

## Application SCR evaluation template

Name of activity, address and NGR	<p>5N Plus UK Limited</p> <p>1-4 Nielson Road Wellingborough Northamptonshire NN8 4PE</p> <p>NGR 490020, 270040</p> <p>Application Surrender EPR/BL37811X/S006</p>
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Document reference of application SCR	<p>Site Condition Report, Report: STP4024G-SCR01 dated August (Surrender Site Condition Report), EDRM Document Ref 9952163</p>
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Date and version of application SCR	<p>Site Condition Report, Report: STP4024G-SCR01 dated August (Surrender Site Condition Report)</p> <p>Copy of Site Condition Report undertaken by MCP, reference PPCW01-001V2, dated 20th November 2001 with following appendices:            B Borehole and trial pit records            C Copy of test results certificates undertaken 1996/2001 (baseline test results)            D Copy of test results certificates undertaken 2017 (closure test results)            E Analysis of test results undertaken 1996/2001 (baseline test results)            F Analysis of test results undertaken 2017 (closure test results)            G Comparison of baseline and closure test results            H Copy of desk study information produced by Envirocheck            I Landfill waste acceptance criteria – primary classification            J Landfill waste acceptance criteria – secondary classification            K Landfill waste acceptance criteria – basic categorisation schedules            L Copies of muck away tickets and photographs of open excavations</p> <p>Details of decommissioning undertaken, email received 20/09/2017</p>
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<b>1.0 Site details</b>	
<b>Has the applicant provided the following information as required by the application SCR template?</b>	
Site plans showing site layout, drainage, surfacing, receptors, sources of emissions/releases and monitoring points	
<i>A plan showing existing site features and investigation points is presented on Drawing 02 of Surrender Site Condition Report .</i>	

## 1.0 Site details

Has the applicant provided the following information as required by the application SCR template?

## 2.0 Condition of the land at permit issue

To be completed by GWCL officers  
(Receptor)

Has the applicant provided the following information as required by the application SCR template?

- a) Environmental setting including geology, hydrogeology and surface waters
- b) Pollution history including:
  - pollution incidents that may have affected land
  - historical land-uses and associated contaminants
  - visual/olfactory evidence of existing contamination
  - evidence of damage to existing pollution prevention measures
- c) Evidence of historic contamination (i.e. historical site investigation, assessment, remediation and verification reports (where available))
- d) Has the applicant chosen to collect baseline reference data?

### a) Environmental setting including geology, hydrogeology and surface waters

Strata	Bedrock or	Approximate thickness	Typical soil type	Likely permeability	Aquifer designation
Northampton sand formation	Bedrock	0-7m	Ooidal ironstone	Moderately impermeable	Secondary A
Whitby Mudstone Formation	Bedrock	>10m	Mudstone	Effectively impermeable	Unproductive strata

#### Hydrogeology

*There are six active surface water abstraction points located within 2000m of the site. The closest lies 1496m to the northwest of the site with water abstracted for spray irrigation.*

*There are no surface water abstraction points recorded within 2km of the site.*

*The site is not located within a zone protecting a potable water supply abstracting from a principal aquifer (i.e. a source protection zone).*

*Surface Waters - The nearest surface water feature is Ise Brook recorded 127m northeast of the site boundary*

### b) Pollution History

*Based on the Envirocheck data the closest pollution incident to the site is recorded 275m to the west of the site and is classified as a minor incident associated with the discharge of crude sewage into Bourn Brook.*

*Two further incidents are recorded 635m and 712m south-west, also minor incidents associated with the discharge of acid into Harrowden Brook. Based on nature and distance all incidents unlikely to have affected soils and groundwater at the subject site.*

*The site has not been subject to a recorded pollution event.*

### c) Evidence of historic contamination from 2007

## 2.0 Condition of the land at permit issue

To be completed by GWCL officers  
(Receptor)

**Has the applicant provided the following information as required by the application SCR template?**

### Surface contamination

- a) During the period 2007-2010, surface soil removal was undertaken in areas where materials had been stored on unmade ground and potential leakage had occurred.
- b) New site surface water interceptors were installed and main area roadways improved during the same period.
- c) Two 13,500l underground storage tanks for diesel at the front of the site were decommissioned in 2007 and filled with resin based hard form by Lees Industrial Services; certificate 07-0157.

### 2) PCBs

- a) Main site transformer contained residual PCB contamination, this was disposed of and replaced with new in early 2015.

### 3) Asbestos

- a) Asbestos register is completed and updated, very limited asbestos is now on site.
- b) Main area of asbestos was office boiler area; this was removed in 2011/12, new natural gas boilers were installed and surface oil tank removed.
- c) During the upgrade of the transformer, all asbestos was removed from the switch-room as part of the upgrade.

### d) Baseline reference Data

A Site Condition Report was produced by Mining and Chemical Products Limited in 2001. The report presents baseline soil and groundwater test data obtained during the 1996 Soiltechnics ground investigation (refer paragraph 2.2.3 above). A copy of the Site Condition Report is presented in Appendix B. The test data is summarised Appendix F (See EDRM Document ref Document: (9952163) S Horsman)

## 3.0 Permitted activities

(Source)

**Has the applicant provided the following information as required by the application SCR template?**

**Response  
(Specify what information is needed from the applicant, if any)**

- a) Permitted activities
- b) Non-permitted activities undertaken at the site

As per table 1.1.1 of Permit

**Table 1.1.1 activities**

Activity under Schedule 1 of the Regulations/ Associated Activity	Description of specified activity	Schedule 1 Activity Reference (if applicable)	Limits of specified activity
Melting, including making alloys, of non-ferrous metals	Melting virgin metal, recovered metal or alloy from scrap	2.2 A(1)(b)	Receipt of raw material from storage to production of finished products and emissions to air
	Recovery of gallium, indium, palladium, tellurium or thallium elements from recycled metals, spent solutions or compounds in which they are contained.		
	Production of metals, alloys and compounds of Selenium by thermal treatment		

### 3.0 Permitted activities

(Source)

Has the applicant provided the following information as required by the application SCR template?		Response (Specify what information is needed from the applicant, if any)	
Producing inorganic chemicals such as bases, salts, oxides etc	Production of indium, gallium, germanium and bismuth chemicals	4.2 A(1)(a)	Receipt of raw material from storage to production of finished products and emissions to air
Manufacturing activity involving the use of, or the use and recovery of, any compounds of antimony, indium, selenium, arsenic, gallium, tellurium etc.	Chemical and/or electrochemical and/or thermal antimony, indium, gallium, germanium and arsenic recovery and refining  Production of indium sulphide by use of hydrogen sulphide	4.2 A(1)(d)	Receipt of raw material from storage to production of finished products and emissions to air
<b>Directly Associated Activities</b>			
<b>Storage and handling of raw materials</b>	Storage, sorting, and pre-treatment of scrap and other raw materials	Directly associated activity	Receipt of raw materials to transfer to processes
Storage and handling of solid waste	Storage and handling of general waste, metal scrap, sludge, caustic slag, dross and bag filter dust	Directly associated activity	From separation of wastes to despatch from installation
Storage and handling of liquid wastes	Storage and handling of waste oil, acid and alkali	Directly associated activity	From separation of wastes to despatch from installation
Water discharges to sewer	Discharge of process water and site drainage from the installation	Directly associated activity	From site to point of entry to sewer

### 3.0(a) Environmental Risk Assessment

(Source)

The H1 environmental risk assessment should identify elements that could impact on land and waters, cross-referenced back to documents and plans provided as part of the wider permit application.

*The Environment Agency reviewed the Operator's environmental risk assessments (H1) for emissions to air and water and accepted the H1 as satisfactory. There are no emissions to water. Surface waters are directed to sewer.*

*The Environment Agency reviewed the Operator's environmental risk assessment including the potential for environmental impact from emissions to air, land and water and was accepted as satisfactory. The documents provided by the operator demonstrate an awareness of the environmental risks. The company has developed its own management system.*

**3.0(b) Will the pollution prevention measures protect land and groundwater?**

(Conceptual model)

Are the activities likely to result in pollution of land? NO

*It was concluded that there is little likelihood of pollution arising from the operation of the installation provided that it is operated and maintained correctly. There are no direct discharges of hazardous substances or non-hazardous pollutants to groundwater from the site.*

*All processing takes place within a building(s), any storage of materials outside of the building such as the Acid Liquor Tanks, Alkali Liquor tanks are on impermeable hard standing which is bunded such that it would contain at least 110% on the contents of the largest single container contained within*

*Waste Oils are stored in the yard adjacent to stores building in secure sealed drums, within bunded concrete hard standing.*

*There are three emission points to sewer S1, S2 & S3 which take site surface waters via oil interceptor, and silt trap. Noted that new site surface water interceptors were installed and main area roadways improved during the period between 2007 to 2010. The current concrete surfacing appears in good condition with sealed expansion joints. We understand that during the initial investigation in 1996 this was also the case with all surface and foul water drainage understood to be maintained. Site employs various control measures include staff awareness and training, portable bunds and spill containment stations.*

*Recording of any pollution incidents, such as spillage of oil, leaking stores etc, which occur during the operation of the permitted site will be continued, together with the steps taken to remedy that pollution at the time will be kept.*

For dangerous and/or hazardous substances only, are the pollution prevention measures for the relevant activities to a standard that is likely to prevent pollution of land?

*Although hazardous substances are handle - No additional requirement required*

Application SCR decision summary	Tick relevant decision
Sufficient information has been supplied to describe the condition of the site at permit issue	x
Information is missing- the following information must be obtained from the applicant.(Advise the permitting team on what additional information is needed)	
Pollution of land and water is unlikely; or	
Pollution of land and water is likely (Advise the permitting team on what additional controls/checks may be necessary)	
Historical contamination is present- advise operator that collection of background data may be appropriate	
Date and name of reviewer:	Fiona Devine – NPS 22/09/2017

## Operational phase SCR evaluation template

Sections 4.0 to 7.0 may be completed annually in line with normal record checks.

<b>4.0 Changes to the activities</b> (Source)	
<b>Have there been any changes to the following during the operation of the site?</b>	<b>Response</b> (Specify what information is needed from the applicant, if any)
a) Activity boundaries b) Permitted activities c) "Dangerous substances" used or produced	
<i>Application Surrender Site Condition Report that there has been no changes to the permitted boundary, EDRM confirms that the permitted boundary has not changed.</i>	
<i>There has though been the following changes to activities since the Permit BL3781IX Issued in 26/11/02</i>	
<i>Variation Application EPR/BL3781IX/V003 issued 13/07/05 New manufacturing processes to be included within the installation.</i>	
<i>Variation application EPR/BL3781IX/V004 issued 09/03/12 -Additional manufacturing process (Indium Sulphide) to be included as an installation activity.</i>	
<i>Area officer to confirm, but EDRM sh</i>	

<b>5.0 Measures taken to protect land</b> To be completed by EM/PPC officers (Pathway)
Has the applicant provided evidence from records collated during the lifetime of the permit, to show that the pollution prevention measures have worked?
If no, specify why

<b>6.0 Pollution incidents that may have impacted on land and their remediation</b> To be completed by EM/PPC officers (Sources)
Has the applicant provided evidence to show that any pollution incidents which have taken place during the life of the permit and which may have impacted on land or water have been investigated and remediated (where necessary)?
No recorded pollution incident described in the SCR – however note that new site surface water interceptors were installed and main area roadways improved during the period between 2007 and 2010.

<b>7.0 Soil gas and water quality monitoring (where relevant)</b>
Where soil gas and/or water quality monitoring has been undertaken, does this demonstrate that there has been no change in the condition of the land? Has any change that has occurred been investigated and remediated?
If no, specify why

## Surrender SCR Evaluation Template

If you haven't already completed previous sections 4.0 to 7.0, do so now before assessing the surrender.

<b>8.0 Decommissioning and removal of pollution risk</b>
To be completed by EM/PPC officers
Has the applicant demonstrated that decommissioning works have been undertaken and that all pollution risks associated with the site have been removed? Has any contamination of land that has occurred during these activities been investigated and remediated?
Additional information provided on 20/09/2017 by email from Steve Horsman
<b>Background</b>  The intention to close the Wellingborough site and cease activities within the UK was announced to the site at the end of September last year. The site closure plan was created at this time and showed that the majority of the processes and equipment was to transfer to other sites within the group.
<b>Equipment</b> <ul style="list-style-type: none"><li>• All equipment was cleaned prior to removal, and then thoroughly cleaned before being shipped to its new location.</li><li>• Production areas including high levels have been cleaned by contractors using vacuum cleaners.</li><li>• Cleaning materials and when used vacuum cleaner contents were disposed of as hazardous waste.</li><li>• Dust extraction equipment was stripped and cleaned, filter bags have been disposed of as hazardous waste.</li><li>• Portable and fixed bunds were extensively used on the site, portable bunds have been washed out in the main fixed bund with all waste being pumped to the effluent tanks and disposed of to hazardous waste by tanker. Fixed bunds have been checked and pumped dry when all activities ceased, but will collect rain water in time.</li><li>• Effluent tanks on site were 2 x 22000Lt tanks one used for acidic waste the other for alkaline. Both are emptied by hazardous waste carrier tanker. The decommissioning of these vessels saw both flushed and rinsed in with fresh water during the final emptying, this ensured the vessels were clean before they were removed. A small amount of sludge type waste was removed from the base of one of the tanks, and this was disposed of via our regular hazardous waste carrier.</li><li>• Waste carriers, Red Industries took the majority of the solid waste,</li><li>• Cawley and Williams Environmental have also been used.</li><li>• Drains, no specific work has been identified as being required on the drains on site.</li></ul>

<b>9.0 Reference data and remediation (where relevant)</b>
To be completed by GWCL officers
Has the applicant provided details of any surrender reference data that they have collected and any remediation that they have undertaken?
(Reference data for soils must meet the requirements of policy 307_03 Chemical test data on contaminated soils – quantification requirements). If the surrender reference data shows that the condition of the land has changed as a result of the permitted activities, the applicant will need to undertake remediation to return the condition of the land back to that at permit issue. You should not require remediation of historic contamination or contamination arising from non-permitted activities as part of the permit surrender.
Comparing the 1996/2001 and 2017 reference data revealed some shallow hotspots of antimony and cadmium soil contamination which were attributed to the permitted activity. This contaminated material has been excavated/removed from site and backfilled with clean gravel. No groundwater has been intercepted beneath the site. Therefore, GWCL are satisfied the site permit can be surrendered.

**10.0a Statement of site condition**

To be completed by EM/PPC officers

Has the applicant provided a statement, backed up with evidence, confirming that the permitted activities have ceased, decommissioning works are complete and that pollution risk has been removed and that the land and waters at the site are in a satisfactory state?

Site Inspector Mr Duncan Beaumont inspected the site on 18<sup>th</sup> of September post all site clearance works – the site appeared in a satisfactory condition, therefore I agree with the GWCL teams satisfaction that the permit can be surrendered.

**10.0b Statement of site condition**

To be completed by GWCL officers

Has the applicant provided a statement, backed up with evidence, confirming that the permitted activities have ceased, decommissioning works are complete and that pollution risk has been removed and that the land and waters at the site are in a satisfactory state?

Yes

**Surrender SCR decision summary**

To be completed by GWCL officers and returned to NPS

**Tick relevant decision**

Sufficient information has been supplied to show that pollution risk has been removed and that the site is in a satisfactory state – accept the application to surrender the permit; or

Yes

Insufficient information has been supplied to show that pollution risk has been removed or that the site is in a satisfactory state – do not accept the application to surrender the permit. The following information must to be obtained from the applicant before the permit is determined:

No

Date and name of reviewer

Jim Branson  
3/10/17