Vinnolit Hillhouse Ltd
TP3833GG

SITE CONDITION REPORT

For full details, see H5 *SCR guide for applicants* v2.0 4 August 2008

COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION

DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7

AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION..

1.0 SITE DETAILS	
Name of the applicant	Vinnolit Hillhouse Ltd
Activity address	Hillhouse International, Bourne Road, Thornton Cleveleys, Lancashire, FY5 4QD
National grid reference	SD 34967 43426 (centre of plant)

Document reference and dates for Site Condition Report at permit application and surrender	See Site Application Report (SAR) March 2006 for condition at application. 'Vinnolit TP3833GG Surrender - SITE APPLICATION REPORT-MARCH 2006.pdf' See references in Section 8 & 9 of this document for surrender condition.

Document references for site plans (including location and boundaries)	See SAR 2006 – Fig 1 (Site location), Fig 2 (Installation boundary), Fig 6 (conceptual model), Fig 7 (surfacing), Fig 11 (Drainage and bunds)

Note:
In Part A of the application form you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

2.0 Condition of the land at permit issue	
Environmental setting including: • geology • hydrogeology • surface waters	See SAR March 2006 Section 6.1 Geology and Hydrogeology, Section 6.2 Surface Waters
Pollution history including: • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures	See SAR March 2006 for pollution history and incidents pre-March 2006, historical land use, etc.

Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)		See SAR March 2006 Section 6.3 (Previous investigations) and Section 6.5 (land pollution history)
Baseline soil and groundwater reference data		See SAR March 2006 Section 6.3 (Previous investigations). There is no groundwater reference data.
Supporting information	• Source information identifying environmental setting and pollution incidents • Historical Ordnance Survey plans • Site reconnaissance • Historical investigation / assessment / remediation / verification reports • Baseline soil and groundwater reference data	

3.0 Permitted activities	
Permitted activities	See 'Vinnolit TP3833GG Surrender - Permitted Activities.pdf'
Non-permitted activities undertaken	See 'Vinnolit TP3833GG Surrender - Permitted Activities.pdf'
Document references for: • plan showing activity layout; and • environmental risk assessment.	Site layout is available in SAR March 2006. The substances and pathways are included in SAR March 2006 Section 4. The site has a number of applicable environmental risk assessments. If these are required for the permit surrender, please request the specific details you require and they will be provided.

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

4.0 Changes to the activity	
Have there been any changes to the activity boundary?	No
Have there been any changes to the permitted activities?	No
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	No
Checklist of supporting information	• Plan showing any changes to the boundary (where relevant) • Description of the changes to the permitted activities (where relevant) • List of 'dangerous substances' used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant)

5.0 Measures taken to protect land	
The original SAR 2006 describes the measures that would be taken to protect the land and these have been applied throughout the lifetime of the permit. The Desktop Study includes a list of the primary measures taken to protect land and includes examples inspection records etc. See 'Vinnolit TP3833GG Surrender - Desktop Study v1.pdf'. The SPMP issued in May 2007 identified the measures to be applied during the operation of the site. See 'Vinnolit TP3833GG Surrender - Hillhouse SPMP without appendix data V10'	
Checklist of supporting information	• Inspection records and summary of findings of inspections for all pollution prevention measures • Records of maintenance, repair and replacement of pollution prevention measures

6.0 Pollution incidents that may have had an impact on land, and their remediation	
The Desktop study includes a list of the pollution incidents that may have had an impact on land, and their remediation. See 'Vinnolit TP3833GG Surrender - Desktop Study v1.pdf'. In summary, there have been no significant or reportable pollution incidents during the term of the permit.	
Checklist of supporting information	• Records of pollution incidents that may have impacted on land • Records of their investigation and remediation

7.0 Soil gas and water quality monitoring (where undertaken)	
It was agreed with the EA, that a set of soil samples would be collected and analysed to support the permit surrender. The process for identifying the sampling requirement is included in 'Vinnolit TP3833GG Surrender - Soil Sampling Strategy v1.pdf'. The strategy was discussed and agreed with the EA prior to commencing work. The samples were obtained as described in the sampling document and analysed by Envirochem Labs as originally discussed. The results can be found in 'Vinnolit TP3833GG Surrender - Soil Test Results.pdf' and a comparison of the original and recent results is presented in 'Vinnolit TP3833GG Surrender – Summary of Soil Test Results v1.xls'. This comparison concluded that no significant contamination of the site had occurred at the trial pit locations and by inference, that no significant contamination of the site had occurred. Water quality monitoring was not deemed to be necessary.	
Checklist of supporting information	• Description of soil gas and/or water monitoring undertaken • Monitoring results (including graphs)

8.0 Decommissioning and removal of pollution risk

The site ceased operation in August 2019. A comprehensive decommissioning plan was developed and discussed with the site EA Inspector. All decontamination was carried out using 'Vinnolit TP3833GG Surrender - SHE 07 State of Contamination procedure.pdf'.

The decommissioning process included the following key steps:

Completion of a 'final batch' to use up the remaining Vinyl Chloride (VCM) as this is difficult to dispose of.
Removal of the remaining bulk raw materials from site by the supplier or registered waste carrier (e.g. draining of tanks)
Decontamination of pipework (e.g. flushing with water back to the tanks).
Decontamination of the raw material storage tanks.
Dismantling of key sections of pipework to allow thorough decontamination with water.
All contaminated water was either processed through the site Waste Water Treatment system and ETP or collected and disposed of as waste. As each piece of equipment was decontaminated, it was labelled as being decontaminated. Photos of these labels in situ are available for inspection.
At this stage, all raw material vessels, pipework and associated equipment are decontaminated.
The next phase was to remove the residual PVC from the site. This involved jet washing areas where this accumulates (e.g. latex storage tanks, process pipework). All of the equipment in the 'Dryer Building' where PVC powder was present, was washed down internally and externally. The contaminated water was processed through the Waste Water Treatment system and ETP to remove residual VCM and capture the PVC. This process took many months to complete.
In parallel with this phase, process chemicals such as refrigerants and lubricants were drained from the equipment and sent for disposal. This included the Ammonia and Kristol used in the Recovery Plant.
The residual VCM gas that could not be processed was held in the gas holder. There is no practical way to recover or remove this remaining material. Following discussion with the EA, it was diluted and vented to atmosphere over a long period, within the emission limits for the site, as per the relevant guidance. Records of this process are available for inspection.
The gas holder was then cleaned and the residual PVC processed through the Waste Water Treatment system and ETP.
At this stage, the only remaining contamination was in the drainage system, waste water treatment vessels and the ETP. These were systematically decommissioned and drained to the point where all practical PVC had been removed. It was agreed at this point with the EA Inspector that the drains could be treated as 'surface water drains' and the drains were diverted to a surface water outfall. The treatment chemicals were drained and removed from site.
Throughout this period, waste materials were collected by a registered waste carrier and disposed of in an appropriate manner.

The site equipment and infrastructure is considered to be free from significant contamination and in a suitable condition to be demolished without risk of contamination to the environment. During the decommissioning process there were no significant releases of contaminants to land, water or air.

This conclusion is supported by the evidence gathered by the site EA inspector on 26.08.2020. EPR CAR reference TP3833GG/0371998 is attached and covers all areas of the site following decommissioning. Photographs were taken by the EA Inspector but are not included in the report. The findings were summarised as:

"Overall, the decommissioning of the site has been done to a high standard and the cleaning of plant and pipework completed to a satisfactory level. There were no signs of any chemicals on the site and discussions with the site indicate sufficient evidence is available to allow a permit surrender application to succeed. There is no reason to predict any future ground and groundwater contamination from the permitted activities including the plant demolition activity in future."

The following documentation is available on request:

- full site closure plan, project plan, action logs, etc

- EA communications
- decontamination certificates (See Vinnolit TP3833GG Surrender - State of Contamination certificate example.pdf)
- photographs of all equipment proving decontamination (See Vinnolit TP3833GG Surrender - State of Contamination certificate example.pdf')

Checklist of supporting information	• Site closure plan • List of potential sources of pollution risk • Investigation and remediation reports (where relevant)

9.0 Reference data and remediation (where relevant)

The site has maintained a comprehensive database of incidents and near-misses during the period of the permit. A desktop exercise has been conducted based on a search of this database. A summary is included in 'Vinnolit TP3833GG Surrender - Desktop Study v1'. The study concludes that there were no significant or notifiable releases. It also demonstrates that where smaller incidents occurred, these were satisfactorily remediated where necessary, at the time of the incident.

It was agreed with the EA, that a small set of soil samples would be collected and analysed to support the permit surrender. The process for identifying the sampling requirement is included in 'Vinnolit TP3833GG Surrender - Soil Sampling Strategy v1.pdf'. The strategy was discussed with the EA prior to commencing work.

The samples were obtained as described in the sampling document and analysed by Envirochem Labs. The results can be found in 'Vinnolit TP3833GG Surrender - Soil Test Results.pdf' and a comparison of the original and recent results is presented in 'Vinnolit TP3833GG Surrender – Summary of Soil Test Results v1.xls'.

This comparison concluded that no significant contamination of the site had occurred at the trial pit locations and by inference that no significant contamination of the site had occurred.

It is therefore concluded that the land at the site is in a "satisfactory state" and is suitable condition for surrender of the permit.

Checklist of supporting information	• Land and/or groundwater data collected at application (if collected) • Land and/or groundwater data collected at surrender (where needed) • Assessment of satisfactory state • Remediation and verification reports (where undertaken)

10.0 Statement of site condition

It is confirmed that:

- the permitted activities have stopped
- decommissioning is complete, and the pollution risk has been removed
- the land is in a satisfactory condition.