

INTERNAL AUDIT REPORT 2013/03

AREA: PPC/ ABSTRACTION LICENCE COMPLIANCE

AUDIT DATE: March. 2013

AUDITOR: D M JONES

REFERENCE DOCUMENTS: PPC Permit No. BU2349 5.10.04, Permit No. BU2349 variation dated 21.04.09, Environmental Manual,

AUDIT FINDINGS

OBJECTIVES

The objective of this audit was to confirm compliance to the conditions of PPC Permit No. BU2349

COMMENTS

There is a copy of the IPPC licence, dated 5.10.04 posted into the Company Intranet along with the variation from 2009, the originals are held in the Company Safe, with date received copies held by JTH, from which uncontrolled copies are available.

Abstraction Licence effective from 1/4/09 expiry 31/3/15.

The requirements of Legislation are incorporated into the PPC Permit under which Synthite Operates.

Communications to the EA are in John Hallard's files. Copies of the returns are held by Jayme Mountford

Emission Points A2 (Ammonia Storage) and A9 (Emulsions Scrubber) are currently not reported as the Ammonia Storage is redundant and the Emulsions Products are also redundant. Measurements at the emission points are reported quarterly to the EA

Storage of Formic Acid has now been relocated to Chemicals Plant bund – this is scrubbed via A7 emission point, there is still a small quantity of Formic remaining on Top site and the designation of the storage tank is yet to be decided. Storage tank P2 has been relocated to above ground storage on the TO plinth and the original tank decommissioned, no action has been taken to fill in the underground storage but no material goes into or out of this receptacle. The EA was notified that intention was to remove the poly liner and the concrete shell used to fill in this area provided it is not contaminated. This part has not yet been completed, the intention is to complete when finances become available..

Synthite were assigned an new EA inspector in 2012, Aled Zachary

No changes to testing methodologies have taken place, the methods used are those prescribed in the PPC permit and are considered to be BAT, there is no intent at present to change to other techniques (which may be more costly or time consuming methods).

PPC page 9 – 1 emission limits to water

For W1 reference point data is kept on spreadsheets and added to as the measurements are taken; data is currently up to date. There are occasional gaps in the data – but the comments column shows that there was 'no flow' that week which means that there was no water pumped to the River Allyn – therefore no flow to sample, the volumetric flow rate is recorded with the information on the quantities abstracted from the boreholes, as the overall discharge to the river on a daily basis doesn't exceed the 700m3 per day the permitted 30 m3 / hour cannot be exceeded

Meter (ISBN 011752364X)

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PPC page 10 – 1 emission limits to sewer

For S1 reference point data is kept on spreadsheets and added to as the measurements are taken; data is currently up to date. The 300m³/day volume has not been exceeded. On occasion since the last audit the meter propeller has become stuck due to a chip of scale from up-stream, this was subsequently removed and the propeller moved freely. There is a chance that the volume could have been exceeded but volume flows on the days both before and after these events show that the average flow rate was not close to the maximum limits.

PPC page 11 – Emissions to groundwater

A large percentage of the site is either tarmac or concreted over which reduces the potential for spillages to the ground and therefore to groundwater.

Storage of containerised liquids on 'unmade ground' is not permitted. All storage tanks are bunded. The area around Top Site is kerbed adjacent to the river bank and containerised liquids are stored in the centre of the working area so that any spillages would not flow towards the unmade ground at the road side of the area.

There is kerbing/bunding at the bottom end of the works near to the Warehouse and Dynea plant which would contain any spillages and prevent this getting into the groundwater.

Items from List 1 (Groundwater Regulations 1998) form the basis of the site SPMP monitoring & reporting.

The SPMP was reviewed in early March 2013, Nitrogen levels near to the Dynea plant were elevated and JTH notified Dynea of our findings.

PPC page 11 – fugitive emissions to water and sewer

The site is bunded with a barrier wall adjacent to the River Alyn – this prevents water from the site flowing into the river and potentially contaminating the river. Much of the site is constructed on concrete hard standing, storage tanks are bunded – their integrity is visually inspected during the weekly site inspection tours within each department, it is also within the remit of all operators on site to report any observed leaks from pipe work to ensure that remedial action is taken immediately.

2PPC Page 20 – Reporting

A copy of the annual returns is held by JTH and has been seen, last one was submitted in January 2013 the next will be due January 2014.

The data for quarterly submission (S1, W1, A1) was also seen, Q42012- Jan 2013; Q32012 – Oct 2012; Q22012 – July 2012; Q12012 – April 2012, all up to date.

The Site closure plan was reviewed in 2012.

No Schedule 1 notices have been raised in 2012.

Emissions to W1(700 m³/day monitored weekly) are recorded on the spreadsheet 'Site Discharges at S1&W1' – the calculation box indicates that the daily volume has been within the consent limit for 2012-2013

Emissions at S1 (300 3/day 3 per week) have been within the parameters set, there have been spells where discharges from site have been suspended internally due to high ammonia in the final effluent. The lagoon and ETP have been put onto recirculation giving the plant bugs more time to process the feeds and reduce the levels such that it is then back in compliance before discharge off-site, no schedule 1 notices were raised as no discharges from site took place, the rise in ammonia levels was spotted before it went over consent or anticipated due to the nature of the material being transferred to the lagoons.

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Environmental Controls

Scrubber check records are held departmentally, those for Chemicals plant are part of the Batch Sheets so the pH is checked batch by batch, for Powders it is part of the daily operating routine and is completed when the plant is operational

Control of Measuring Devices

Lab equipment calibration records are all up to date for pH meters & thermometers, VOC meter is in calibration.

Preventative Action

Preventative action in this operational area includes the bunding of areas, overspill protection for storage tanks, abatement controls, temperature control of storage for some bulk products, storage of as many products as possible either under cover or well wrapped against the influence of the elements.

Interface with Dynea UK activities.

Section 2.13 of Dynea Permit refers to Transfers which can be made to Synthite Ltd. Effluent Treatment Plant, these are prescribed as being only from Tank Bunds – which should be Rain Water with possible low concentration of contaminants or Effluent Transfer Sump – which would be contaminated Rain water.

They do a daily visual inspection on the levels of liquid in any bunds which would determine whether they felt the need to discharge the contents. The bunds have also undergone an integrity check.

If Dynea need to empty their bunds then they obtain permission from Synthite for this, a sample of the contents is submitted for test, if the ETP can cope then KMJ gives permission for a transfer, if permission is not granted then Dynea have to dispose of the material offsite under their own waste disposal route. (SOP 14 and WI 16 seen), the information is maintained in a spreadsheet by Gavin Ding and includes the outcome (approval or otherwise) of any transfer requests. Their pumps are locked shut to prevent transfer of material without approval.

Material going into the Effluent Transfer Sump (Storm Sump at Dynea) should only be water from the onsite roadways and therefore not contaminated. A copy of their Spill Containment Measures Review has been seen.

The Lab drains in Dynea plant go to the catchment pit at Dynea.

No CAR's raised following this audit.

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