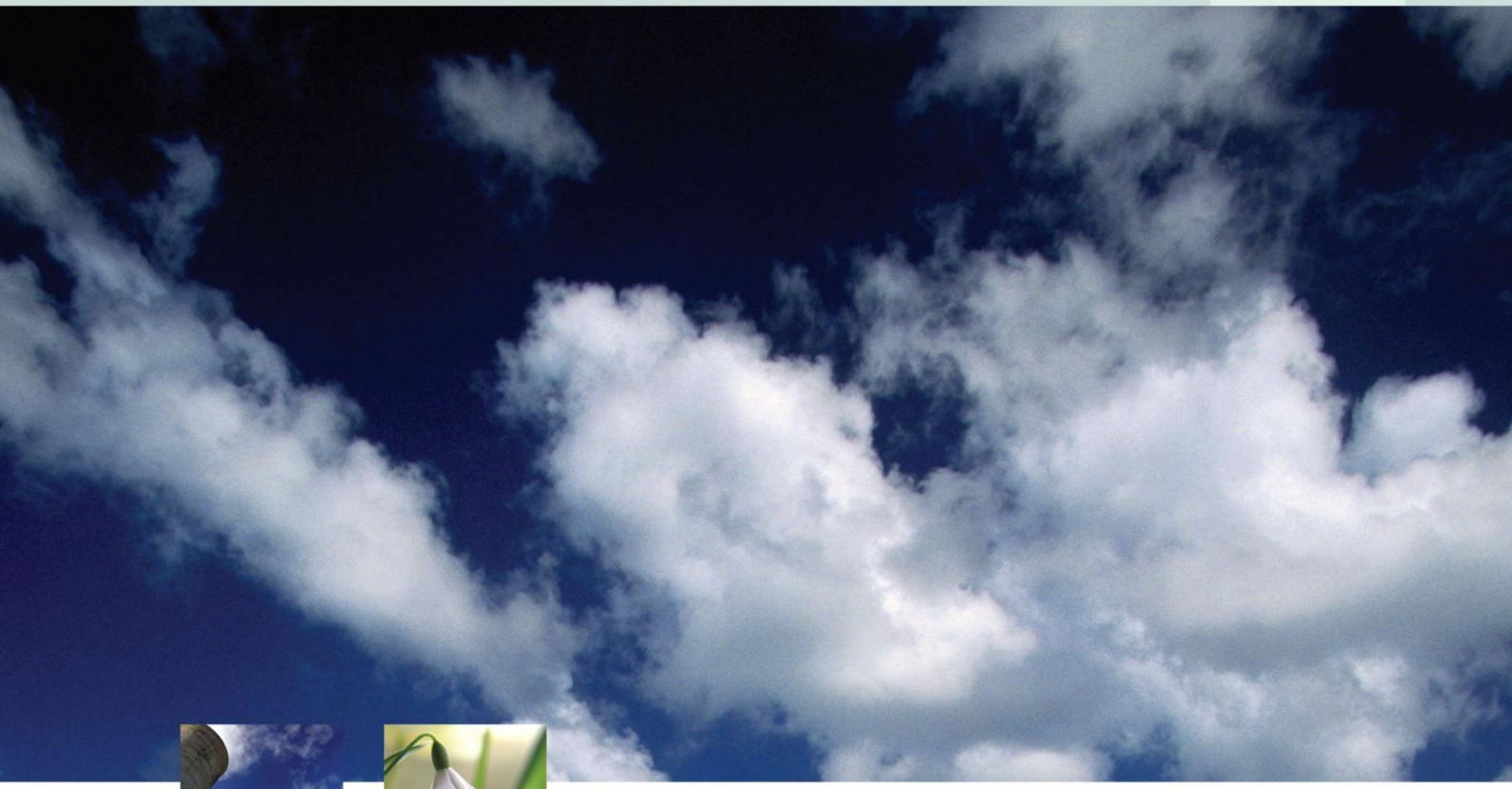

Site Condition Report Variation

Application EPR/BX9846ID/V005

Timet UK Ltd Permit

Timet Waunarlwydd

Date:
January 2022

Project Issue Number:
SOL_21_P019_TIM

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Contents

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1. Introduction

This Application Site Report has been prepared by Sol Environment Ltd on the behalf of Timet UK Ltd in support of a Minor Technical Variation Application of their existing permit at Timet Waunarlwydd, Ystrad Road, Waunarlwydd, Swansea.

Timet UK Ltd is making this application to carry out a Minor Technical Variation of their existing EPR permit under The Environmental Permitting (England and Wales) Regulations 2016 (as amended) for the following reason:

- To vary the existing permit (EPR/BX9846ID) to include a new area of land ('new area') within the permitted boundary in order to relocate the existing swarf storage area on site, further east, and within a new purpose built storage building.

This Application Site Condition Report (ASCR) focuses solely on the new area to be included in the new permit and will need to be read in conjunction with any existing ASCR which may have been submitted previously for the existing permitted facility and boundary.

This ASCR relies on information supplied by the site and various third party information sources (See Section 2) together with information submitted as part of the planning application process and ground investigation information supplied by Earth Environmental and Geotechnical Ltd.

The Timet UK Ltd Waunlarwydd site (*'the Site')* is located at Ystrad Road, Waunlarwydd, Swansea, SA1 1XD.

This document has been prepared in accordance with NRW's Guidance Document H5 Site Condition Reports Guidance and Templates (Version 5.0, dated October 2014). This report provides baseline information in relation to the site.

2. Site Details

Name of the Applicant:	Timet UK Ltd
Activity Address:	Timet Waunlarwydd, Ystrad Road, Waunarlwydd, Swansea, SA1 1XD
National Grid Reference:	OS X (Eastings) 260448 OS Y (Northings) 196337

Document Reference:	Sol document reference and date: SOL_21_P019_TIM January 2022
Annexes:	Annex A of this report: • Figure A1 – Site Location • Figure A2 – Site Layout & Process Drainage • Figure A3 – Existing Permit Boundary • Figure A4 – New Permit Boundary • Figure A5 – Surface Water Drainage Annex B: Earth Environmental Geo-environmental Site Investigation Report 2022

3. Condition of Land at Permit Issue

3.1 Environmental Setting

3.1.1 Site Location

The location of the subject Site is shown on Figure A1, Annex A, centered at approximate National Grid Reference OS X (Eastings) 260448; OS Y (Northings) 196337. The site layout, including the new area of land to be included in the permit as part of variation V005, is shown in Figure A2.

The site occupies the north east area of the current Timet Waunarlwydd site located at Titanium Road, Waunarlwydd, Swansea, SA5 4BT (Figure A of Appendix A).

The new area to be included in the permit is approximately 0.12 hectares. The new area is situated in the north east corner of the Timet Waunarlwydd site and consists of an open area with the existing site to the west and south, site boundary and woodland to the east and woodland to the north. A dry ditch is located to the north of the new area and a wet ditch / drainage culvert to the east along the site boundary. The wider, existing Timet site forms part of an industrial complex off Titanium Road which is surrounded by agricultural land to the west, north and east. To the south of the site there is a railtrack and the village of Waunarlwydd. The nearest sensitive receptor to the site is the playing field located 377m southeast of the site and the property Dobes Acres, also located 580m to the southeast of the site.

Table 3.1 provides further information in relation to the site.

Table 3.1 Site Setting

Direction	Description
North	Immediate Vicinity: Unoccupied Land / Woodland Within 500m: Unoccupied Land / Woodland / River Llan / Agricultural land Beyond 500m: Unoccupied Land / Agricultural land / B4620 Swansea Road
North East	Immediate Vicinity: Unoccupied Land / Electricity Sub Station Within 500m: Unoccupied Land / Agricultural land Beyond 500m: Unoccupied Land / Agricultural land / B4620 Swansea Road
East	Immediate Vicinity: Unoccupied Land / woodland Within 500m: Unoccupied Land / Agricultural land / Woodland Beyond 500m: Unoccupied Land / Agricultural land / Woodland / Keepers Lodge Farm
South East	Immediate Vicinity: Wider Timet site / Woodland / Unoccupied Land Within 500m: Westfield Industrial Park Units / Electricity Sub Station / Dobies Acres Beyond 500m: Agricultural land / Residential Buildings / Railtrack / Waunarlwydd village
South	Immediate Vicinity: Wider Timet site Within 500m: Wider Timet site / Industrial Units Beyond 500m: Agricultural land / Residential Buildings / Railtrack / Waunarlwydd village / B4295

South West	Immediate Vicinity: Wider Timet site Within 500m: Wider Timet site / Industrial Units Beyond 500m: Residential Buildings / Railtrack / Waunarlwydd village / B4295
West	Immediate Vicinity: Wider Timet site Within 500m: Sewage Works Beyond 500m: Agricultural land / Gors-Fawr Brook
North West	Immediate Vicinity: Wider Timet site Within 500m: Wider Timet site Beyond 500m: Woodland / Afon Llan / Agricultural land

3.1.2 Geology, Hydrogeology and Surface Waters

Desk-based research of the local geology, hydrogeology and surface waters has been carried out in order to establish the potential for migration of contamination onto or away from the Site, and to assess the surface water and groundwater sensitivity of the Site area. Information was obtained from a number of sources, namely:

- Information provided by an environmental database report (Groundsure).
- Geological maps produced by the British Geological Survey (BGS) and the BGS Geology of Britain Viewer (http://maps.bgs.ac.uk/geologyviewer).
- MAGIC http://magic.defra.gov.uk)
- BGS GeoIndex Onshore Map GeoIndex - British Geological Survey (bgs.ac.uk)
- Coal Authority Interactive Map Interactive Map Viewer | Coal Authority (bgs.ac.uk)
- BGS Borehole Record Viewer (http://www.bgs.ac.uk/data/boreholescans/home.html)
- Natural Resources Wales flood map for planning Flood Map for Planning (naturalresources.wales)
- Lle Map Browser Lle - Map (gov.wales)

Geology

According to the BGS Geology of Britain Viewer and BGS 1:50,000 Solid and Drift map of the area, the site is directly underlain by superficial Alluvium which comprises clay, silt, sand and gravel. The superficial deposits are subsequently further underlain by the Bedrock Geology of the Grovesend Formation.

The BGS Lexicon of Named Rock Units describes the Grovesend Formation as '*predominantly argillaceous, comprising mudstones and siltstones, with well developed coals; minor lithic ("Pennant") standstones; locally developed red mudstones in the type area.'*

An intrusive geotechnical investigation of the site was undertaken by Earth Environmental and Geotechnical in December 2021. The report showed the geology directly beneath the site to comprise the following:

- Variable Made Ground present to a maximum of 1.20m below ground level (bgl). The Made Ground was further underlain by the following natural strata;
- Alluvium clay, sands and silts. Encountered between 0.7m – 1.2m bgl;
- Groundwater encountered between 0.8 – 1.8m bgl.

The Groundsure report undertaken in December 2021 (see Annex B) using the highest resolution radon dataset for the UK, states the land is in an area with a radon potential of less than 1% where no radon protection measures are required.

The site is located in a coal mining area as defined by the Coal Authority. A search of the Coal Authority Interactive Map in January 2022 does not indicate any mine entries in the immediate area to be included in the permit in 2022. There is a coal outcrop and shaft located approximately 475m to the South.

Hydrogeology

The hydrogeological characteristic of the geological groups identified is summarised below:

- Secondary A Aquifer – 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. These are generally the water-bearing parts of the former non-aquifers.

The site is not located in a Groundwater Source Protection Zone (SPZs).

There are no groundwater abstractions on site. However, there is 14 groundwater abstractions within 250m of the Site.

The site is considered to be situated in an area of medium sensitivity with respect to groundwater resources due to the underlying Secondary A Aquifer. This sensitivity is mitigated somewhat by the site not being situated in a groundwater source protection zone.

Surface Water

There are no surface water features located on site. There is a drainage culvert approximately 25 m to the east of the site and another drain approximately 160m south east. A dry ditch is located approximately 20m north of the site (centre).

The nearest main river is the Afon Llan (river) approximately 140 m north east of the site at the closest point.

River Quality data on the Lle Map (Water Framework Directive River Waterbodies Cycle 1) for the Afon Llan, shows that the river was classified as 'Good' for chemical and 'moderate' for ecological quality in 2012.

There are no surface water abstractions on site. However, there are three surface water abstractions, two of which are historical (closest at 191m north west of the site).

Table 3.2. Surface Water Abstractions within 2km of the Site			
Operator	**Distance and Direction**	**Location**	**Purpose**
Alcoa Manufacturing (GB) Ltd	191m north west	River Llan near Waunarlwydd	HISTORICAL Non-evaporative cooling
Bromham Leisure Ltd	1731m west	River Llan at Llwchwr	HISTORICAL Make-up or top-up water
Unknown	1731 west	Unknown	ACTIVE Make-up or top-up water

The Natural Resources Wales Flood Map for Planning indicates the site is located in a Flood Zone 3 for rivers, surface water and small watercourses (chance of flooding 1% or greater (1 in 100).

3.1.3 Designated Sites

The Environment Agency's 'Risk assessments for specific activities: environmental permits' guidance and 'Air emissions risk assessment for your environmental permit' guidance (which Natural Resources Wales H1 guidance links to) state that the potential impacts of the site should be assessed for the following habitat sites within 10km of the Installation:

- Special Areas of Conservations (SAC's and candidate (cSACs) designated under the EC Habitats Directive;
- Special Protection Areas (SPAs) and potential SPAs designated under the EC Birds Directive.
- Ramsar Sites designated under the Convention of Wetlands of International Importance.

It is also stated that within 2km of the Source:

- Sites of Special Scientific Interest (SSSI) established by the 1981 Wildlife and Countryside Act;
- National Nature Reserves (NNR);
- Local Nature Reserves;
- Local Wildlife sites;
- Ancient Woodland*.

*There are no air emissions from the changes proposed in this variation and therefore for Ancient Woodland, for which there are numerous sites within 2km, the screening distance has been reduced to 1km.

Information from the Multi Agency Geographic Information for the Countryside (MAGIC) website (http://magic.defra.gov.uk/), Swansea Green Spaces Map and Lle Map for Wales, has been used to obtain the below information.

The habitat receptor designations and locations relevant to the assessment are shown in Table 3.3 below:

Table 3.3: Sensitive Habitat Receptors

Receptor	Habitat Designation	Approx. Location (Relative to Site)
10km radius sites[1]		
Crymlyn Bog and Pant Y Sais	RAMSAR, National Nature Reserve, SAC	8528m SE
Burry Inlet	RAMSAR, SPA	2637m NW
Gower Ash Woods	SAC	7564m SW
Limestone Coast of South West Wales	SAC	9943m SW
Gower Commons	SAC	3528m SW
Carmarthen Bay and Estuaries	SAC	4081m NW
2km radius sites[2]		
Mynydd Bach y Glo	LWS	727m SE
Cwmllwyd Woods	LWS / Local Nature Reserve	1663m SE
Shaw's Woodland	LWS	1916m W
Stafford Common	LWS	1225m NW
Golden Grove	LWS	1450m NW
Mynydd Garn Goch	LWS	1642m NE
1km radius sites (Ancient Woodland)[3]		
Unnamed Wood Lle ref 2778	Ancient Semi Natural Woodland	1885m NW
Unnamed Wood Lle ref 2773	Ancient Semi Natural Woodland	982m NW
Unnamed Wood Lle ref 2768	Ancient Semi Natural Woodland	342m NW
Unnamed Wood Lle ref 2783	Restored Ancient woodland	365m NE
Unnamed Wood Lle ref 2762	Ancient Semi Natural Woodland	378mNE
Unnamed Wood Lle ref 2780	Restored Ancient woodland	469m NE
Unnamed Wood Lle ref 2767	Ancient Semi Natural Woodland	425m NE
Unnamed Wood Lle ref 2781	Restored Ancient woodland	665m NE
Unnamed Wood Lle ref 2782	Restored Ancient woodland	806m NE
Unnamed Wood Lle ref 2763	Ancient Semi Natural Woodland	942m NE

The site is not located within a nitrate vulnerable zone.

[1] Magic Map Application (defra.gov.uk)

[2] Swansea Green Spaces Map | Open Green Map

[3] Lle - Map (gov.wales)

The site is not located within an Air Quality Management Area.

Due to the nature of the proposed changes at the Installation and that there are no direct releases of emissions from the changes to permitted activities covered by this permit variation (V005), it is the conclusion of this assessment that the proposed operations are not likely to have any significant effect on the surrounding environment.

3.2 Pollution History

3.2.1 Environmental Database Records

The following information has been obtained from a search of a publicly available database of environmental information (Groundsure 2021).

The databases contain records of information from public registers held by environmental regulatory authorities and can be used to assess the site's sensitivity, the potential for neighbouring activities to pose a risk to the site and to determine whether specific records of pollution relate to the subject site.

Pollution Incidents

There have been no records of pollution incidents relating to the site.

There are 8 records of substantiated pollution incidents within a 500m radius of the site shown in Table 3.4 below.

Table 3.4. Surface Water Abstractions within 500 m of the Site

Distance and Direction	Details	Category of impact
183m south	Incident Date: 05/04/2013 Incident Identification: 1099781 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
355m west	Incident Date: 14/06/2001 Incident Identification: 9260 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
400m west	Incident Date: 28/07/2014 Incident Identification: 1261680 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
424m south west	Incident Date: 15/10/2002 Incident Identification: 123733 Pollutant: Inorganic Chemicals/Products Pollutant Description: Alkalis	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

427m west	Incident Date: 22/11/2013 Incident Identification: 1177998 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Chemical Odour	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
429 m south west	Incident Date: 14/01/2015 Incident Identification: 1306549 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
450m west	Incident Date: 20/07/2001 Incident Identification: 23032 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
450m west	Incident Date: 20/07/2001 Incident Identification: 23026 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

The above incidents are not considered to have had any impact on the subject site.

Licensed Waste Management Facilities

There are 3 waste management facilities within 500 m of the site which are shown in Table 3.5 below.

Table 3.5. Surface Water Abstractions within 500 m of the Site

Distance and Direction	Details	Issue/Expiry Date
134m east	Site Name: Timet Lagoon Type: Lagoon Operator: Timet UK Ltd Waste Management Licence No: 34004	Issue Date: 08/08/1977
249m west	Site Name: Timet Lagoon / Landfill Type: Lagoon Operator: Timet UK Ltd EPR Ref: YP3595FE/A001	Issue Date: 08/08/1977 Expiry Date: 21/05/2002
264m south west	Site Name: Alcoa Manufacturing G B Ltd Type: Industrial waste Operator: Alcoa Manufacturing G B Ltd Waste Management Licence No: 34021 EPR Ref: JP3795FM/S002	Issue Date: 30/11/1988 Surrendered Date: 23/11/2001

Discharge Consents

There are no water discharge consents, revoked or current, associated with the site. It should be noted that the existing Timet UK Ltd site has a Trade Effluent Consent from Welsh Water to discharge treated effluent to sewer which the new part of the site to be included in variation V005 will connect into.

There is one current discharge consent located within a 500 m search radius of the Site which is located 490m to the southeast of the site for 'discharge of storm sewage overflow' into the River Llan.

Authorised or Permitted Processes

Other than BX9846ID (the permit to which this variation relates) there are four other Part A(1 Environmental Permits (and no Part A(2) or Part B Permits) as defined by the Environmental Permitting (England and Wales) Regulations 2016 (as amended) within a 500 m search radius of the site which are shown in Table 3.6 below.

Table 3.6. Part A(1) Installation Permits within 500 m of the Site

Distance and Direction	Details	Issue/Expiry Date
314m south	Operator: The Treatment Hub Process: Recovery of waste; hazardous waste >10t/d by recycling inorganics (not metals) EPR Ref: ZP3933NJ	Issue Date: 30/09/2013 Effective
328m south	Operator: Alcoa Europe Flat Rolled Products Process: NON-FERROUS METALS; MELTING WITH CAPACITY >4T/D LEAD/CADMIUM OR 20T/D OTHERS EPR Ref: BM1377IT (also BX4658IV and BP3739LM)	Issue Date: 12/08/2003 Superseded
332m east	Operator: Viridis 178 Ltd Process: BURNING ANY FUEL IN AN APPLIANCE WITH A RATED THERMAL INPUT OF 50 OR MORE EPR Ref: AB3393CP (also CP3630AJ)	Issue Date: 10/01/2017 Effective

3.2.2 Historical Land Uses

Available historic maps for the site have been obtained and reviewed to determine if there is the potential for contamination to be present on Site associated with the Sites historical uses.

The historical maps are presented within Annex B of this report and a summary of the historical development of the site and surroundings is included below.

The land use chronology shown on the historical plans shows the Site to have been in agricultural use / rough grassland habitat since the earliest available map dated 1879. The maps do not show significant changes to the site or immediate surroundings until the manufacturing facility was built (1959 map).

The maps indicate that the site has remained as agricultural land / rough grassland since 1879 and aerial photography indicates tree coverage in 2000 which were cleared by 2017 and crushed aggregates have been laid across the site. The site is being used for material storage.

3.2.3 Site Reconnaissance

Visual/Olfactory Evidence of Existing Contamination

All areas of the site have been subject to a visual inspection in November 2021 in advance of the new surfacing and building being constructed.

The inspection was carried out in conjunction with the management of Timet UK Ltd.

There was no evidence of any contamination or hydrocarbon/pollutant staining noted during the site assessment.

There is no visual or olfactory evidence on site of existing contamination.

The following basic design have been incorporated into the design of the plant:

- All aspects of the site will be operated within a purpose-built building, on sealed impermeable flooring. The concrete provides a completely impermeable barrier to ensure that the underlying geology and controlled waters are protected.
- All IBCs will be stored above ground within the building.
- There are no underground structures, pipelines, or transfer ducts except for the drainage sump which connects to existing drainage.
- All IBCs will be stored within a secondary containment bund designed to Oil Storage Regulations Guidance

The construction of the plant foundations and tanks is very significant and on their own provide significant protection to the environment.

All aspects of the Timet UK Ltd operation are subject to a strict maintenance schedule.

Installation of the site drainage and sump will be in accordance with Natural Resource Wales requirements.

Due to the construction of the new building and the moving of the existing swarf storage area (currently outside) into the new building, the operations on Site will improve the management of the existing operations and will not introduce any new polluting substances to the Site.

3.2.4 Preliminary Risk Assessment

The preliminary Risk Assessment undertaken by Earth Environmental and Geotechnical in December 2021 states, that based on a review of the potential sources of contamination and the likely receptors, a low to moderate risk is present. A ground investigation was therefore undertaken (see section 2.3).

3.3 Evidence of Historic Contamination

3.3.1 Site Investigation

A baseline intrusive site investigation was undertaken by Earth Environmental and Geotechnical in December 2021. There was considered to be a low to moderate risk for contamination to be present on the Site relating to its historical use and therefore baseline intrusive investigation data was obtained to establish the geo-environmental conditions of the site. The investigation comprised:

- 3 no. window sample boreholes (WS01 to WS03) were sunk to a maximum depth of up to 3m below existing ground level and 50mm diameter standpipe piezometers were installed in each borehole at depths between 1.5m and 3m below ground level.
- Chemical analyses were carried out on 6 soil samples and 3 groundwater samples for: asbestos screen (soil only), arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, mercury, nickel, selenium, vanadium, zinc, cyanide, sulphate, sulphide, pH, Soil Organic Matter (soil only), phenol, speciated Total Petroleum Hydrocarbons, speciated Polyaromatic Hydrocarbons, SVOCs (groundwater only) and VOCs (groundwater only).
- One round of groundwater and gas monitoring was undertaken approximately one week after installation of the boreholes

Made Ground was encountered at varying depths in all three locations and overlying Alluvium. A moderate hydrocarbon odour was noted in WS01 (1.05 – 1.2 mbgl) and a strong hydrogen sulphide odour was noted in WS03 (0 – 0.7 mbgl).

Groundwater was encountered within all three locations at varying depths within the Alluvium.

Concentrations of methane, hydrogen sulphide and carbon monoxide were not detected in the ground gas monitoring.

No soil analyses were found to exceed the commercial / industrial end use criteria (DEFRA C4SL where available and S4ULs where not) and asbestos was not encountered.

In general, chemical laboratory analyses of groundwater samples identified slightly elevated levels of contamination above the EQS and Drinking Water Standards for arsenic (14 ug/l), copper (23 ug/l), cyanide (70 ug/l and sulphate (430,000 ug/l). All other results were below the screening values.

The revised Conceptual Model presented in the Ground Investigation 2021, states the risk of contamination is considered low.

The full Ground Investigation Report 2021 can be found in Annex B.

3.4 Supporting Information

Figures detailing the location, boundary and layouts of the Installation are shown in Annex A.

The Ground Investigation containing Groundsure report, historical maps, chemical analyses and Conceptual Model can be found in Annex B.

4. Permitted Activities

4.1 Activities Undertaken at the Installation

4.1.1 Existing Activities

Timet UK Ltd is making this application to carry out a Minor Technical Variation of their existing EPR permit under The Environmental Permitting (England and Wales) Regulations 2016 (as amended) for the following reason:

- To vary the existing permit (EPR/BX9846ID/V004) to relocate the existing outdoor swarf storage area slightly further East and upgrade the storage facility by erecting a purpose built building with sealed drainage (connected to existing process drain on site);
- Expand the permit boundary to include the new area to house the new swarf storage building.

Under Permit EPR/BX9846ID/V004, the facility is permitted to finish rolled titanium / non-ferrous alloy units by acid pickling, de-scaling, bright dipping and strain etching in process tanks with a total capacity greater than 30m3. The total throughput of the plant is 2000 – 3000 tonnes per year.

Swarf is currently generated in three main areas across the site:

1. Rod rolling and finishing in E Bay – titanium rod is run through bar peelers which take off up to 1mm on diameter. The operation requires water based coolant to lubricate and cool the cutting action and this is where the oily swarf is generated.
2. Machine Centre in C Bay – titanium flat sheet is run through several milling operations (Noble and Lunde, Asquith Butler and Cincinnati) to get the plate flat and to correct dimensions. These also create oily swarf.
3. Test Laboratory in Main Office – smaller samples of titanium road and sheet are machined on small lathes to get the samples to the correct dimensions to carry out quality assurance checks. This also produces swarf.

Currently, swarf waste from the permitted activities is stored in bunded IBCs in a designated external area in the North East of the site. Oily water is pumped from the IBCs into a sump which is periodically emptied into the rod pickle area manhole located on the north side of the Y Bay building. Process effluent from this manhole joins with the acids from various site processes in the acid drain, diluting the oily water and dissolving some of the oil in the mixture. The effluent is then routed to the existing effluent treatment plant for treatment prior to discharge to sewer through existing Dŵr Cymru Welsh Water Trade Effluent Consent SW79. This arrangement is currently permitted by the sites existing permit and no changes are proposed to the effluent treatment plant.

4.1.2 Description of the Process

The proposed variation does not change the purpose and function of the Installation.

There are no changes to the process feedstocks, including how or where swarf is generated in the process or its characteristics, as a result of the permit variation (V005) for which this Site Condition Report has been produced.

No changes are proposed to the existing permitted activities other than the movement of the existing swarf storage area to a new purpose built building slightly further East and the extension of the permit boundary in the North East corner of the site to accommodate this. The new purpose built swarf storage area will comprise:

- Detached steel frame building to store swarf waste in IBCs (within bund)
- Vehicle access and parking (for 2 IBC trailers) for collection of drained swarf IBCs
- A short section of new pipe to collect process effluent (oily residues drained from the IBCs containing the swarf) via a new sump within the building, and route this to drain through the existing manhole at the rod pickle area (located on the north side of the existing Y Bay building), joining up with the existing underground acid drain and flowing to the existing effluent treatment plant
- Uncontaminated surface water drainage through new rainwater garden and attenuation tank via flow control outlet to existing dry ditch to the North of the new building

The changes to the swarf waste storage will be to move the storage of the IBCs into a purpose-built building with integral concrete bunding. The bund has a capacity of 265 m^3 which is greater than both 25% of the total IBC capacity of oily water (noting the IBCs will predominantly comprise swarf with an anticipated 20% oily water) and over 110% of the largest tank (IBC) within the bund.

Oily water will drain from the IBCs into the internal drainage channel to a new sump in the North East of the building and this will be pumped to the existing manhole and on to the existing effluent treatment plant. The effluent treatment plant will continue to discharge to sewer (through existing emission point S1) under the existing Trade Effluent Consent.

4.1.3 Substances Used at the Installation

There will be no changes to substances used, produced or stored at the installation. The new area will store oily swarf.

4.1.4 Waste Storage

All waste will be stored within dedicated areas. All waste vessels, will be clearly identified, sealed, and stored internally within a secured area protected by secondary containment.

The proposed new swarf storage will produce waste swarf which is sent off site for further processing, and oily residues which are drained to existing site process drainage.

All waste swarf will be stored within the building prior to loading on the IBC trailers (also within the building) and transferring off-site.

4.1.5 Drainage Systems

All aspects of the operating site are constructed on a sealed concrete hardstanding.

All clean, uncontaminated surface water falling from the roof of the new swarf storage area will be routed through a new rainwater garden and attenuation tank via flow control outlet to existing dry ditch to the North of the new building.

There is no potential for cross contamination from the 'dirty area' inside the building.

Oily residues which are drained from the IBCs will drain to existing site process drainage for treatment in the existing effluent treatment plant prior to discharge to sewer under existing Trade Effluent Consent.

There are no new direct releases to controlled waters emanating on the site.

Hardstanding

All internal and external processing areas are constructed with impermeable concrete hardstanding which has been designed in accordance with the load bearing requirements of the building and vehicles used at the facility.

Tanks and Bunds

All IBCs are stored within secondary containment designed to comply with the Oil Storage Regulations guidance. All IBCs are enclosed within the main process building.

4.1.6 Potential for Fugitive Releases to Soil, Groundwater and Surface Water

The materials and substances used in the activities on site are not considered to have potential to cause ground or groundwater contamination under general storage or operating procedures.

Furthermore:

- The building floor is concrete and is built to fall to the North East corner sump. Any materials spilt within the main building will therefore drain to sump and be treated accordingly.
- All IBCs are located away from vehicle maneuvering areas and vehicle accessway within secondary containment bunds;
- All storage activities associated with the operation are enclosed within the main building.

The site operates a comprehensive maintenance and management system.

The management system includes visual inspections of:

- All tanks and hard surfaced areas to detect any signs of deterioration, leaks, or spillage. Any corrective action required is reported to and implemented by the Site Manager; and
- Equipment in all process areas as part of the company's planned/predictive maintenance programme.

Site management operate an environmental management system which is designed to meet the requirements of Natural Resources Wales (refers to Environment Agency Guidance 'Develop a Management System: Environmental Permits').

Based on this assessment, the potential for the operations on site to impact soil and groundwater underlying the installation is considered to be low.

Non-permitted activities undertaken at the Installation	Not applicable
Plan showing activity layout	Refer to Figure A2, Annex A
Environmental Risk Assessment	See attached Main Application Document SOL_21_P019_TIM_ASD See attached Application Supporting Document SOL_21_P019_TIM Annex B - ERA

Annex A – Figures

Annex B – Ground Investigation 2021