

VENATOR

Venator – Birtley Partial Permit Surrender

Supporting Information Document

23 October 2019

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Signature Page

October 2019

Venator – Birtley Partial Permit Surrender

Supporting Information Document

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1. INTRODUCTION

1.1 Reason for Application

Venator Materials PLC operates the Venator Pigments UK Limited facility at Mary Avenue, Chester-le-Street, County Durham, DH3 1QX (“the site”) under Environmental Permit (EP) number EPR/JP3637UE/V006 as varied in July 2018. Building 22 has been vacant since 2011 and Venator Materials PLC is therefore seeking to surrender this land.

2. PARTIAL SURRENDER

2.1 Description of the Surrender

The area of permit surrender comprises a single building (referred to as Building 22) with hardstanding areas. The building is understood to have been used as a warehouse for storing zinc powder products between 1997 and 2011. From 2011, Building 22 was vacant and no longer in use. The area to be surrendered is shown on a site plan in Appendix A and a photolog is presented in Appendix C. The map of the site after surrender is shown in Appendix B.

2.2 Site Condition

A Site Condition Report was completed using H5 template and is presented in Appendix E. It covers the condition of the land at the time of Permit’s issue, the measures taken to avoid any pollution risk, and the current state of the land.

At the time of the original Permit application in 2006, Building 22 was indicated to be within permitted activity area. However, the land of site which is to be surrendered has never been an operational area. Building 22 had been used as a warehouse for storing zinc powder products between 1997 and 2011. From 2011, building 22 was vacant and no longer in use.

No hazardous substances have been stored within the area to be surrendered. The permit application did not identify any pollution risks with this area and there have been no environmental incidents within this area. ERM undertook a groundwater monitoring and sampling round in October 2018 and did not identify a requirement for remediation.

As no further investigation to determine the condition of the land to be surrendered is required, it has been agreed with the Environment Agency that this surrender is considered low risk. An email from the Environment Agency confirming this conclusion has been included in Appendix D.

Appendix A MAP OF LAND TO BE SURRENDERED

Land to be surrendered and BH14 location



Appendix B MAP OF THE SITE AFTER SURRENDER

Map of the Site after Surrender



Appendix C PHOTOLOG



Photograph: 1

Building 22 from the south-east



Photograph: 2

Building 22 from the north-east



Photograph: 3

View along the eastern boundary of Building 22



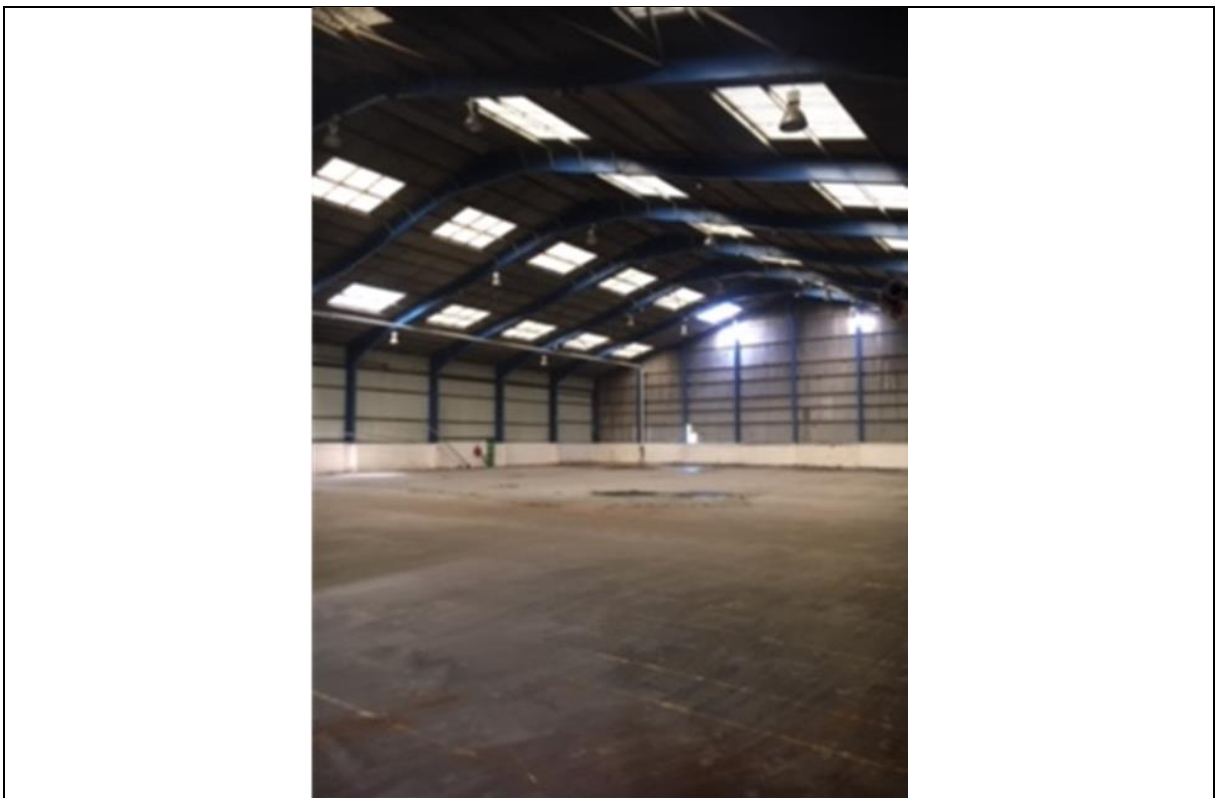
Photograph: 4

View along the southern boundary of Building 22



Photograph: 5

View of inside the building from the north-east



Photograph: 6

View of inside the building from the south-east

Appendix D LOW-RISK CONFIRMATION

Application for an environmental permit Part E2 – Surrender application (installations, waste operations, mining waste operations and mobile plant only)



Fill in this part of the form together with part F1, if you are surrendering all or part of your permit or applying to surrender mobile plant. Please check that this is the latest version of the form available from our website.

Please read through this form and the guidance notes that came with it.

The form can be:

- 1 Saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.

2 Printed off and filled in by hand. Please write clearly in the answer spaces.

It will take less than two hours to fill in this form.

Contents

- 1 About the permit
- 2 About the application
- 3 About the parts of the permit you want to surrender
- 4 For all applications
- 5 Surrendering mobile plant
- 6 How to contact us

1 About the permit

1a Discussions before your application

If you have had discussions with us before your application, provide the permit reference or details on a separate sheet and tell us below the reference you have given the document.

Permit or document reference

1b Permit number

What is the permit number that this application relates to?

1c Site details

What is the name, address and postcode of the site? (but not mobile plant)

Site

Address

Postcode

1d Type of permit

Tick below which type of permit you are applying to surrender

A site permit

Now go to section 2

Mobile plant permit

Now go to section 5

2 About the application

2a Is this a low risk surrender application? (see guidance notes on part E2)

No

Yes

Please attach a copy of the evidence and give us the document reference below.

Document reference

2 About the application, continued

2b Have we confirmed during discussions we have had with you before your application that this will be a low risk surrender?

No
 Yes

Have there been any changes to your proposal since the discussions?

No
 Yes

Please send us a copy of confirmation or a letter justifying any changes you have made since pre-application discussions. Give us the reference number you have given this document:

Document reference for the justification _____

2c Tick below to show whether you are applying to surrender all or part of your permit

All of permit Now go to section 4

Part of permit Now go to section 3

3 About the parts of the permit you want to surrender and the parts you want to keep

3a Fill in Table 1 below with details of all the activities you no longer operate or plan to stop operating

Fill in a separate table for each activity you are applying to surrender. Use a separate sheet if you have a long list and send it to us with your application form. Tell us below the reference you have given the extra sheet.

Document reference of the extra sheet _____

Table 1 – Parts of the permit you want to surrender

| Activity reference | | | Building 22 | | |
|-----------------------|-----------------------------|------------------------------|-----------------------------------|---|-------------------|
| Installations only | | | Description of the waste facility | Description of the mining waste operation | Standard facility |
| Schedule 1 references | Description of the activity | Directly associated activity | | | |
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Supply

1 a map or plan identifying the part (or parts) of the permit your application relates to.

Document map or plan reference _____

2 a map or plan identifying the part (or parts) of the permit you will be keeping (please clearly mark the new boundary).

Document map or plan reference _____

3 About the parts of the permit you want to surrender and the parts you want to keep, continued

3b Do you think you will need to apply to vary (change) any of the permit conditions as a result of surrendering part of your permit?

Note: If you are partially surrendering an area of land only it is unlikely that you will need to amend any conditions other than the site plan.

No Now go to section 4

Yes Fill in the relevant parts of C1 to C7 of the application form, giving details of how the permit conditions will need to be changed as a result of surrendering part of the permit

Document reference of these details _____

4 For all applications

4a Please provide a site report/baseline report/surrender report which describes the condition of the site, or the parts of the permit the application relates to (see guidance notes on part E2).

Document reference of the report _____

4b Have you taken any steps on the site (or the part of the site you are surrendering) to avoid any pollution risks or to return the site to a satisfactory condition?

No

Yes Describe the steps you have taken

Document reference of your explanation _____

4c Does a financial provision agreement exist for this site?

(This information will allow the provision to be returned or cancelled correctly on surrender of the permit)

No

Yes

Now fill in part F1.

5 Surrendering mobile plant

I want to surrender the environmental permit mentioned in section 1 above

5a Tell us the date on which you want to surrender the plant

(This must be at least 20 working days from the date you fill this form in.)

Date you want to surrender the plant (DD/MM/YYYY) _____

6 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: www.gov.uk/government/organisations/environment-agency

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it.

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form? _____

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please

No thank you



For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No

Yes Amount received

£ _____

Samantha Day

From: Harrison, Steve <Steve.Harrison@environment-agency.gov.uk>
Sent: 26 September 2019 10:01
To: Samantha Day
Cc: Miller, Julie; White, Kirsty
Subject: If B22 requires partial surrender

[EXTERNAL E-MAIL]: Please exercise caution in opening links and attachments.

Hi Sam,

FYI

I have completed our authorisation form to allow an agency led variation to cover the correction of the permitted boundary, the form needs authorising by our AEM then passing to permitting.

Just so you are aware and as discussed this morning we think that you should apply separately to partially surrender permit to remove B22.

Fees and charges and guidance links below.

<https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-permitting-charges-guidance>

<https://www.gov.uk/government/publications/environmental-permitting-charging-scheme-2019>

See extracts from guidance to consider:

Surrender-RGN9

The legal test for surrender is – ‘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.’

Low risk surrender

2.15 The extent of evidence required at surrender to prove the facility is in a satisfactory state depends on the possible risk at that point. We have developed low risk surrender arrangements where the evidence burden is small or non-existent. Currently, this includes: for installations (non-landfills) and waste facilities, where the risk to the environment is sufficiently low that we do not need intrusive site survey or monitoring data in the surrender site condition report.

Low risk surrender – where activities could in principle pollute land or groundwater but the operator can show through waste acceptance records (where applicable) and pollution control measures that the legal test set out above has been met. A report is required but not one involving intrusive monitoring data.

Guidance Notes to Part E2 Surrender application

2 About the application

2a Low risk surrender

Tell us whether the surrender application is a low risk surrender application.

A 'low risk' surrender application is where you are applying to surrender a permit for an activity where the evidence demonstrate that the site is in a satisfactory condition is small or non-existent. This will include permits where the activity has never started. If we have confirmed that the facility you wish to surrender is low risk and we do not have to carry out a site investigation (except in the case of a landfill surrender; see below), tick this box and you pay a reduced fee. You must provide a copy of the evidence with the application.

Regards,
Steve

Steve Harrison
PPC/RSR Officer - Installations (North)

Environment Agency
Tyneside House
Skinnerburn Road
Newcastle Business Park
Newcastle Upon -Tyne
NE4 7AR

Telephone: +44 2084747893

Email : steve.harrison@environment-agency.gov.uk

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Appendix E SITE CONDITION REPORT (H5)

SITE CONDITION REPORT TEMPLATE

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

(Now updated to v3.0 April 2013)

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 | Venator Materials PLC |
| Activity address | Building 22 at Venator Materials PLC, Mary Avenue, Chester-le-Street, County Durham, DH3 1QX |
| National grid reference | 426421, 556346 |

| | |
|--|--|
| Document reference and dates for Site Condition Report at permit application and surrender | <p>This Site Condition Report relates to the application for partial surrender of a portion of the permitted area.</p> <p>Site Condition at application:</p> <ul style="list-style-type: none"> ■ ENVIRON, Phase II Environmental Site Investigation at Elementis Pigment, Birtley, Chester-Le-Street, County Durham DH3 1QX. May 2002 <p>Groundwater monitoring round at partial surrender:</p> <ul style="list-style-type: none"> ■ ERM, Groundwater Monitoring and Sampling Report at Brenntag UK Ltd, Longshank Lane, Birtley, DH3 1QZ. October 2018 |
|--|--|

| | |
|--|---|
| Document references for site plans (including location and boundaries) | <p>This Site Condition Report relates to the application for partial surrender of a portion of the permitted area. Area of permitted boundary to be surrendered identified on drawing:</p> <ul style="list-style-type: none"> ■ Appendix A – land to be surrendered and BH14 location (within the area of permit surrender). ■ Appendix B – Map of the Site after Surrender |
|--|---|

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

This section records the condition of the whole permitted area at permit issue.

Geology

According to the British Geological Survey (BGS) website¹, the site is underlain by superficial deposits of Glaciolacustrine Deposits which comprise clay and silt. The superficial deposits are underlain by the Pennine Middle Coal Measures Formation comprising cyclical sequences of mudstone, siltstone and sandstone. BH14 (within the area of permit surrender) borehole log from the ENVIRON 2002 report indicated that made ground comprised brown black silty ashy sand with brick and sandstone fragments (1.7m thick) followed by orange brown mottled blue grey silty laminated clay (borehole terminated at 4 m below ground level (bgl)).

Hydrogeology

The BGS Aquifer maps² classifies the superficial deposits as an Unproductive Aquifer due to its low permeability, and the bedrock as a Secondary A Aquifer, which contain permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. The Environment Agency has classified³ the underlying regional groundwater unit (Tyne Carboniferous Limestone and Coal Measures) as having an overall poor quality status. The site is not situated within a Groundwater Source Protection Zone (SPZ). There are no groundwater abstractions located within 2 km of the site.

During the ERM groundwater monitoring and sampling round undertaken in October 2018, groundwater was encountered at 0.74 m bgl and the depth to base was 1.80 m bgl.

Surface Water

The nearest surface water is the River Team located approximately 330 m west of the site. The river has been classified as having a

¹ <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

² <https://magic.defra.gov.uk/>

³ <http://environment.data.gov.uk/catchment-planning/>

| | |
|---|--|
| | <p>moderate overall quality by the Environment Agency.</p> |
| <p>Pollution history including:</p> <ul style="list-style-type: none"> ■ 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 | <p>The site investigation completed in 2002 reported that no olfactory or visual contamination was observed during soil and groundwater sampling of BH14 (within the area of permit surrender).</p> <p>The area of permit surrender is understood to have been used as a warehouse for storing zinc powder products between 1997 and 2011. From 2011, building 22 was vacant and no longer in use.</p> |
| <p>Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)</p> | <p>The site investigation completed in 2002 reported two soil samples were recovered from BH14 at 0.5-1.0 m bgl and 3.0-3.5 m bgl. The analytical testing detected TPH screen 340-26 mg/kg, arsenic 16-6 mg/kg, cadmium 6.0-<0.5 mg/kg, chromium 12-29 mg/kg, lead 170-41 mg/kg, selenium 1.6-<0.5 mg/kg, copper 800-30 mg/kg, nickel 44-49 mg/kg and zinc 1,390-170 mg/kg. No groundwater was recovered.</p> <p>Two rounds of gas monitoring were carried out in April 2002 and showed concentrations of methane (0.0%), carbon dioxide (between 1.9 % and 2.6%) and flow rates (between 0.0 and 1.5 l/hr) within BH14.</p> |
| <p>Baseline soil and groundwater reference data</p> | <p>Information relating to baseline soil and groundwater conditions can be found in the following report:</p> <ul style="list-style-type: none"> ■ ENVIRON, Phase II Environmental Site Investigation at Elementis Pigment, Birtley, Chester-Le-Street, County Durham DH3 1QX. May 2002 |

| 3.0 Permitted activities | |
|---------------------------------|---|
| <p>Permitted activities</p> | <p>The area of land being surrendered has never been an operational area within the existing permit. Building 22 was used as a warehouse for storing zinc powder products between 1997 and 2011. No hazardous substances have been stored within this area. The permit application did not identify any pollution risks and there have been no environmental incidents within this area.</p> <p>The permitted activities for the wider site are provided below.</p> |

| | |
|---|---|
| | <p>Schedule 1 Activity on the Installation</p> <ul style="list-style-type: none"> ■ Preparation of metal salts of organic acids (Schedule 1 Section 4.2 Part A(1) (a) (iv)) ■ Preparation of zinc carbonate (Schedule 1 Section 4.2 Part A(1) (a) (iv)) ■ Preparation of zinc oxide (Schedule 1 Section 4.2 Part A(1) (a) (v)) ■ Preparation of metal salts of inorganic acids (Schedule 1 Section 4.2 Part A(1) (a) (iv)) |
| Non-permitted activities undertaken | The area of land being surrendered has never been an operational area within the existing permit. Building 22 was used as a warehouse for storing zinc powder products between 1997 and 2011. |
| <p>Document references for:</p> <ul style="list-style-type: none"> ■ plan showing activity layout; and ■ environmental risk assessment. | <p>Area of permitted boundary to be surrendered identified on drawing:</p> <ul style="list-style-type: none"> ■ Appendix A – land to be surrendered ■ Appendix B – site boundary after surrender <p>Environmental risk assessment: see table below.</p> |

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.

| Substances | State | Environmental Fate and Behaviour | Pollution Risk | Quantity Stored on Site | Delivery | Storage and Containment Arrangements | | Use | Likely Impact to Receptors |
|---------------------|-------|----------------------------------|--|-------------------------|--|--|--|---|----------------------------|
| | | | | | | Primary | Secondary | | |
| Zinc Powder Product | Solid | Low Risk | Yes if released to environment although given the material is a powder (not highly soluble) it is unlikely to flow far | Unknown | Final product from the adjacent Zinc Product Plant | Unknown (these products were stored from 1996 to 2011) | Unknown (these products were stored from 1996 to 2011) | Finished products ready for distribution to Customers | Low risk |

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

5.0 Measures taken to protect land

The area of land being surrendered has never been an operational area within the existing permit and Building 22 was used as a warehouse for storing zinc powder products between 1997 and 2011. As such, there were no requirements for further investigations.

Measures taken to protect the land are associated within the wider site and include regular maintenance and inspections of the zinc plant.

6.0 Pollution incidents that may have had an impact on land, and their remediation

No hazardous substances have been stored within the area to be surrendered. The permit application did not identify any pollution risks with this area and there have been no environmental incidents within this area.

7.0 Soil gas and water quality monitoring (where undertaken)

ERM undertook a groundwater monitoring and sampling round in October 2018. Groundwater from BH14 was collected and submitted to Exova Jones Environmental Laboratory (UKAS and MCERTS accredited) for analysis of a wide range of analytical suite. Concentrations of zinc were detected at 219.9 µg/l (Environmental Quality Standard value is 213 µg/l).

Given the findings of the monitoring round and low metal concentrations, there is no requirement to complete remediation prior to surrender of this area of land.

8.0 Decommissioning and removal of pollution risk

Given the findings of the monitoring round carried out by ERM in October 2018, there is no requirement to complete remediation prior to surrender of this area of land.

9.0 Reference data and remediation (where relevant)

ERM undertook a groundwater monitoring and sampling round in October 2018 and did not identify a requirement for remediation within this area of land.

10.0 Statement of site condition

The area of permit surrender is understood to have been used as a warehouse for storing zinc powder products between 1997 and 2011. From 2011, Building 22 was vacant and no longer in use. ERM undertook a groundwater monitoring and sampling round in October 2018 and did not identify a requirement for remediation within this area of land.

The collected evidence presented in this report demonstrates that the area under investigation has been non-operational under the control of Venator and no hazardous substances have been stored within the area during this period. Therefore, the area can be considered of low environmental risk and suitable for surrender. This is corroborated by the opinion of the site inspector who indicates that the partial surrender is considered to be low risk, see Appendix D.

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