

Environment Agency permitting decisions

Part surrender

We have decided to accept the surrender of part of the permit for Winnington Sodium Bicarbonate Manufacturing Site operated by Tata Chemicals Europe Limited.

The permit number is EPR/SP3630BE.

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.

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

- Key issues
- Annex 1 the decision checklist

Key issues of the decision

Low risk vs Full Surrender

1. The applicant paid the fee for a full surrender but asked that it be considered a low risk surrender if possible. Regulatory Guidance note RGN 9: Surrender describes low risk surrender as 'where activities could in principle pollute land or groundwater but the operator can show through...pollution control measures that the legal test [for surrender] has been met.'

In this case the site has only ever been used for dry powder and the nature of the material is that any seepage into the ground or run off into the adjoining water courses will have a transient effect. All work areas are impermeably surfaced and records were submitted of only one minor incident during the period of the permit.

The application was therefore reclassified as a low risk partial surrender and the overpayment refunded.

Horizontal Guidance note H5 Site Condition Report defines when an

intrusive investigation of soil and groundwater at surrender is required. No intrusive sampling of Wallerscote island was needed at the original permit application. The risk assessment for sodium carbonate does not identify a risk to land or groundwater and there were no concerns about pollution prevention measures, incidents or compliance record.

Therefore a site condition report was submitted but intrusive investigation of soil and groundwater was not required.

Surrender with sodium carbonate residue in silos

2. The Environmental Permitting Regulations 2010 as amended (Schedule 5 Part 1; 14(1)) defines the legal test for surrender as
'that the necessary measures have been taken -
a) to avoid a pollution risk resulting from the operation of the regulated facility; and
b) to return the site of the regulated facility to a satisfactory state, having regard to the state of the site before the facility was put into operation.'

This usually involves the removal of all potentially polluting material from the installation before permit surrender. The applicant provided satisfactory evidence via records, photographs and site visits of removal and cleaning of sodium carbonate residues and dust from all parts of the site apart from inside the storage silos.

Despite a protracted programme of draining down followed by flail-whipping, 4 of the 5 silos still contain an estimated total of 775 tonnes of hard packed sodium carbonate adhering to the silo walls. It would not be possible to remove any more of this material without entering the silos with power tools which we accept would be an unacceptable Health and Safety risk.

The partial surrender application addressed the possibility of dissolution of the remaining material in water but concluded this was impracticable because:

- i) The silo bottom seals are for powder rather than water
- ii) Even with optimistic assumption about solubility this would be a time-consuming and expensive undertaking generating a very large quantity of aqueous waste and tanker movements.

We accept this is an impractical option.

The only realistic opportunity for recovery of the remaining sodium carbonate is during the demolition of the silos. The draft demolition plan (submitted in the original application but retracted when a finalised version could not be provided) intends to demolish one of the contaminated silos piece by piece but the other four (three contaminated) are to be rendered horizontal by explosive demolition before being broken up.

The applicant contends that the partial surrender can be completed with the residual material still in place because this particular layer of hardened sodium carbonate has been on the silo walls for decades and

certainly throughout the lifetime of the permit. The Defra Core Guidance for the Environmental permitting (England and Wales) Regulations 2010 explains that the regulator should not hold the operator responsible for contamination that the regulator is convinced was caused before the PPC permit was issued for this site. Taking that into account the site meets part a) of the definition above because all sodium carbonate introduced to the site and silos during the life of the permit has been removed and meets part b) because the satisfactory state appraisal must take into account that the residue on the walls was present before the IPPC/EPR permit was granted.

As evidence the applicant has submitted (in the surrender application and as response to a Schedule 5 notice):

- i) The method of estimating residual, unrecoverable material (known as deadstock) in the silos.
- ii) A statement that the dead stock was estimated each month and was consistently above the amounts now left after the final decommissioning flail-whipping.
- iii) Quantitative estimates of the deadstock for each silo before the permit was granted in 2002, during the permit in 2009 and after decommissioning in July 2015.

| (Tonnes) | Jan 2002 | Nov 2009 | July 2015 (Surrender) |
|----------|----------|----------|--------------------------|
| Silo 1 | 400 | 400 | 0 |
| Silo 2 | 750 | 1000 | 200 |
| Silo 3 | 750 | 400 | 100 |
| Silo 4 | 255 | 500 | 175 |
| Silo 5 | 2700 | 1500 | 300 |

This is not definitive proof the residual sodium carbonate (which becomes hard with atmospheric moisture and strongly adheres to surfaces) is the same material all throughout the permit lifetime but we accept it is credible and likely that it is and any residual risks are lower than at the date the first permit was granted for the facility .

Taking into account:

- a) That sodium carbonate produces transient increases in pH of water bodies but is not a persistent or bioaccumulative environmental pollutant.
- b) The remaining quantity of sodium carbonate in the silos is significantly smaller than the operational deadstock measurements.
- c) That the applicant has removed as much material from the site as possible without demolishing the silos.
- d) The remaining material is very hard and difficult to remove and so is unlikely to form a dust during demolition.
- e) The owners of the Wallerscote site to whom control will revert after a surrender are aware of the need to include the residual material in their demolition plan. They will be responsible for the site and will need to

carry out the demolition in a safe and environmentally acceptable manner.

we accept the application as meeting the legal test for surrender.

Permit change decisions

3. The site plan has been updated to reflect the surrender of the Wallerscote Island part of the installation. The applicant submitted a revised plan with only the green installation boundary outline rather than the shading of the site plan in variation V004. Some red hatching has been added to areas enclosed by the site boundary but excluded from it, to aid interpretation.
A small excluded area next to the existing sodium bicarbonate plant had been lost from the site plan during update. This has been reinserted. The condition 1.2.1 text has been updated for the loss of shading.
4. Completed Improvement Conditions in Table 1.4.1 have been marked as complete. IC1-18 were already complete. IC 21, 22, 23 and 25 have been completed since variation V004. IC 19 and 20 are extended to 31st October 2015. IC 24 is partially complete but is left open until decommissioning of the east part of the site is complete.
5. The pre-operational conditions in section 1.6 may be complete but are not directly relevant to this partial surrender of Wallerscote island so they are left unchanged.
6. Emission points A10/1-11 Dust Filter Units on Sodium Carbonate Storage (Wallerscote) are deleted from Table 2.2.1a and Table 2.2.1b Emission points to air.
7. Emission points A10/11 emission limits and monitoring for particulates are deleted from Table 2.2.2a and Table 2.2.2b.
8. There is only uncontaminated surface water runoff from the Wallerscote Island part of the installation. No changes to emission limits and monitoring tables is required.
9. References to the superseded PPC regulations have been removed from condition 4.1.1 and section 6 Interpretation. Reference to the superseded Land Protection Guidance H7 in section 6 Interpretation has also been removed.
10. Emission point A10 (Wallerscote island) references have been removed from reporting of monitoring data Table S2a and Table S2b.

Annex 1: decision checklist

This document should be read in conjunction with the Duly Making checklist, the application and supporting information and permit/ notice.

| Aspect considered | Justification / Detail | Criteria met |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| | | Yes |
| Receipt of submission | | |
| Confidential information | A claim for commercial or industrial confidentiality has not been made. | ✓ |
| Identifying confidential information | We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality. | ✓ |
| The facility | | |
| The regulated facility | <p>The permitted regulated facilities have changed as a result of the partial surrender.</p> <p>This is a part surrender of the western part, known as Wallerscote Island, of the installation boundary of the operator's part of the Winnington Site. The surrendered area has only been used for the storage and delivery of solid sodium carbonate during the period of the EPR permit. There is no change to the scheduled activities for the site.</p> <p>This permit applies to only one part of the installation. The names and permit numbers of the operators of other parts of the installation are detailed in the permits introductory note Other Part A installation permits table.</p> | ✓ |
| The permit conditions | | |
| Changes to permit conditions | <p>The following permit conditions have changed as a result of the partial surrender in order to remove references to air emission monitoring and reporting from the Wallerscote Island plant and to update the installation boundary on the site plan:</p> <p>Table 2.2.1a Emission points to air referenced in condition 2.2.1.2.</p> <p>Table 2.2.1b Emission points to air (upon operation of stand-alone sodium bicarbonate plant only) referenced in condition 2.2.1.2.</p> <p>Table 2.2.2a Emission limits to air and monitoring referenced in condition 2.2.1.3.</p> <p>Table 2.2.2b Emission limits to air and monitoring (upon</p> | ✓ |

| Aspect considered | Justification / Detail | Criteria met |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| | | Yes |
| | <p>operation of stand-alone sodium bicarbonate plant only) referenced in condition 2.2.1.3.</p> <p>Schedule 2 Table S2a Reporting of monitoring data referenced in condition 4.1.2.1.</p> <p>Schedule 2 Table S2b Reporting of monitoring data (upon operation of stand-alone sodium bicarbonate plant only) referenced in condition 4.1.2.1.</p> <p>Schedule 5 Site Plan and referencing condition 1.2.1</p> | |
| The site | | |
| Extent of the surrender application | <p>The operator has provided a plan showing the extent of the site of the facility that is to be surrendered.</p> <p>We consider this plan to be satisfactory,.</p> | ✓ |
| Pollution risk | <p>We are satisfied that the necessary measures have been taken to avoid a pollution risk resulting from the operation of the regulated facility.</p> <p>The operation of the remaining part of the installation has not changed.</p> | ✓ |
| Satisfactory state | <p>We are satisfied that the necessary measures have been taken to return the site of the regulated facility to a satisfactory state.</p> <p>In coming to this decision we have had regard to the state of the site before the facility was in operation under a permit</p> <p>See key issues above.</p> | ✓ |