a wheat processing facility –</p> <ul style="list-style-type: none"> • Section 6.8 A(1)(d)(ii) Manufacture of wheat based products for human consumption and animal feed. • Section 1.1 A(1)(a) Combustion of natural gas or gas oil for energy generation and steam raising. Combustion of natural gas in afterburner and in carbon furnace. • Section 5.3 A(1)(c)(ii) Primary treatment of aqueous effluent. • Directly associated activity Provision of abatement, utilities and services to support all operations. <p>Variation EPR/BM01171J/V003 effective date 21/7/10, changed the regulations from Pollution Prevention and control (England and Wales) Regulations 2000 to Environmental Permitting (England & wales) Regulations 2010. One additional activity is included on the permit-</p> <ul style="list-style-type: none"> • Directly associated activity Reverse osmosis water treatment plant. <p>Variation EPR/BM01171J/V004 effective date 25/3/13, the permitted activities changed due to the consolidation of permits EPR/BM01171J and EPR/KP3030FQ and the increased production in the ethanol plant. The updated listed activates are-</p> <ul style="list-style-type: none"> • Section 6.8 A(1)(d)(ii) Manufacture of wheat based products for human consumption and animal feed, and manufacture of ethanol from liquid starch mash. • Section 1.1 A(1)(a) Combustion of natural gas or gas oil for energy generation and steam raising. Combustion of natural gas in afterburner and in carbon furnace. • Section 5.4A(1)(a)(ii) Primary treatment of aqueous effluent. • Directly associated activity Provision of abatement, utilities and services to support all operations. • Directly associated activity Reverse osmosis water treatment plant.

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 recorded evidence for pollution prevention is detailed below. However, it does not provide evidence for the specific area of land being surrendered. The EO has confirmed that the land is a concrete and pebbled area of the site.

Regulations

Trafford park Corn Wet Milling operated under a Pollution Prevention and Control (England & Wales) Regulations 2000, the permit was issued on 27/9/05. On 29/09/06 a variation was issued, the site name changed to Trafford Park Wheat Milling Plant and operated under a Pollution Prevention and Control Regulations 2000. On 02/07/10 a variation was issued, the site name changed to Trafford Park Wheat Milling Facility and operated under an Environmental Permitting (England & Wales) Regulations 2010. On 25/03/13 a variation was issued, the site name changed to Trafford Park Wheat Milling and Ethanol, the site continued to operate under an Environmental Permitting (England & Wales) Regulations 2010.

Sensitive Ecological Receptors

Variation EPR/BM01171J/V002 effective 29/09/06, takes into consideration the effects on the sensitive sites within 10km of the installation Manchester Mosses (SAC), Brookheys Covert (SSSI), Astley & Bedford Mosses (SSSI), Nob End (SSSI) and Ashclough (SSSI). It was concluded that there would be no significant effect.

Variation EPR/BM01171J/V003 effective 20/07/10, takes into consideration the nearest ecologically sensitive site Manchester Mosses (SAC) at approximately 8km from the installation. It was assessed that the emissions from the site are unlikely to have an affect due to the distance and as process effluent is discharged to sewer with adequate measures in place to prevent contaminated releases to surface water.

Variation EPR/BM01171J/V004 effective 25/03/13, a full assessment of the application and its potential to affect the site (Manchester Mosses SAC) was carried out as part of the permitting process. We considered the application will not affect the features of the site. Using the H1 risk assessment tool, predicted ground level concentrations of all emitted pollutants are well below 1% of the short-term and long-term EALs for human health (applied in the absence of ecological EALs or critical levels for the emitted pollutants) and are therefore considered insignificant.

Improvement Conditions

Improvement conditions have been set as part of the permit conditions. The original permit set seven improvement conditions and dates to be completed by. The conditions were as followed:

- 1) The Operator shall reduce particulate emissions from the gluten dryer and dextrose dryer to within the benchmark value of 50 mg m⁻³. 31st August 2007.
- 2) The Operator shall complete improvements to operating techniques to reduce particulate emissions from the refinery precoat filter dump tanks.
A report of the improvements shall be submitted in writing to the Agency together with emission monitoring data to demonstrate reductions in particulate emissions. 31st August 2006.
- 3) (Following completion of the above condition, Reference 2) the Operator shall submit proposals to extend the improvements to the HDx precoat filter dump tank.
The proposals shall be submitted in writing to the Agency for agreement prior to implementation. 28th February 2007.
- 4) The Operator shall develop and implement noise control measures for the Dextrose Tower Blower and ancillary plant to reduce the noise contribution from this source.
The proposed measures shall be submitted in writing to the Agency for agreement prior to implementation. 31st August 2006.

5.0 Measures taken to protect land

(Pathway)

- 5) The Operator shall review options for reduction of noise emissions from the Mitchell Rotary Drier fan.
The proposed measures and timetable for implementation shall be submitted in writing to the

Agency for agreement prior to commencement. 31st August 2006.

- 6) The Operator shall complete improvements to the environmental management systems as identified in Section B9 of the Application. 28th February 2007.
- 7) The Operator shall develop a written Site Closure Plan with regard to the requirements set out in the Agency Guidance Note IPPC S6.10.
Upon completion of the plan a summary of the document shall be submitted in writing to the Agency. 28th February 2007.

Improvement conditions have been set as part of the permit conditions. The variation EPR/BM01171J/V002 set six improvement conditions and dates to be completed by. The conditions were as followed:

- 1) The Operator shall carry out a review to identify methods of reducing the emission of particulates from the HDx precoat filter dump tank. The Operator shall submit a written summary of the review to the Environment Agency. 28th February 2007.
- 2) The Operator shall complete improvements to the environmental management systems as identified in Section B9 of the Application. 28th February 2007.
- 3) The Operator shall develop a written Site Closure Plan with regard to the requirements set out in the Agency Guidance Note IPPC S6.10.
Upon completion of the plan a summary of the document shall be submitted in writing to the Agency. 28th February 2007.
- 4) The Operator shall submit a post commissioning report to the Environment Agency. The report shall include the following:
 - Identify any changes from the information supplied in the variation application
 - Monitoring of emissions from the gas turbines
 - Monitoring of particulate emissions
 - An assessment of the impact from odour. 1st September 2007.
- 5) The Operator shall submit a written proposal to the Environment Agency for carrying out a noise survey on the permitted installation. 1st September 2007.
- 6) The Operator shall submit a written proposal to the Environment Agency for carrying out ambient air monitoring beyond the installation boundary. The Proposal shall include methods to show how the ambient air quality relates to the Operation of the CHP plant when burning gas and diesel. 1st September 2007.

An improvement condition was set as part of the permit conditions. The variation EPR/BM01171J/V003 set one improvement condition and date to be completed by. The condition was as followed:

- The Operator shall submit a written report to the Environment Agency for approval.
The report shall assess the affects of the undiluted discharge via W1 of Reverse Osmosis retentate into the Manchester Ship Canal. The report shall include but not be restricted to a detailed analysis of the retentate and assessments against the relevant Environmental Quality Standards together with appropriate water dispersion modelling and an assessment of emission impacts within the mixing zone.
The report shall identify any adverse impacts and submit proposals with timescales for their correction or mitigation.
The approved plan shall be implemented from the date of approval or such other date as may be specified in that approval. 31st January 2011.

The CAR dated 21/03/2011, records the completion of this improvement condition.

No improvement conditions were set or recorded in variation EPR/BM01171J/V004. This indicates that improvement conditions have been met and the pollution prevention measures are all in place.

Site Condition Reports (SCR)

A SCR was received with the original application. The report identifies levels of perchloroethylene steadily increasing in well water. The contamination is thought to arisen from the local aircraft manufacturing industry. The water is used for cooling purposes and poses no risk of contamination to the final product.

Hydrated lime for the effluent treatment plant is stored in a silo, within a concrete bund. Evidence of spillages in and around the bund are recorded, the concrete hardstanding was observed to be in good order.

The hydrochloric acid tank, located to the north-eastern corner of the site, shows evidence of leakages

of acid resulting in corrosion to the concrete hardstanding outside the bunded area. Spillages can potentially flow through the surface drains into the sump adjacent to the canal.

An approved remediation programme was implemented to improve secondary containment of bulk chemical storage. A new bund was installed and repairs made to the surrounding surfaces. This work was completed in December 2004.

Discharges to the canal are monitored but there is a possibility of contaminants potentially entering the watercourse in emergency storm conditions or due to pump failure of the sump located adjacent to the canal. A second level probe was installed to address this issue in July 2004.

The drains along the northern boundary date back to the 1950s, concerns relating to the conditions of the drains were raised. An internal drainage study using dye tracing showed no evidence of contamination directly to the canal. An improvement condition was set for further investigation to cover the whole site.

An updated site condition report was supplied with variation EPR/BM01171J/V002. In addition to previous investigations, soil sampling has been carried out in the area to the north of the Trafford Gold Store. No additional pollution have been recorded.

Changes recorded to the installation on the site condition report are:

- The stores in the north east of site are to be decommissioned and utilised as a lorry park;
- The dextrose plant in the north of the site is now decommissioned;
- The starch dryer in the centre of the site is now decommissioned;
- The wet mill in the northern portion of the site will be closed and replaced by the dry mill to the west;
- The feed house in the centre of the site will be decommissioned and a new evaporator will be installed in the area of the old ORFD (Odour Reduction Feed Dryer);
- The moist feed store will be extended;
- A new building will be constructed in the west of the site housing a dry mill, wet separation process and two gluten dryers;
- Raw materials will no longer be transported to site via the canal. Deliveries will be made via road, and a new roadway and weighbridges will be constructed in the northern portion of the site for this purpose;
- An extension to the Combined Heat and Power (CHP) plant is to be constructed in the southern portion of the site housing two extra gas turbines with waste heat boilers;
- From early 2007 the site will process wheat instead of corn. The commissioning period for this change is planned for the first quarter of 2007.

The site has kept up to date with site condition reports and improvement conditions have been completed. Over the current lifetime of the permit, the site has improved the pollution prevention methods in place

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 compliance history and recorded incidences for the site show that there have been issues on the site. Historically, there used to be a sulphuric acid plant situated on the area to be surrendered but this was closed and demolished in the early 1990s and the land was acquired by Cerestar soon after. The recorded incidences do not relate to the parcel of land being surrendered as part of this application. The EO has confirmed a low risk surrender is appropriate for the area of land, it is a concrete and pebbled area of the site.

Compliance History

- 2007, records one category 4 breach (a non-compliance which has no potential environmental effect).
- 21/03/2011, records the completion of improvement condition 8 and no breaches in compliance.
- 17/05/2011, no breaches in compliance.
- 08/07/2011, no breaches in compliance.
- 21/10/2011, no breaches in compliance.
- 24/07/2012, no breaches in compliance. Recommended action: review need for operator to submit W1 and agree change/suspension of the permit requirement.
- 23/07/2013, no breaches in compliance.
- 19/09/2013, no breaches in compliance. It was noted that during the visit the site appeared to have pigeon and Canada geese visiting the site, particularly around the wheat intake location. The chaff waste skip lid was also seen to be open at the time of the visit which was pointed out to the Operator, before it was then closed to prevent pigeons from entering it.
- 2014, records one category 3 breach (a non-compliance which could have a minor environmental effect) and two category 4 breaches.
- 2015, records three category 3 breach and two category 4 breaches.
- 2016, records two category 4 breaches.

Recorded Incidences

- August 2003, a breach of discharge consent to surface water occurred due to the poor condition of drains in the area. This occurred in a period of shutdown, residual liquid from the drains entered the canal resulting in a breach of the limits for suspended solids and ph.
- May 2003, a breach of the trade effluent discharge to sewer occurred when the daily consent limit for Chemical Oxygen Demand Load of 18 tonnes was exceeded.
- 12/05/2012, abnormal emissions from the Gluten Pelletiser reverse jet filter was a result of a damaged filter sock. There was no pollution in the local vicinity of the release point or visible beyond the site boundary.
- 04/04/2015 and 20/02/2015, a small explosion occurred in the filter housing of vital wheat gluten No.1. The investigation has concluded that the most likely source of ignition that has led to this explosion was the none earthing of the level switch device that was situated within the filter housing.
- 04/01/2015, an explosion and fire occurred on the vital wheat gluten (VWG) dryer 1. There was no environmental impact.
- 20/02/2015, an explosion and fire occurred on the vital wheat gluten (VWG) dryer 1. There was no environmental impact.
- 22/08/2015, a smouldering roller brush on mill 1323 and smouldering on the mechanical sieving unit on the floor above, all the fire water was contained within the building.
- 06/07/15, complaint of odour. The site concluded that there was no evidence to say that the Cargill facility is the source of this odour.
- 24/01/16, Vital Wheat Gluten dryer No.1 screw conveyors was found to be on fire, the fire extinguished itself by the time the fire brigade arrived. No impact on the environment or the community apart from the siren from the fire brigade.
- 05/07/16, instrument failure which lead to a sudden shut down of part of the refinery plant. As a result of the sudden shut down there was sudden drop in demand for steam and the relief valve on the CHP plant opened up for 40minutes. The opening of the relief valve created a loud whistling noise which was a noise nuisance to some of our neighbours and complaints to Greater Manchester Police

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?

Soil and groundwater sampling have been carried out during the lifetime of the permit. Specific soil sampling has been submitted for the area of land being surrendered, this is comparable with the soil samples taken in 2009.

Soil sampling was carried out in the area to the north of the Trafford Gold Store in December 2005. Ten soil samples from the mound were collected and sent for laboratory analysis for a range of metallic and organic contaminants. Some elevated levels of PAH and TPH were found in two of the samples. Further analysis of these two samples showed that this was likely to be due to degraded coal compounds present in the soil due to historical activities from the site. No visual or olfactory evidence of contamination was observed during sampling. Cargill PLC will keep records of the location and use of this soil.

Baseline Reference Data for groundwater was carried out in 2012, as part of the variation EPR/BM0117IJ/V004 application,

Soil sampling has been carried out as part of the partial surrender EPR/BM0117IJ/S005, no previous comparable sample results are available for this section of the site. The proposed site for the partial surrender has not been used for any purpose since the last site condition report was completed in 2012 and has a result does not require any decommissioning and / or pollution removal works.

As part of that SCR completed in 2012, a groundwater and soil survey was carried out and this showed no signs of pollution. A further analysis of the area to be partially surrendered was carried out in September 2016 and this confirmed the results achieved in 2012. Also, Cargill Plc has an Environmental Management System, ISO14001, in line with the requirements of its operational permit, and the piece of land to be surrendered fell under that management system. As part of its EMS, Cargill Plc reports and investigates any environmental incident on its site and takes any remedial action required – non have been reported in the area to be partially surrendered.

Based on this analysis carried out and limited or no activity in the area concerned we are confident that that the land is in a satisfactory condition.

Surrender SCR Evaluation Template

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 area of the site for partial surrender does not contain any polluting or potential polluting activities. There are 2 desuperheating pumps located in the surrender area. These pumps remove pure condensate from the steam main which is used to remove superheat from a pressure reducing station.

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?
(Reference data for soils must meet the requirements of policy 307_03 Chemical test data on contaminated soils – quantification requirements). If the surrender reference data shows that the condition of the land has changed as a result of the permitted activities, the applicant will need to undertake remediation to return the condition of the land back to that at permit issue. You should not require remediation of historic contamination or contamination arising from non-permitted activities as part of the permit surrender.
Soil sampling has been carried out as part of the partial surrender EPR/BM0117IJ/S005, no previous comparable sample results are available for this section of the site. The proposed site for the partial surrender has not been used for any purpose since the last site condition report was completed in 2012 and has a result does not require any decommissioning and / or pollution removal works.

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 area of site to be surrendered is within the site boundary and technical installation. There are no permitted activities taking place within the surrender area and there has never been a pollution risk that would impact this area within the lifetime of the permit. Soil sampling confirms that the land is in a satisfactory condition.

Surrender SCR decision summary	Tick relevant decision
To be completed by GWCL officers and returned to NPS	
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	✓
Insufficient information has been supplied to show that pollution risk has been removed or that the site is in a satisfactory state – do not accept the application to surrender the permit. The following information must to be obtained from the applicant before the permit is determined:	
Date and name of reviewer	L.Mellor 13/10/17