

EPR/KP3732PL/V004 Duly Making Questions

1 Activities

The new process was confirmed as a chemical process in the preapp advice June 2020 as follows:

4.2 A (1) (a) (iv) Production of inorganic salts

Please update application C2 form to confirm this is scheduled activity being applied for

Confirm C2 form has been amended. See attached copy.

2 Fee

Please provide additional habitat fee of £779 as per preapp advice June 2020.

This is for assessment of impact of changes on European site which is within 10km screening distance.

This is being arranged to be paid.

3 Air emissions

For ferrous chloride new process – please list emissions to air , confirm this is via A1 emission and if such emissions are new with ferrous chloride process provide a quantitative assessment of impact – link for assessment is provide in June 2020 preapp advice

To assist you have provided concentration of hydrogen chloride for current operation

Please now you following data to input into H1 quantitative assessment:

- HCL concentration in mg/m³ after variation changes
- Stack height of A1 in metre
- Air flowrate in m³/s
- Efflux velocity in m/s of air at vent outlet

This will allow H1 to be completed.

Emissions will be from A1.

H1 assessment completed

4 Effluent emissions

In relation to effluent emissions from new process, it is unclear if the new processes leads to regular deliberate additional emissions to sewer (as opposed to potential for leaks captured in bund). Please confirm.

Only if regular emissions please complete a quantitative assessment for changes as per link in June 2020 preapp advice

Please confirm your current effluent treatment plant capacity to treat in m³/hour.

Capacity is 2l/s = 7.2m³ per hour. In reality we work at an average of 25m³ per day = 1.05m³ per hour. All MCERTS approved.

5 BAT

Please complete a BAT assessment for new chemical process by going through section by section how the process and associated facilities will comply – specifically with **BAT sector guidance TGN 4.03** for inorganic chemicals sector.

Completed as a separate document, namely EPR Permit Variation Application Ferrous Production 0821 – BAT.

6 Capacity/raw materials

Please confirm a mass balance for new process as follows:

Total HCL acid raw material usage per annum – **Approx 2,154t**

Other chemicals raw material usage per annum – **Water approx. 2,411t, Steel approx. 622t. For abatement scrubber exhaust treatment, approx. 5T of Sodium Chloride**

Total Ferrous chloride production quantity per annum – **2,304t**

7 Bund

For three new process tanks and specifically reactor/base tank please confirm volume of bund to ensure compliance with following criteria

Bund volume > 110 % of largest individual tank – **Process tank is 16m³, bund capacity is 800m³**

Bund volume > 25 % of total tank volumes within bund including new tankage – **All process tank calculated as follows;**

Acid process tanks = 66m³ (66,000ltrs)

Ferrous storage tanks = 220m³ (220,000ltrs)

Rinse tank = 31m³ (31,000ltrs)

Pre-wash = 9.3m³ (9,300ltrs)

New process application = 32m³ (32,000ltrs)

Scrubber – approx. 60m³ (60,000ltrs) – not technically a tank but takes space.

Total = 418.3 or 418,300 ltrs.

This falls well within the 25% of all tank size of 600m³ from a total size of 800m³.

Compatibility – please confirm no risk of adverse chemical reaction from mixing of pollutants from tank leakages within bund – **No other chemicals other than process rinse tanks are within the bund, so no chemical reaction can occur.**

- Please confirm bund lining materials are compatible within HCL acid/other new materials stored within bund. – **Floor screeding is namely, Robex Epoxy bund seal advised as an excellent barrier against chemical spillage.**

8 Habitat assessment

If there any new air emissions from the new process – please complete a habitat impact assessment for list of habitat sites as per air emissions screening provided with 2020 preapp advice (attached again for assistance)

No new air emissions, only HCL.

9 Site Plan

For clarity in consolidation of permit –please provide a site plan with locating features with installation boundary in green.

Appendix 3 – New Installation Plant location

