Site Condition Report (SCR) - Bespoke Installation Permit Application: Parkham Farms Cheese Factory

On Behalf of:

Parkham Farms Ltd, Higher Alminstone Farm, Woolsery, Bideford, Devon EX39 5PX

ETL928/2025

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V1.0 Issue 0	25/02/2026	First Issue	A Trelawny	A Becvar

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Abbreviations

BGS	British Geological Survey
CAS	Chemical Abstract Service
C&L Inventory	Classification and Labelling Inventory
CLP	Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008
CIP	Cleaning in place
DAF	Dissolved air flotation
ECHA	European Chemicals Agency
EA	Environment Agency
EMS	Environmental Management System
EPR	Environmental Permitting (England and Wales) Regulations 2016
IBC	Intermediate Bulk Container
m AOD	metres above Ordnance Datum
MVP	Mechanical Vapour Recompression
NGR	National Grid Reference
SAC	Special Area of Conservation
SCR	Site Condition Report
SOP	Standard Operating Procedure
SPA	Special Protection Area
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
STOT	Specific target organ toxicity
UN	United Nations

1 Introduction

This document, comprising a Site Condition Report (SCR) including a Baseline Report, has been prepared by Earthcare Technical Ltd on behalf of Parkham Farms Limited in support of an application for a bespoke installation permit (Permit ref: EPR/ HP3728LG) for Parkham Farms Cheese Factory, Higher Alminstone Farm, Woolsery, Bideford, EX39 5PX, centred on National Grid Reference (NGR SS 35168 20723), herein termed 'the Site'. The plant is operated by Parkham Farms Limited (PFL), herein termed 'the Operator'.

The permit application is for a new bespoke installation permit for the following listed activities found in Schedule 1 of the Environmental Permitting (England and Wales) Regulations 2016:

- Section 6.8 Part A(1)(e) -Treating and processing milk, the quantity of milk received being more than 200 tonnes per day (average value on an annual basis), namely the production of production of cheese.

The Environmental Permitting Regulations Site Condition Report guidance for applicants H5,[1] defines a SCR as a document that describes and records the condition of the land and groundwater at a site at a point in time. When an operator applies to the Environment Agency (EA) to surrender the Environmental Permit, the SCR can be used to demonstrate that the land and water within the vicinity have been protected during the lifetime of the regulated facility and that the land is in a satisfactory state.

The Baseline Report assessment in Section 5 of the SCR draws upon European Commission Guidance[2] which explains that a baseline report is required where an activity involves the use, production or release of relevant hazardous substances, having regard to the possibility of soil and groundwater contamination.

This report describes the site condition at the time of the permit application. It is designed to be updated and retained through the operational phase of the regulated facility, for use as a reference at the end of the operational phase, when the operator makes an application to surrender the Environmental Permit. The site is already operational however, an environmental permit for the site is now required as the scale of operations at the site over time have increased such that they now exceed the limits for the listed activities under the Environmental Permitting (England and Wales) Regulations 2016.

The SCR comprises information gathered during a site walkovers by Earthcare Technical Limited (5 November 2024 & 28 May 2025) and a desk top study utilising:

- Publicly available information
- Enviro Geo Insight Report, Groundsure (May and August 2025)

Please refer to the following SCR template which has been replicated from the guidance for the purposes of consistency. Section 5 comprises the Baseline Report assessment.

[1] H5, Site condition report – guidance and templates, LIT8001 Version 3.0 April 2013.
[2] European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions (2014/C 136/03)

2 Site Details

<table>
<tr><td>Name of applicant</td><td>Parkham Farms Limited</td></tr>
<tr><td>Activity address</td><td>Parkham Farms Cheese Factory, Higher Alminstone Farm, Woolsery, Bideford, EX39 5PX</td></tr>
<tr><td>National grid reference</td><td>SS 35168 20723</td></tr>
<tr><td>Site footprint</td><td>The site footprint (proposed permitted area) is approximately 1.79 hectares (4.4 acres)</td></tr>
<tr><td>Site Infrastructure</td><td>
<table>
<tr><th>Item.</th><th>Working capacity</th></tr>
<tr><td>Access Road</td><td></td></tr>
<tr><td>Lorry Wash Bay</td><td></td></tr>
<tr><td>Parking Area</td><td></td></tr>
<tr><td>1 No. Cold Water Tank (for regenerative heat) (7oC)</td><td>90 m^3</td></tr>
<tr><td>1 No. Hot Water Tank (for regenerative heat) (40oC)</td><td>90 m^3</td></tr>
<tr><td>6 No. Milk Silos</td><td>810 m^3 total capacity</td></tr>
<tr><td>2 No. Whey Protein Concentrate (WPC) Silos</td><td>30 m^3 & 50 m^3</td></tr>
<tr><td>2 No. Reverse Osmosis Water Tanks</td><td>45 m^3 & 90 m^3</td></tr>
<tr><td>Raw Whey Silo</td><td>60 m^3</td></tr>
<tr><td>Cream Silos (CT1 & CT2)</td><td>4 m^3 each</td></tr>
<tr><td>Cream Silo (CT3)</td><td>23 m^3</td></tr>
<tr><td>Main Cheese Production Building including:
○ 4 No. Milk Reception Vats
○ 1 No. Drainer
○ 2 No. Cheese Cutting Tables
○ 1 No. Curd Unloader
○ 3 No. Cheese Block Formers
○ 1 No. Boxing Room
○ 1 No. Re-gassing System
○ 1 No. Vacuum Packer
○ 1 No. Wedge Wire Curd Screen
○ 1 No. Press (fines)
○ Ultra Filtration Membranes
○ Reverse Osmosis Membranes
○ Chlorine Dosing Station
○ Whey Protein Concentrate (WPC) Cooler
○ 1 No. Whey Separator (Centrifuge)
○ 3 No. Pasteurisers
○ Chillers
○ 3 No. Cleaning in Place (CIP) systems(raw milk processing, cheese room & whey room)
○ Compressors</td><td></td></tr>
<tr><td>WPC and Whey Cream Tanker Loading Bay</td><td></td></tr>
</table>
</td></tr>
</table>

	IBC Storage Areas for chemicals	
	Mechanics Workshop including engine oil storage	
	Back-up Generator	805KVA
	2 No. Kerosene Boilers for steam production	1,567 kW (each)
	Bunded Kerosene Tanks: Tank 1 Tank 2	 40m^3 10m^3
	1 No. Bunded Diesel Tank (DERV Tank)	20m^3
	1 No. Bunded Diesel Tank (generator)	1.2 m^3
	2 No. Lactose Tanks (Nos 1 and 2)	60 m^3 & 90 m^3 respectively
	1 No. Dirty water reception pit (below ground)	300m^3 / 270 m^3 working capacity
	1 No. Dirty water storage tank (above ground)	840m$^{3/}$ 756 m^3 working capacity
	Dirty Water Lagoon	35,500 m^3
	Deluge Lagoon (proposed to be installed)	tbc
	2 No. Boreholes	
	1 No. Sewage Treatment Plant	
	Cheese Store	
Document reference and dates for Site Condition Report at permit application	Application SCR (this report): Site Condition Report (SCR) - Bespoke Installation Permit Application: Parkham Farms Cheese Factory (ETL928_PFL_SCR_V1.0)	
Document References for site plans (including location and boundaries)	Figure 1: Site Location Plan, Earthcare Technical Limited (ETL928_2026_EPR01) Figure 2: Permit Boundary & Emission Point Plan, Earthcare Technical Limited (ETL928_2026_EPR02) Figure 3: Site Layout Plan, Earthcare Technical Limited (ETL928_2026_EPR03) Figure 4: Human Receptor Plan, Earthcare Technical Limited (ETL928_2026_EPR04) Figure 5: Site Wide Drainage System Plan Figure 6: Ecological Receptor Plan, Earthcare Technical (ETL928_2026_EPR05) (See Figures)	

3 Condition of the Land at Permit Issue

Environmental setting including: • **Geology** • **Hydrogeology** • **Surface waters** • **Flood risk**	**Geology** The site is at an elevation of approximately 185m above Ordnance Datum (m AOD) at the Cheese Factory area (northern sector) and 178m AOD for Lagoon area (southern sector). Across most of the site the soils are freely draining, slightly acidic loamy soils. At the southern extent, including the area where the Dirty Water Lagoon is sited, soils are predominantly slowly permeable, seasonally wet acidic loamy and clayey soils.[3] As detailed in Section 5 of the Enviro Geo Insight Report (Appendix A): • The bedrock geology is the Holsworthy Group (mudstone, siltstone and sandstone). This comprises of interbedded fine-grained rocks with low matrix (intergranular) permeability, where flow pathways are primarily along fractures and bedding planes.[4] • There are no records of superficial geology on Site. • There are no records of soluble rock risk within 1km of the proposed Site. **Hydrogeology** As detailed in Section 6 of the Enviro Geo Insight Report (Appendix A): • The entire site sits upon a bedrock aquifer which is classified as a Secondary A Aquifer. The Holsworthy Group here is fracture-dominated with interbedded sandstone providing locally higher permeability; it can support local supplies. • The bedrock aquifer is classified as High Vulnerability. • Leaching Classification: High. Although the infiltration index is < 40%, the dilution (> 550 mm/yr) indicates high annual recharge/percolation, which drives a high leaching class. • There are no records of a superficial aquifer on Site. The absence of superficial deposits coupled with high leaching soils contributes to the high vulnerability of the bedrock geology. • The site is not within a Groundwater Source Protection Zone. • The site is not within a Drinking Water Safeguard Zone.[3] (Groundwater) (England). • There are two boreholes on Site and an additional borehole located 4m to the west of the Site permit boundary. These are licensed for groundwater abstractions for the farm extracting more than 20 cubic metres of water per day primarily for livestock drinking water. These boreholes are used by the Operator in accordance with Environmental Permits (Ref: **SW/050/0007/020**) each to abstract a maximum of 20.4m^3 per day for general farming and domestic use. • There are no additional active groundwater abstractions within 2km of the Site.

[3] https://www.landis.org.uk/soilscapes/ accessed 15 August 2025
[4] National Geological Screening: South-west England Region, Bristish Geological Survey, Comissioned Report CR/17/095

	Surface Water The site lies to the west of a tributary of the Dipple Water. Surface water from the main yard area, is directed to a ditch located along the eastern boundary of the site. From there, it flows into the unnamed tributary of the Dipple Water (an ordinary watercourse) approximately 125m to the south west of the site and then flows on to the River Torridge. From there, the River Torridge continues north to the Taw–Torridge Estuary at Bideford, and out into Bideford Bay. A second ordinary (unnamed) watercourse lies 15m to the north of the dirty water storage lagoon. It drains and flows via field ditches to the Dipple Water and thence to the River Torridge and the Taw–Torridge estuary at Bideford. The catchment area is the Dipple Water and was classified in 2022 under the Water Framework Directive as follows: • Ecological status – moderate • Biological quality elements - moderate • Physico-chemical quality elements – moderate • Hydromorphological Supporting Elements – not high • Chemical – does not require assessment[5] In accordance with Section 6.7 of the Enviro Geo Insight Report (Appendix A) there are no recorded surface water abstraction within 2km of the Site. The site is not located within a Drinking Water Protected Area (Surface Water) or a Drinking Water Safeguard Zone (Surface Water).[3] **Flood Risk** The site is in a Flood Zone 1 which means that overall, there is a low probability of flooding from rivers or sea.[6] In accordance with Section 9.1 of the Enviro Geo Insight Report (Appendix A) there negligible risk of surface water flooding across the Site footprint. In accordance with Section 10.1 of the Enviro Geo Insight Report (Appendix A) the risk of groundwater flooding on Site is also negligible.
Pollution history including: • Pollution incidents that may have affected land. • Historical land uses and associated contaminants	**Pollution incidents that may have affected land.** As detailed in Sections 4.19 of the Enviro Geo Insight Report (Appendix A) there are 6 No. substantiated pollution incidents within 500m of the site. Note that since 2006 this data has only included Category 1 (major) and 2 (significant) pollution incidents. 1. **One pollution incident is recorded as having occurred on site (04/09/2021).** This was a spillage of cattle slurry which contaminated an unnamed tributary of the Dipple Water (an

[5] https://environment.data.gov.uk/catchment-planning/WaterBody/GB108050014370 Accessed 13 August 2025
[6] https://flood-map-for-planning.service.gov.uk/ Accessed 13 August 2025.

• Any visual/ olfactory evidence of existing contamination • Evidence of damage to pollution prevention measures	ordinary watercourse) approximately 125m to the south west of the site. • EA documented impact: **Water Cat 1 (Major)**; Land Cat 4 (No impact); Air Cat 4 (No impact). • Interpretation: The incident caused an acute in-stream impact. However, given the Land Cat 4 classification and the fast-degrading nature of slurry, **significant lasting contamination of on-site soils/groundwater is unlikely**. Documented incidents within proximity to the Site: 2. 27 m SW (16/01/2002) — food & drink biodegradable waste. • EA documented impact: **Water Cat 3 (Minor)**; Land/Air Cat 4. • Likelihood of effect on site: **Unlikely**. Small, localised incident. No land impact recorded. 3. 34 m NW (26/06/2001) — food & drink biodegradable waste. • EA documented impact: **Water Cat 2 (Significant); Land Cat 2 (Significant)**. • Likelihood of effect on site: **Unlikely**. Although significant impact on; land was recorded, the incident was >20 years ago. Any soil impact would be local to the source and biodegradable. Pollution unlikely to have persisted. 4. 383 m S (11/06/2001) — food & drink biodegradable waste**.** • EA documented impact: **Water Cat 2; Land Cat 2**. • Likelihood of effect on site: **Unlikely**. Down-valley/downgradient from the Site; no pathway for pollution back to the site. 5. 424 m SW (16/01/2002) — slurry/dilute slurry. • EA documented impact: **Water Cat 3**; Land/Air Cat 4. • Likelihood of effect on site: **Unlikely**. Pollution would have travelled away from the site. No land impact recorded. 6. 500 m SW (17/07/2017) — silage liquors. • EA documented impact: **Water Cat 2**; Land/Air Cat 4. • Likelihood of effect on site: **Unlikely**. Off-site and along the south-west watercourse; acute in-stream event with no impact on land recorded. **Permitted activities that may have affected land.** As detailed in Section 3 of the Enviro Geo Insight Report (Appendix A), there are no active or historical landfills, licensed waste sites or historic waste sites within 500m of the site. There are 9 recorded Waste Exemptions within 500m of the Site. The categories of exemption are largely using and storing of both

	agricultural and non-agricultural waste. 5 of these Exemptions are registered to Higher Alminstone Farm itself. **Historical / current land uses** As detailed in Section 1.1 of the Enviro Geo Insight Report (Appendix A) an 'unspecified old quarry' located 498m to the south of the Site was present in 1984. The aerial photography on pages 6 to 10 shows the site from 1991 to 2021 including the installation of the dirty water lagoon in 2018 and the construction of additional site buildings / warehouses at the north of the Site between 2006 and 2021 which are used as Cheese Stores and Workshops for the farm and factory. **Potential contaminants associated with previous site use** As detailed in Section 4.6 of the Enviro Geo Insight Report (Appendix A) there are no records of sites determined as Contaminated Land within 500m of the study site. As detailed in Section 4.17 and 4.18 of the Enviro Geo Insight Report (Appendix A) there are no records of discharges of List 1 or List 2 Dangerous Substances within 500m of the site. **Any visual / olfactory evidence of existing contamination** At the time of the site walkover carried out by Earthcare Technical Limited (28 May 2025) there was no evidence of land contamination within the proposed permitted area. **Evidence of damage to pollution prevention measures** At the time of the site walkover carried out by Earthcare Technical Limited (28 May 2025), there was no evidence of damage to pollution prevention measures in place.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports	Please see above under 'Any visual / olfactory evidence of existing contamination'. There is no evidence indicating potential historical contamination of the site.
Baseline soil and groundwater reference data	Please refer to Section 21 of the Enviro Geo Insight Report (May 2025) (Appendix B), which contains information on BGS Estimated Background Soil Chemistry. The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead, Bio accessible Lead and Nickel in topsoil. No ground investigation and analysis of soils for potential contaminants has been carried out.
Supporting information	• Enviro Geo Insight Report (August 2025) (Appendix A) • Section 21 (Soil Chemistry) Enviro Geo Insight Report (May 2025) (Appendix B) • Site Walkover Photographs (Appendix C)

4 Permitted Activities

Proposed Permitted activities	• Section 6.8 Part A(1)(e) -Treating and processing milk, the quantity of milk received being more than 200 tonnes per day (average value on an annual basis), namely the production of production of cheese. Directly Associated Activities (DAAs): • Steam supply • Cleaning • Use of refrigerants • Storage of raw material • Oils and chemicals storage • Waste storage, handling and dispatch • Lorry wash • Emergency back-up generator • Surface water collection, storage and discharge
Non – permitted activities	None
Document references: • Plan showing activity layout; and • Environmental risk assessment	• Site Layout Plan, Earthcare Technical Limited (ETL928_2026_EPR03) Figure 3. • Environmental Risk Assessment – Appendix A of Environmental Management System (EMS) Manual (PFL-OD-01)

5 Baseline Report Assessment

5.1 Introduction

This section comprises an assessment of whether a Baseline Report is required before permitted activities commence on site. The guidance[2] states that a Baseline Report should include:

- *'Information on the present use and, where available, on past uses of the site; and*
- *where available, existing information on soil and groundwater measurements that reflect the state at the time the report is drawn up or, alternatively, new soil and groundwater measurements having regard to the possibility of soil and groundwater contamination by those hazardous substances to be used, produced or released by the installation concerned.'*

The stages of the Baseline Report assessment are replicated below followed by the assessment of the proposed site and activities in line with the guidance.

5.2 Stage 1

Activity - Identify which hazardous substances are used, produced or released at the installation and produce a list of these hazardous substances.

Objective - Determine whether or not hazardous substances are used, produced or released in view of deciding on the need to prepare and submit a baseline report.

Table 1 below show the hazardous substances that are stored on site, their use and storage arrangements including the maximum amount that may be stored at any one time.

Table 1 – Hazardous Substances

Hazardous Substance	Form	United Nations (UN) Number[7]	Maximum amount stored on site at any one time	Use of product	Storage arrangements
Compressed Oxygen	Gas	UN1072	33.27m3	Cutting and Gas Welding	Designated caged area on site yard
Pureshield - Argon Gas	Gas	UN1951	23.42m3	Welding shield gas	Designated caged area on site yard
Argoshield Universal (Argon with CO_2 and O_2 (shielding gas mixture))	Gas	UN1951	23.42m3	Welding shield gas	Designated caged area on site yard
Propane	Liquid	UN 1978	46.4Kg	Thermal cutting	Designated caged area on site yard
Caus-Deta 25 -Sodium Hydroxide Solution (Caustic) (30%)	Liquid	UN1824	2500Kg	Cleaning in place systems	IBCs (chemical cage)
Opti-Caus Max - Sodium Hydroxide Solution (Caustic) (30%) (Prime Cleaning in Place)	Liquid	UN1824	2500Kg	Cleaning in place systems	IBCs (chemical cage)
NIPAC - Pascal descaler (blend of Nitric Acid (50%) & Phosphoric Acid)	Liquid	UN3264	2500Kg	Breaking down limescale and milk stone build up in production plant/pipework	IBCs (chemical cage)
Pressure Wash 10 - Sodium Hydroxide Solution (Traffic Film Remover) (caustic based)	Liquid	Not classified / No UN number	550L	Lorry washing	25L plastic jerrycan/containers (pressure wash station)
Pulsatec 6017 - Sodium Hypochlorite (15%)	Liquid	UN1908	2000L	Water treatment, Chlorine Dioxide dosing.	IBCs (chemical cage)

[7] https://chem.echa.europa.eu/ Accessed 22 September 2025

Hazardous Substance	Form	United Nations (UN) Number[7]	Maximum amount stored on site at any one time	Use of product	Storage arrangements
Pulsatec 6019 - Sodium Hypochlorite (10%)	Liquid	Not classified / No UN number	2000L	Water treatment, Chlorine Dioxide dosing.	IBCs (chemical cage)
Ethylene glycol (Anti-freeze)	Liquid	UN 3082	30L	Anti-freeze	5L container (workshop)
Kerosene	Liquid	UN1223	50,000L	Boiler fuel	Kerosene Tanks
Diesel (DERV & generator)	Liquid	UN1202	20,000L	Running vehicles & generator	DERV Tank & Bunded Diesel Tank (generator)
Engine & Transmission Oils (3 varieties used all supplied by Q8 oils; Q8 T 904 10W-40, Q8 T 2200 and Q8 T 45 LS 90).	Liquid	Not classified / No UN number	2,000L	Vehicle maintenance	IBCs (Workshop)
Urea (AdBlue)	Liquid	Not classified / No UN number	1240L	Vehicle maintenance	IBCs (adjacent to DERV tank) & drums (workshop)
Sodium Hypochlorite (15%)	Liquid	UN1791	2500kg	Cleaning in place systems	IBCs
Aciplusfoam VF59 (blend of phosphoric acid, 20-30%, nitric acid 3-10%, Alcohols, C10-16, ethoxylated (7-<15 EO), alkyl alcohol ethoxylate & Lauramine oxide)	Liquid	UN2031	60L	Cleaning	20L containers (chemical cage)
Acifoam VF10 (blend of phosphoric acid, alkylbenzenesulphonic acid, propan-2-ol & sodium cumenesulphonate)	Liquid	UN1805	60L	Cleaning	20L containers (chemical cage)
Divodes FG Wipes VT75 - Mainly alcohols (propan-1-ol / n-propanol and propan-2-ol / isopropanol) in an impregnated wipe.	Solid	UN3175	2500PC	Cleaning	Designated cupboard in laboratory

Hazardous Substance	Form	United Nations (UN) Number[7]	Maximum amount stored on site at any one time	Use of product	Storage arrangements
Hypofoam VF6 (blend of Sodium hydroxide: 3–10%, Sodium hypochlorite (active chlorine) 3–10%, Lauramine oxide, 3–10% (plus water and minor additives)	Liquid	UN1719	240L	Cleaning	20L containers (chemical cage)
Diverflow Direct-N (Sodium hydroxide 20-30%)	Liquid	UN1824	240L	Cleaning	20L containers (chemical cage)
DI Microwet-N - Alkyl alcohol ethoxylate (Trideceth 7–10)	Liquid	Not classified / No UN number	120L	Cleaning	20L containers (chemical cage)
Divosan Sanibright VS59 (Sodium Hydroxide, surfactants (Lauramine oxide, Laurylamine Dipropylenediamine_, minor additives such as tetrasodium EDTA (a chelating / sequestering agent))	Liquid	UN 1760	240L	Foam cleaner	20L containers (chemical cage)
Divos C1 VM60 (Sodium Hydroxide, 7-13%, potassium hydroxide 1-5%, minor additives such as tetrasodium EDTA (a chelating / sequestering agent and surfactants)	Liquid	UN1824	360L	Cleaning	20L containers (chemical cage)
DI Divosan Forte VT6 (Hydrogen peroxide: 20–30 %, Acetic acid: 10–20 %, Peracetic acid: 10–20 %)	Liquid	UN3109	450Kg	Cleaning	25kg drums (chemical cage
DI Divos 80-2 VM1(Propylene glycol: 30-50%, alkyldimethyl betaine: 10-20%, Subtilisin: 0.1-1%)	Liquid	Not classified / No UN number	600L	Cleaning	20L containers (chemical cage)
Phenolphthalein Solution (Phenolphthalein: ~1–2% , Ethanol & Water)	Liquid	UN1170	6L	Cheese testing	2.5L containers (laboratory)
Sodium Hydroxide	Liquid	UN1824	25L	Cheese Testing	5L containers (laboratory)

Hazardous Substance	Form	United Nations (UN) Number[7]	Maximum amount stored on site at any one time	Use of product	Storage arrangements
Proto Solve	Crystals	UN2967	600Kg	Acidic Powdered Detergent	25kg drums (chemical cage)
Pulsatec 203	Liquid	Not classified / No UN number	250L	Boiler Chemical	25L drums (chemical cage)
Pulsatec 238	Liquid	Not classified / No UN number	250L	Boiler Chemical	25L drums (chemical cage)
Pulsatec 230	Liquid	UN 1824	250L	Boiler Chemical	25L drums (chemical cage)
P171	Liquid	Not classified / No UN number	400L	Boiler Water Treatment - neutraliser	25L drums (chemical cage)
Pure Dried Vacuum (PDV) Salt	Crystals	Not classified / No UN number	53.9 tonnes	Salt in Cheesemaking Process	25kg bags (cheese store)
Hydrogranular Salt	Crystals	Not classified / No UN number	1.375 tonnes	Boiler Salt	25kg bags (boiler room)
JLA Ultra Biological	Liquid	Not classified / No UN number	60L	Laundry Detergent	20 L containers (laundry)
Ambersil Food Grease FG	Liquid	UN1950	1600ml	Lubrication	Aerosol (office)
Ambersil Penetrating Oil	Liquid	UN1950	1200ml	Lubrication	Aerosol (office)

5.3 Stage 2

Activity - Identify which of the hazardous substances from Stage 1 are 'relevant hazardous substances.' Discard those hazardous substances that are incapable of contaminating soil or groundwater. Justify and record the decisions taken to exclude certain hazardous substances.

Objective - To restrict further consideration to only the relevant hazardous substances in view of deciding on the need to prepare and submit a baseline report.

'Relevant hazardous substances' (Article 3(18) and Article 22(2), first subparagraph) are those substances or mixtures defined within Article 3 of Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) which, as a result of their hazardousness, mobility, persistence and biodegradability (as well as other characteristics), are capable of contaminating soil or groundwater and are used, produced and/or released by the installation.

An assessment of each substance in Table 1 has been made using the Classification and Labelling (C&L) Inventory Database[8] and the relevant hazardous substances are detailed in Table 2.

[8] https://echa.europa.eu/information-on-chemicals/cl-inventory-database Accessed 14 October 2024

Table 2 – Assessment of Relevant Hazardous Substances

Hazardous Substance	EC: European Community number/ List no.: List number assigned by ECHA.	Chemical Abstract Service (CAS) Registry number	Substance / Mixture Classification	Relevant hazardous substance (Yes / No)
Argon Gas	231-147-0	7440-37-1	Press. Gas (Comp.)	Not classified as harmful to the environment.
Compressed Oxygen	231-956-9	7782-44-7	Flam. Gas 1 Press. Gas	Not classified as harmful to the environment.
Argoshield Universal (Argon with CO_2 and O_2 (shielding gas mixture)) CO_2 Argon & oxygen – listed above	 204-696-9	 124-38-9	 Press. Gas (Comp.)	Not classified as harmful to the environment.
Propane Gas	200-827-9	74-98-6	Flam. Gas 1 Press. Gas	Not classified as harmful to the environment.
Caus-Deta 25, containing: Sodium Hydroxide Solution (30%) Ethylenediaminetetraacetic Acid Tetrasodium Salt	 215-185-5 215-185-5	 1310-73-2 1310-73-2	Mixture classification: • Skin Corrosion. 1A • Met. Corr. 1	Not classified as harmful to the environment.
Opti-Caus Max, containing: Sodium Hydroxide Solution (Caustic) (30%)	 215-185-5	 1310-73-2	Mixture classification: • Met. Corr. 1 • Skin Corrosion. 1A • Eye Dam. 1	Not classified as harmful to the environment.
NIPAC - Pascal descaler, containing: • Nitric Acid (50%)	231-714-2	7697-37-2	Mixture classification: • Met. Corr. 1 • Skin Corrosion. 1A • Eye Dam. 1	Not classified as harmful to the environment.

Hazardous Substance	EC: European Community number/ List no.: List number assigned by ECHA.	Chemical Abstract Service (CAS) Registry number	Substance / Mixture Classification	Relevant hazardous substance (Yes / No)
• Phosphoric Acid)	231-633-2	7664-38-2	• Acute Toxicity. 3 (inhalation)	
Pressure Wash 10 - Sodium Hydroxide Solution (Traffic Film Remover) (caustic based). Containing: EDTA and salts thereof Sodium Hydroxide	200-573-9 215-185-5	64-02-8 1310-73-2	Mixture classification: • Skin Irrit. 2 • Eye Irrit. 2	Not classified as harmful to the environment.
Pulsatec 6017, containing: Sodium Chlorite (1-10%)	231-836-6	7758-19-2	Mixture classification: • Met.Corr. 1 • Acute Tox. 4 • Eye Irrit. 2	Not classified as harmful to the environment.
Pulsatec 6019, containing: Sodium Hypochlorite (10%)	231-668-3	7681-52-9	Mixture classification: • Skin Irrit. 2 • Eye Irrit. 2 • STOT SE 3	Not classified as harmful to the environment.
Ethylene glycol (Anti-freeze)	609-475-4	3775-85-7	Not classified	No
Kerosene	232-366-4	8008-20-6	• Flam. Liquid 3 • Skin Corrosion/Irritation 2 • Aspiration Hazard 1 • STOT SE 3 • Aquatic Chronic 2	Yes

Hazardous Substance	EC: European Community number/ List no.: List number assigned by ECHA.	Chemical Abstract Service (CAS) Registry number	Substance / Mixture Classification	Relevant hazardous substance (Yes / No)

Hazardous Substance	EC: European Community number/ List no.: List number assigned by ECHA.	Chemical Abstract Service (CAS) Registry number	Substance / Mixture Classification	Relevant hazardous substance (Yes / No)
Diesel (DERV & generator)	269-822-7	68334-30-5	Carc. 2	Although not classified under CLP, oil products are hazardous to controlled waters and must be handled/stored accordingly (e.g. secondary containment, spill control.
Engine & Transmission Oil - **Q8 T 2200**. Containing: Distillates (petroleum), hydrotreated heavy paraffinic Mineral oil - zinc bis[O,O-bis(2-ethylhexyl)] bis (dithiophosphate)	Mixture CLP classification: Not Classified. See Appendix D for full classification. 265-157-1 224-235-5	 64742-54-7 4259-15-8	See SDS Section 3 for component hazards present at low levels.	As above
Engine & Transmission Oil - **Q8 T 45 LS 90**. Containing: Distillates (petroleum), hydrotreated heavy Naphthenic Reaction products of bis (4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	Mixture CLP classification: Not Classified. See Appendix D for full classification. 265-155-0 931-384-6	 64742-52-5 NA	See SDS Section 3 for component hazards present at low levels.	As above

Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14, -tert-alkyl Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	939-591-3 939-460-0	1471315-74-8 1471311-26-8		
Engine & Transmission Oil - **Q8 T 904 10W-40.** Containing: Distillates (petroleum), hydrotreated heavy paraffinic Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based Mineral Oil bis(nonylphenyl)amine Phosphorodithioic acid, mixed O, O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	Mixture CLP classification: Not Classified. See Appendix D for full classification. 265-157-1 276-738-4 253-249-4 272-238-5	 64742-54-7 72623-87-1 36878-20-3 68784-31-6	See SDS Section 3 for component hazards present at low levels.	As above
Urea (AdBlue)	200-315-5	57-13-6	Not classified	Yes - Urea can lead to eutrophication of water bodies.

Hazardous Substance	EC: European Community number/ List no.: List number assigned by ECHA.	Chemical Abstract Service (CAS) Registry number	Substance / Mixture Classification	Relevant hazardous substance (Yes / No)
Sodium Hypochlorite (15%)	231-668-3	7681-52-9	Skin Corr. 1B Eye Dam. 1 Aquatic Acute 1 Aquatic Chronic 1	Yes
Aciplusfoam VF59, containing: • Phosphoric acid, 20-30% • Nitric acid 3-10%, • Alcohols, C10-16, ethoxylated (7-<15 EO) • Alkyl alcohol ethoxylate • Lauramine Oxide	 231-633-2 231-714-2 500-182-6 500-241-6 216-700-6	 7664-38-2 7697-37-2 68002-97-1 69011-36-5 1643-20-5	Mixture classification: • Skin Corr. 1B • Eye Dam. 1 • Met. Corr.1	No
Acifoam VF10, containing: • Phosphoric acid, 3—50% • Alkylbenzenesulphonic acid, • Propan-2-ol • Sodium cumenesulphonate)	 231-633-2 287-494-3 200-661-7 239-854-6	 7664-38-2 85536-14-7 67-63-0 NA	Mixture classification: • Skin Corr. 1B • Eye Dam. 1 • Met. Corr.1	No

Divodes FG Wipes VT75 - Mainly alcohols, containing: • Propan-1-ol • Propan-2-ol	200-746-9 200-661-7	71-23-8 67-63-0	Mixture classification: • Flam. Liq. 2 • STOT SE 3 • Eye Dam. 1	Not classified as harmful to the environment & wipes are in solid form and stored appropriately.

Hazardous Substance	EC: European Community number/ List no.: List number assigned by ECHA.	Chemical Abstract Service (CAS) Registry number	Substance / Mixture Classification	Relevant hazardous substance (Yes / No)
Hypofoam VF6, containing: • Sodium hydroxide: 3–10% • Sodium hypochlorite 3–10% • Lauryldimethylamine Oxide, 3–10%	 215-185-5 231-668-3 931-292-6	 1310-73-2 7681-52-9 308062-28-4	Mixture classification: • Skin Corr. 1A • Eye Dam. 1 • Aquatic Acute 1 • Aquatic Chronic 2 • Met. Corr.1	Yes
Diverflow Direct-N (Sodium hydroxide 20-30%)	215-185-5	1310-73-2	Mixture classification: • Skin Corr. 1A • Eye Dam. 1 • Met. Corr.1	Not classified as harmful to the environment.
DI Microwet-N Alkyl alcohol ethoxylate (Trideceth 7–10)	NA	69011-36-5	Mixture classification: • Acute Tox. 4 • Eye Irrit. 2	Not classified as harmful to the environment.
Divosan Sanibright VS59 • Sodium Hydroxide • Lauramine Oxide • Laurylamine Dipropylenediamine • Tetrasodium EDTA	 215-185-5 216-700-6 219-145-8 200-573-9	 1310-73-2 1643-20-5 2372-82-9 64-02-8	Mixture classification: • Skin Corr. 1A • Eye Dam. 1 • Aquatic Chronic 3 • Met. Corr.1	Yes

Hazardous Substance	EC: European Community number/ List no.: List number assigned by ECHA.	Chemical Abstract Service (CAS) Registry number	Substance / Mixture Classification	Relevant hazardous substance (Yes / No)
Divos C1 VM60, containing: • Sodium Hydroxide, 7-13%, • potassium hydroxide 1-5% • Tetrasodium EDTA • Sodium polyacrylate • D-Glucopyranose, oligomers, decyl octyl glycosides	215-185-5 215-181-3 200-573-9 692-137-3 500-220-1	1310-73-2 1310-58-3 64-02-8 9003-04-7 68515-73-1	Mixture classification: • Skin Corr. 1A • Eye Dam. 1 • STOT SE 2 • Met. Corr.1	No
DI Divosan Forte VT6, containing: • Hydrogen peroxide: 20–30 % • Acetic acid: 10–20 % • Peracetic acid: 10–20 %	231-765-0 200-580-7 201-186-8	7722-84-1 64-19-7 79-21-0	Mixture classification: • Org. Perox. F • Skin Corr. 1A • Acute Tox. 4 (Oral, dermal & inhalation) • STOT SE 3 • Eye Dam. 1 • Aquatic Chronic 1 • Met. Corr.1	Yes
DI Divos 80-2 VM1, containing: • Propylene glycol: 30-50% • Alkyldimethyl betaine: 10-20% • Subtilisin: 0.1-1%	200-338-0 931-700-2 232-752-2	57-55-6 66455-29-6 9014-01-1	Mixture classification: Eye Irrit. 2,	No

Phenolphthalein (Phenolphthalein Solution)	201-004-7	77-09-8	Carc. 1B Muta. 2 Repr. 2	Not classified as harmful to the environment.
Sodium Hydroxide	215-185-5	1310-73-2	Skin Corr. 1A	Not classified as harmful to the environment.
Proto Solve (>75% by weight Sulphamic acid) Sulphamic acid	226-218-8	5329-14-6	Sulphamic acid classification: • Skin Irrit. 2 • Eye Irrit. 2 • Aquatic Chronic 3	Yes -however this is in a solid form and kept dry so not considered further in this assessment.
Pulsatec 203 Sodium Bisulphite (ECHA name Sodium hydrogensulfite)	231-548-0	7631-90-5	Mixture has no classification under CLP.	No
Pulsatec 238 - polyphosphate and polymer blend	NA -Not classified as hazardous under CLP. SDS states no hazardous ingredients above disclosure threshold.	Na	NA	No
Pulsatec 230 Sodium Hydroxide	215-185-5	1310-73-2	Mixture classification: • Met. Corr.1 • Skin Corr. 1A	Not classified as harmful to the environment.
Pulsatec 203 Sodium hydrogensulfite)	231-548-0	7631-90-5	Mixture has no CLP classification.	No
Pure Dried Vacuum (PDV) Salt Sodium Chloride	231-598-3	7647-14-5	NA -No CLP classification.	No
Hydrogranular Salt	231-598-3	7647-14-5	NA -No CLP classification.	No

JLA Ultra Biological , containing: Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide Alcohols, C13-15, branched and linear, ethoxylated Treated amorphous silica Ethanediol Subtilisin Potassium Hydroxide	 932-051-8 931-954-4 843-553-0 203-473-3 232-752-2 215-181-3	 NA 157627-86-6 2035064-87-8 107-21-1 9014-01-1 1310-58-3	Mixture classification: • Eye Dam.1	No
Ambersil Food Grease FG, containing: Hydrocarbons C3-4-rich, petroleum distillate Petroleumgas (1,3-butadiene < 0.1%) Cyclopentane Hydrocarbons, C6, isoalkanes	 270-990-9 206-016-6 931-254-9	 68512-91-4 287-92-3 NA	Mixture classification: • Aerosol 1 • Aquatic Chronic 3	Yes
Ambersil Penetrating Oil, containing: Hydrocarbons C3-4-rich, petroleum distillate Petroleumgas (1,3-butadiene < 0.1%) Hydrocarbons, C11-13, n-alkanes, isoalkanes, cyclics, <2% aromatics White Mineral Oil (petroleum)	 270-990-9 920-901-0 232-455-8	 68512-91-4 NA 8042-47-5	Mixture classification: • Aerosol 1	No

5.4 5.4 Stage 3

Activity - For each relevant hazardous substance brought forward from Stage 2, identify the actual possibility for soil or groundwater contamination at the site of the installation, including the probability of releases and their consequences, and taking particular account of:

- *the quantities of each hazardous substance or groups of similar hazardous substances concerned;*
- *how and where hazardous substances are stored, used and to be transported around the installation;*
- *where they pose a risk to be released;*

In case of existing installations also the measures that have been adopted to ensure that it is impossible in practice that contamination of soil or groundwater takes place.

Objective - To identify which of the relevant hazardous substances represent a potential pollution risk at the site based on the likelihood of releases of such substances occurring. For these substances, information must be included in the baseline report.

Table 3 below lists the relevant hazardous substances identified through Stage 2 and provides a risk assessment with regard to the potential for causing soil or groundwater contamination on the site.

Table 3- Soil and Groundwater Risk Assessment with Respect to Relevant Hazardous Substances

Relevant Hazardous Substance	Classification	Form	Maximum stored at any one time	Potential risk to soil or groundwater	Use and storage arrangements	Further control measures	Residual risk to soil or groundwater
Kerosene	• Flam. Liquid 3 • Skin Corrosion/Irritation 2 • Aspiration Hazard 1 • STOT SE 3 • Aquatic Chronic 2	Liquid	50,000L	Yes	Kerosene is stored within 2 double skinned steel tanks – used for boiler fuel.	• Provision of spill kits • Training of staff on spillage procedures • Daily visual check for spillages or damage • Procedure in place to contain spillages within the surface water drainage system • Stored within bunded tanks	Low
Diesel (DERV & generator)	• Carc. 2	Liquid	20,000L	Yes	Stored within in a Harlequin EVO bunded tank. Used for as vehicle fuel.	As above	Low
Engine & Transmission Oils (3 varieties used all supplied by Q8 oils; **Q8 T 904 10W-40, Q8 T 2200 and Q8 T 45 LS 90**).	Mixture CLP classification: Not Classified. See Appendix D for full classification. See SDS Section 3 for component hazards present at low levels.	Liquid	2,000L	Yes	Stored within IBCs on impermeable surfacing within the Workshop.	• Provision of spill kits • Training of staff on spillage procedures • Daily visual check for spillages or damage • Procedure in place to contain spillages within the surface water drainage system Storage within building	Low
Urea (AdBlue)	No CLP classification	Liquid	1,000L	Yes	IBCs (adjacent to DERV tank) Used for vehicle maintenance.	• Provision of spill kits • Training of staff on spillage procedures	Low

Relevant Hazardous Substance	Classification	Form	Maximum stored at any one time	Potential risk to soil or groundwater	Use and storage arrangements	Further control measures	Residual risk to soil or groundwater
						• Daily visual check for spillages or damage • Procedure in place to contain spillages within the surface water drainage system • Storage on impermeable surfacing	
Sodium Hypochlorite (15%)	• Skin Corr. 1B • Eye Dam. 1 • Aquatic Acute 1 • Aquatic Chronic 1	Liquid	2,500kg	Yes	Storage within IBCs on impermeable surfacing. Used within cleaning in place systems.	• Provision of spill kits • Training of staff on spillage procedures • Daily visual check for spillages or damage • Procedure in place to contain spillages within the surface water drainage system • Storage on impermeable surfacing	Low
Hypofoam VF6	• Skin Corr. 1A • Eye Dam. 1 • Aquatic Acute 1 • Aquatic Chronic 2 • Met. Corr.1	Liquid	240L	Yes	Stored within 20L drums within chemical cage and used for cleaning.	As above	Low
Divosan Sanibright VS59	• Skin Corr. 1A • Eye Dam. 1 • Aquatic Chronic 3 • Met. Corr.1	Liquid	240L	Y es	As above.	As above	Low

Relevant Hazardous Substance	Classification	Form	Maximum stored at any one time	Potential risk to soil or groundwater	Use and storage arrangements	Further control measures	Residual risk to soil or groundwater
DI Divosan Forte VT6	• Org. Perox. F • Skin Corr. 1A • Acute Tox. 4 (Oral, dermal & inhalation) • STOT SE 3 • Eye Dam. 1 • Aquatic Chronic 1 • Met. Corr.1	Liquid	450Kg	Yes	As above.	As above	Low
Ambersil Food Grease FG	• Aerosol 1 • Aquatic Chronic 3	Liquid	1600ml	Yes	Aerosol spray can kept within Site Office. Used as food-safe lubricant.	• Provision of spill kits • Training of staff on spillage procedures • Daily visual check for spillages or damage • Procedure in place to contain spillages within the surface water drainage system • Very small quantity kept within building.	Low

5.5 5.5 Conclusion of Baseline Report Assessment

The site hydrogeology is vulnerable to pollutants released at ground level across the entire site for the following reasons:

- Leaching classification: *High*. Although the infiltration index is < 40%, the dilution (> 550 mm/yr) indicates high annual recharge/percolation, which drives a high leaching class.
- The bedrock geology is the Holsworthy Group (mudstone, siltstone and sandstone). This comprises of interbedded fine-grained rocks with low matrix (intergranular) permeability, where flow pathways are primarily along fractures and bedding planes.
- The Holsworthy Group bedrock geology beneath the site forms a Secondary A bedrock aquifer capable of supporting local supplies and is assessed as high vulnerability.
- There are no superficial deposits on Site.

However, it is apparent that there is no significant possibility for contamination of soil or groundwater due to:

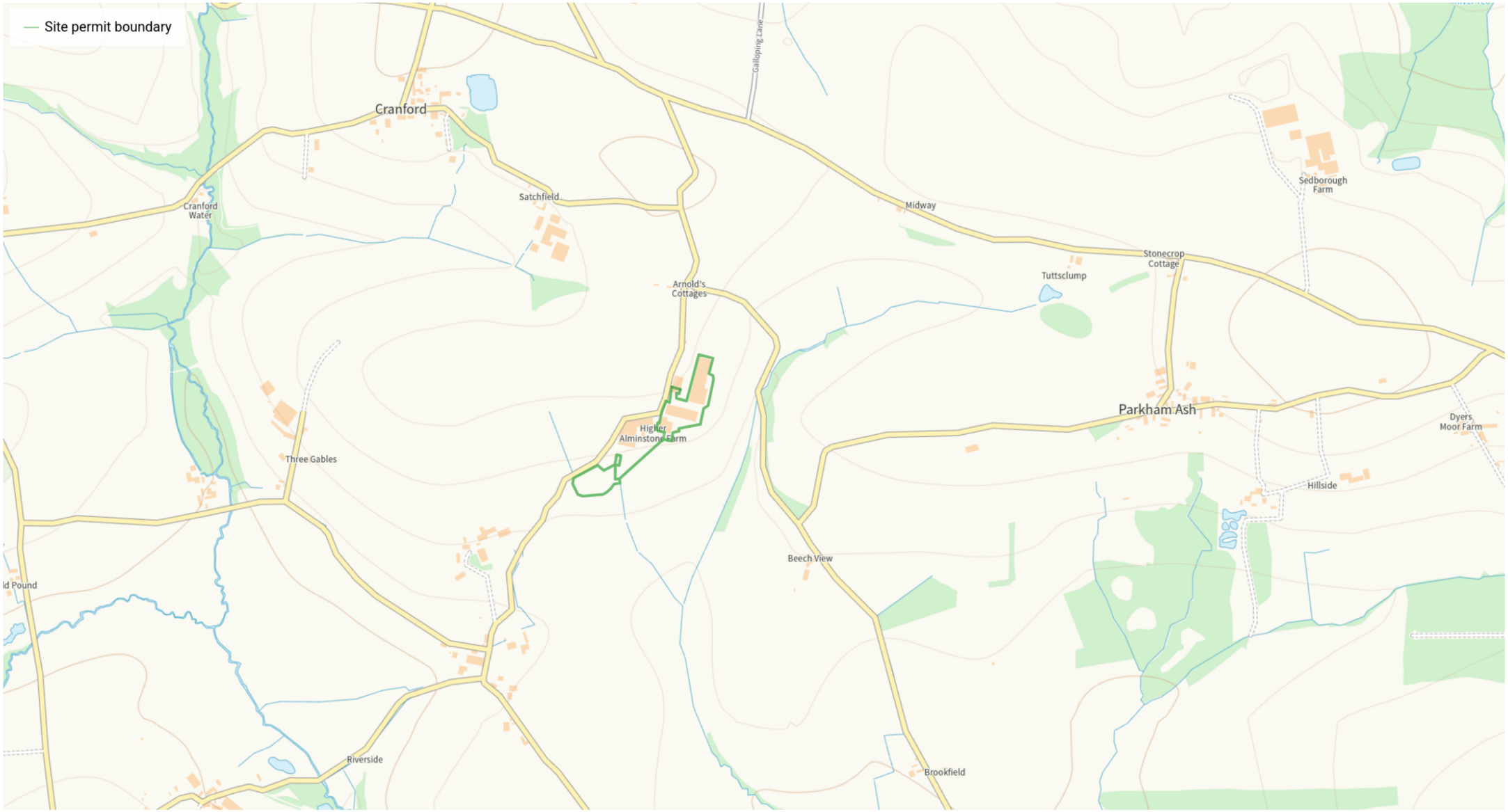
- The relatively low quantities of the hazardous substances used and produced at the installation;
- The robust site engineering and drainage design; and
- The management control measures in place.

Therefore, it is deemed that a baseline report is not required for this installation.

Figures

Earthcare TECHNICAL

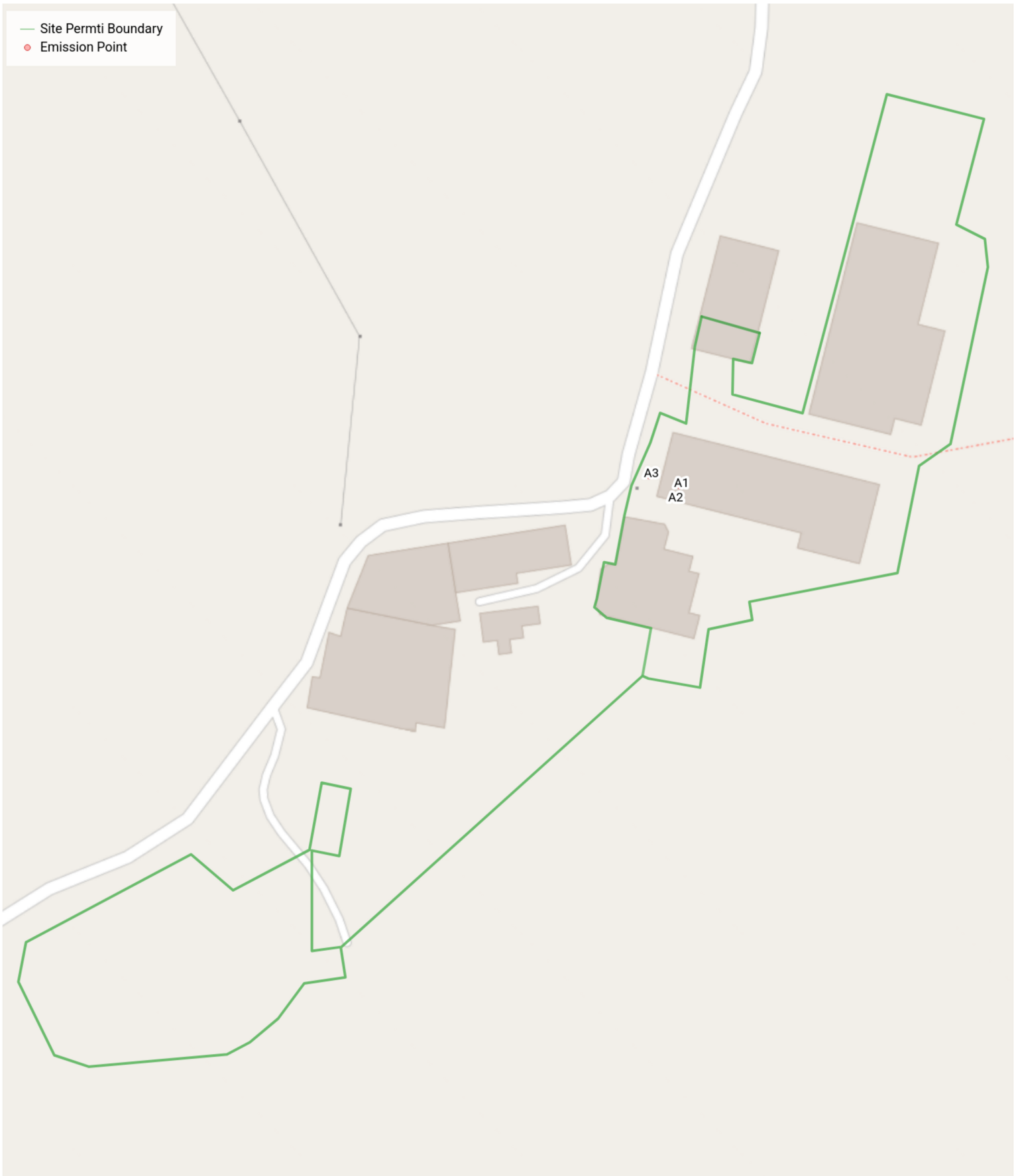
ETL928_2026_EPR01 Site Location Plan



500 m
Scale 1:13000 (at A4)

N

ETL928-2026_EPR02
Permit Boundary and Emissions Point plan

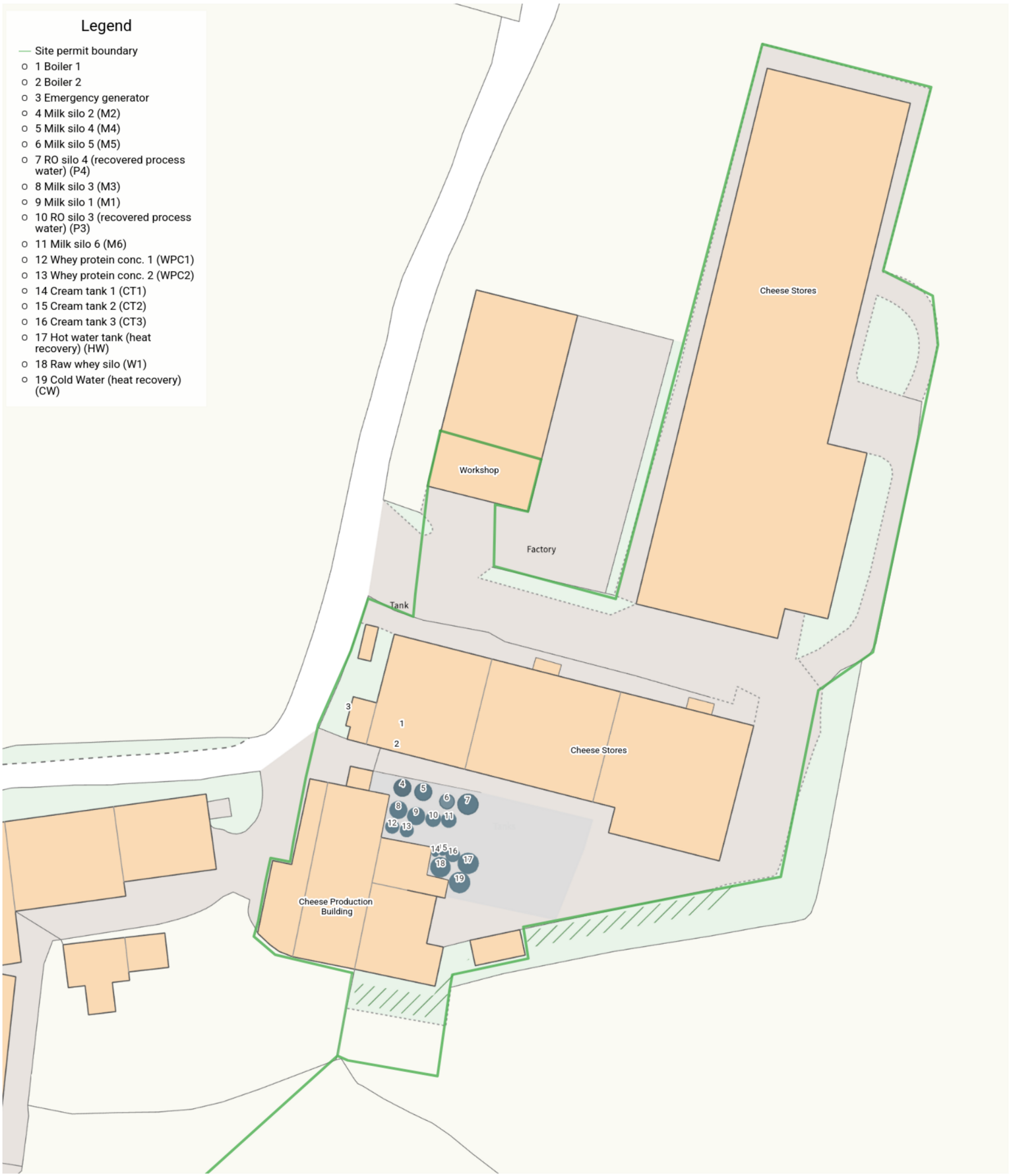


Produced on Land App, Feb 27, 2026.

50 m
Scale 1:1800 (at A4)

N

ETL928_2026_EPR03
Site Layout Plan



20 m
Scale 1:1030 (at A4)

N

Earthcare TECHNICAL

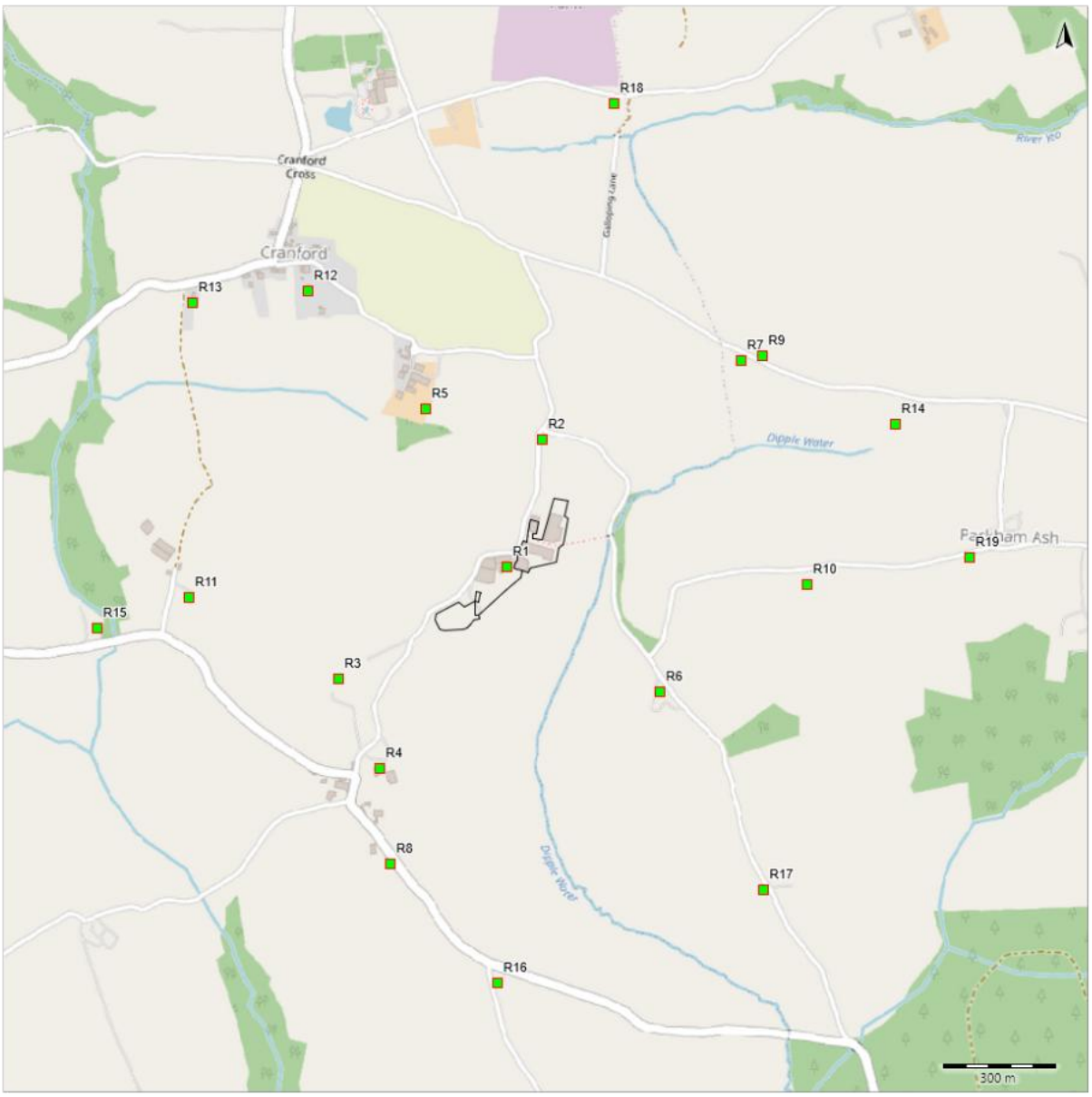
ETL928_2026_EPR03
Site Layout Plan

20 m
Scale 1:1030 (at A4)

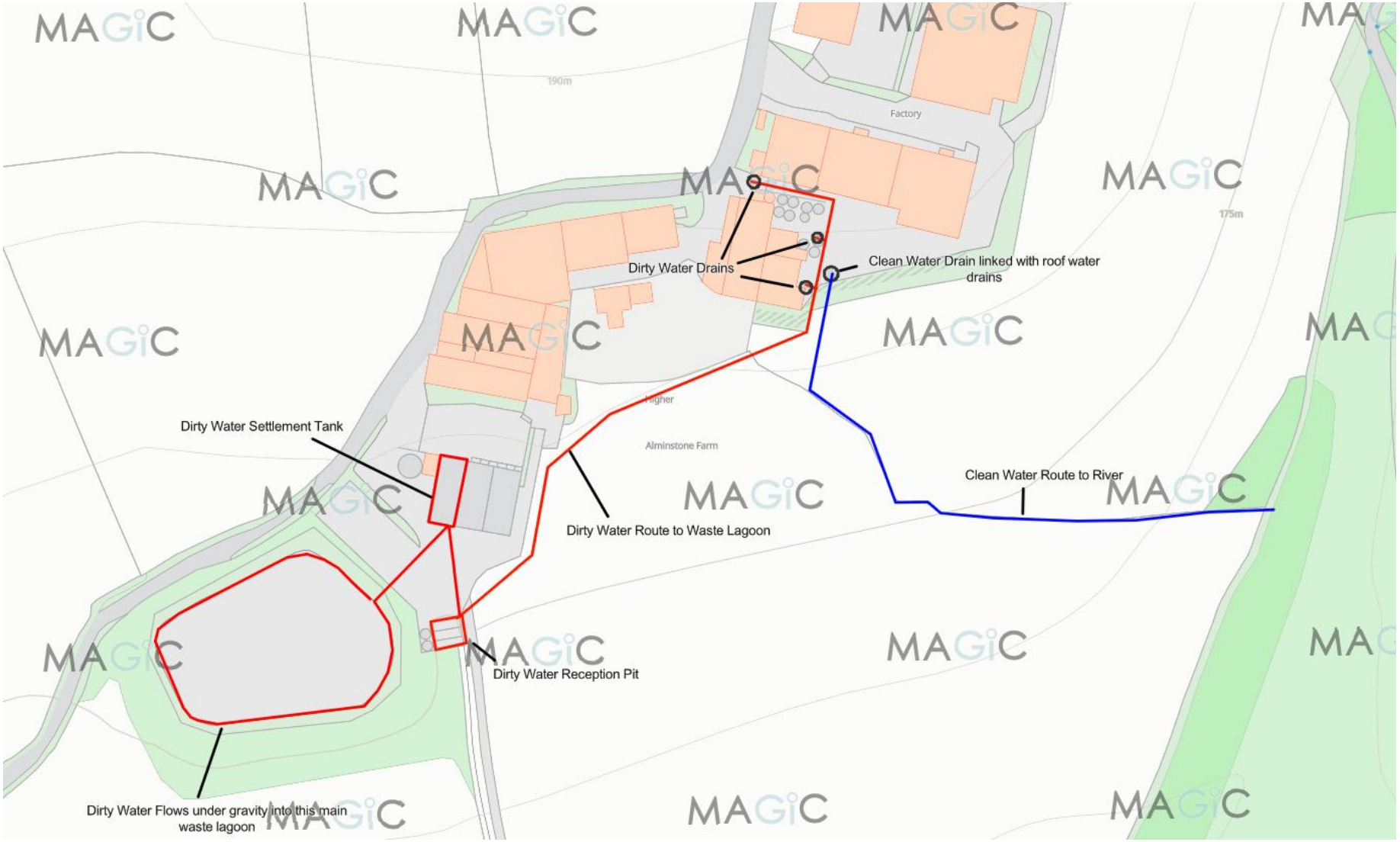
N

EPR928_2026_EPR04

Human Receptor Plan



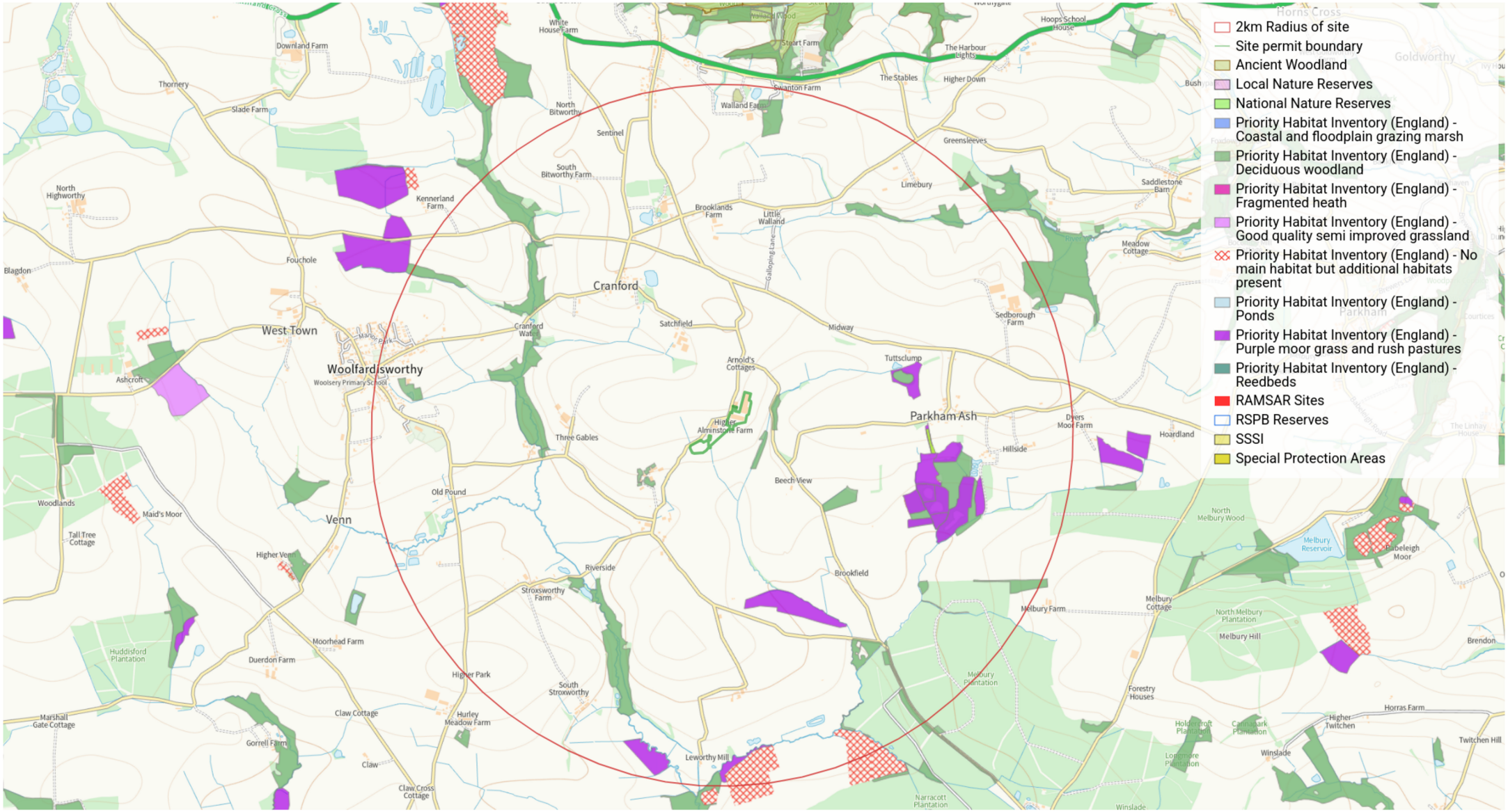
Site Drainage Plan (Outside Drains and Water Overview schematic)



Parkham Farm cheese Factory -Site Drainage Plan (Outside Drains and Water Overview schematic)

Earthcare TECHNICAL

ETL928-2026_EPR05
Ecological Receptors Plan



Produced on Land App, Feb 27, 2026.

500 m

Scale 1:30000 (at A4)

N

Appendix A: Enviro Geo Insight Report (August 2025)

Groundsure
LOCATION INTELLIGENCE

Enviro
Insight

PARKHAM FARMS, HIGHER ALMINSTONE FARM, ROAD FROM CAPTAIN BROOKS CROSS TO ALMINSTONE CROSS, WOOLSERY, DEVON, EX39 5PX

Order Details

Date: 07/08/2025

Your ref: ETL928 Parkham Farms Ltd

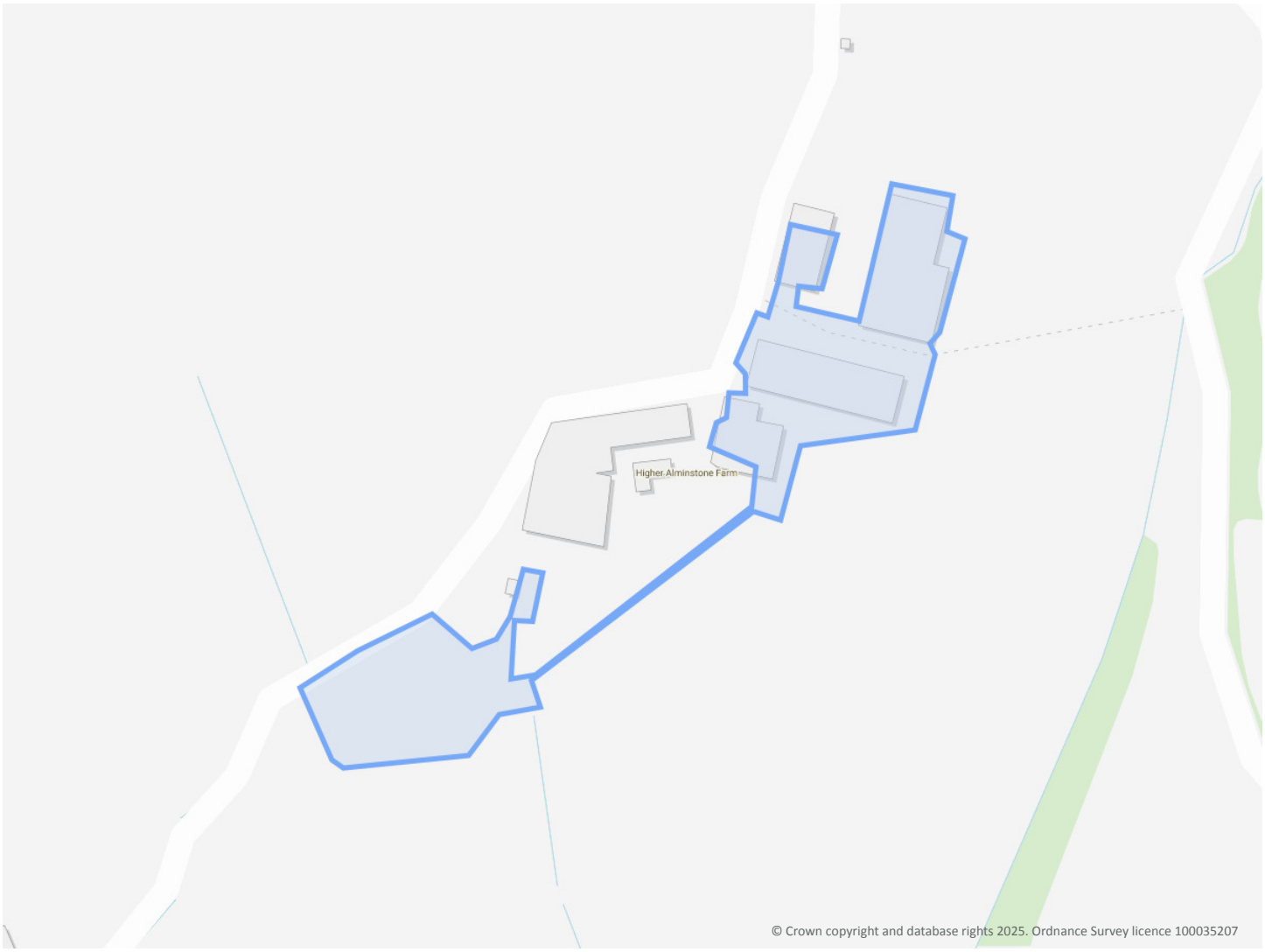
Our Ref: GS-ZUA-QGB-JK6-Z3X

Site Details

Location: 235195 120713

Area: 1.79 ha

Authority: Torridge District Council ↗



Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
12 >	1.1 >	Historical industrial land uses >	0	0	0	1	-
13	1.2	Historical tanks	0	0	0	0	-
13	1.3	Historical energy features	0	0	0	0	-
13	1.4	Historical petrol stations	0	0	0	0	-
13	1.5	Historical garages	0	0	0	0	-
14	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	2.1 >	Historical industrial land uses >	0	0	0	1	-
16	2.2	Historical tanks	0	0	0	0	-
16	2.3	Historical energy features	0	0	0	0	-
16	2.4	Historical petrol stations	0	0	0	0	-
16	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
17	3.1	Active or recent landfill	0	0	0	0	-
17	3.2	Historical landfill (BGS records)	0	0	0	0	-
18	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
18	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
18	3.5	Historical waste sites	0	0	0	0	-
18	3.6	Licensed waste sites	0	0	0	0	-
18 >	3.7 >	Waste exemptions >	0	5	0	4	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
20 >	4.1 >	Recent industrial land uses >	3	0	1	-	-
21 >	4.2 >	National Geographic Database (NGD) - Current or recent tanks >	5	2	0	-	-
21	4.3	Current or recent petrol stations	0	0	0	0	-
21	4.4	Electricity cables	0	0	0	0	-
22	4.5	Gas pipelines	0	0	0	0	-

22	4.6	Sites determined as Contaminated Land	0	0	0	0	-
22	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
22	4.8	Regulated explosive sites	0	0	0	0	-
22	4.9	Hazardous substance storage/usage	0	0	0	0	-
23	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
23	4.11	Licensed industrial activities (Part A(1))	0	0	0	0	-
23	4.12	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
23	4.13	Radioactive Substance Authorisations	0	0	0	0	-
23 >	**4.14 >**	**Licensed Discharges to controlled waters >**	0	0	1	1	-
24	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
24	4.16	Pollutant release to public sewer	0	0	0	0	-
24	4.17	List 1 Dangerous Substances	0	0	0	0	-
25	4.18	List 2 Dangerous Substances	0	0	0	0	-
25 >	**4.19 >**	**Pollution Incidents (EA/NRW) >**	1	2	0	3	-
26	4.20	Pollution inventory substances	0	0	0	0	-
26	4.21	Pollution inventory waste transfers	0	0	0	0	-
26	4.22	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Geology (basic) >**					
27	5.1	Superficial geology (625k)	None (within 500m)				
27 >	**5.2 >**	**Bedrock geology (625k) >**	Identified (within 500m)				
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
28	6.1	Superficial aquifer	None (within 500m)				
29 >	**6.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
31 >	**6.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
32	6.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
32	6.5	Groundwater vulnerability- local information	None (within 0m)				
33 >	**6.6 >**	**Groundwater abstractions >**	2	1	0	0	0
34	6.7	Surface water abstractions	0	0	0	0	0
35	6.8	Potable abstractions	0	0	0	0	0

35	6.9	Source Protection Zones	0	0	0	0	-
35	6.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
36 >	**7.1 >**	**Water Network (OS MasterMap) >**	0	2	16	-	-
38 >	**7.2 >**	**Surface water features >**	0	2	8	-	-
38 >	**7.3 >**	**WFD Surface water body catchments >**	1	-	-	-	-
39 >	**7.4 >**	**WFD Surface water bodies >**	0	0	1	-	-
39 >	**7.5 >**	**WFD Groundwater bodies >**	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
40	8.1	Risk of flooding from rivers and the sea	None (within 50m)				
40	8.2	Historical Flood Events	0	0	0	-	-
40	8.3	Flood Defences	0	0	0	-	-
41	8.4	Areas Benefiting from Flood Defences	0	0	0	-	-
41	8.5	Flood Storage Areas	0	0	0	-	-
42	8.6	Flood Zone 2	None (within 50m)				
42	8.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
43	9.1	Surface water flooding	Negligible (within 50m)				
Page	Section	**Groundwater flooding >**					
44 >	**10.1 >**	**Groundwater flooding >**	Negligible (within 50m)				
Page	Section	**Environmental designations >**	On site	0-50m	50-250m	250-500m	500-2000m
45	11.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
46	11.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
46	11.3	Special Areas of Conservation (SAC)	0	0	0	0	0
46	11.4	Special Protection Areas (SPA)	0	0	0	0	0
46	11.5	National Nature Reserves (NNR)	0	0	0	0	0
47	11.6	Local Nature Reserves (LNR)	0	0	0	0	0
47 >	**11.7 >**	**Designated Ancient Woodland >**	0	0	0	0	1
47 >	**11.8 >**	**Biosphere Reserves >**	1	0	0	0	0

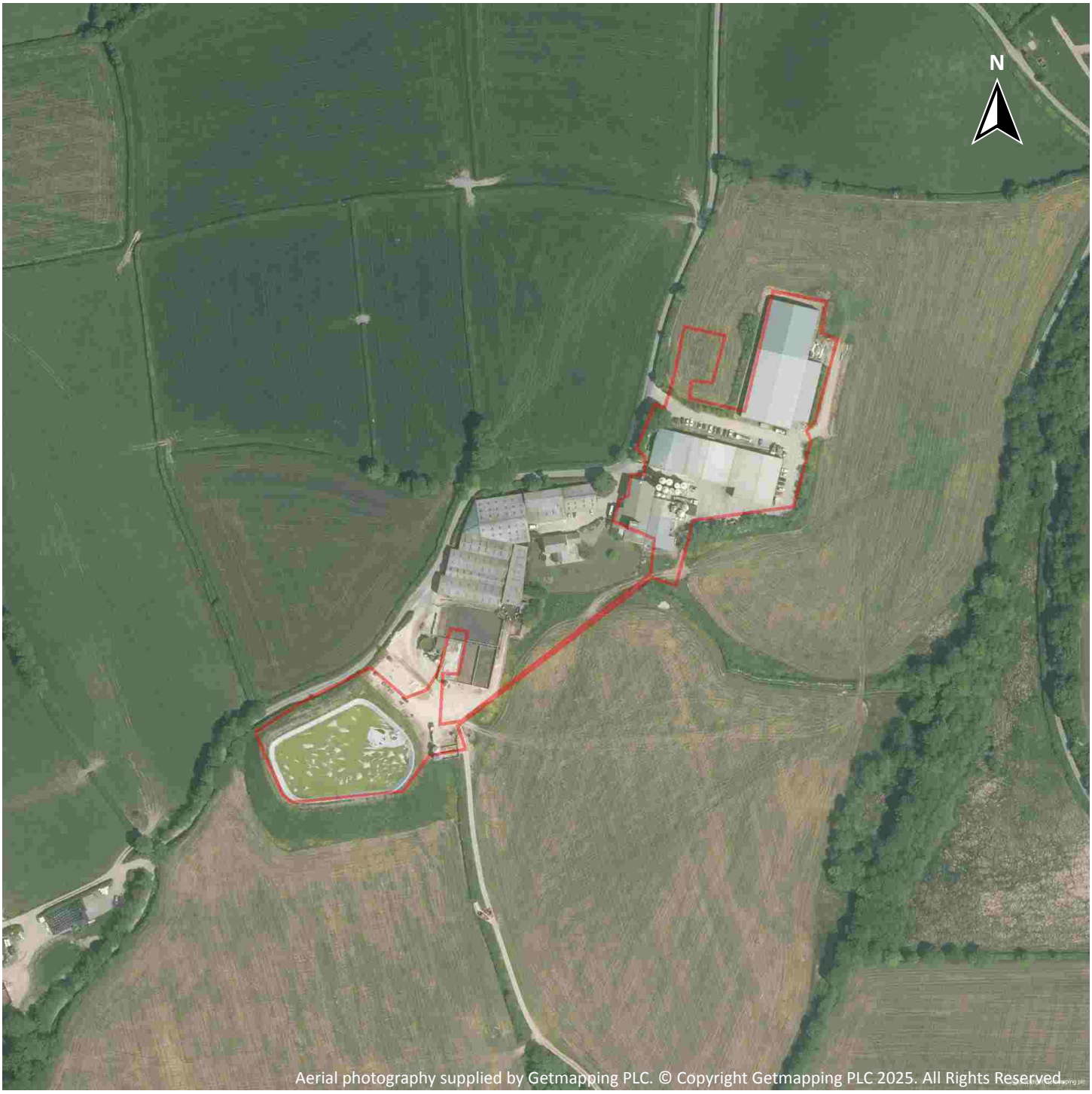
48	11.9	Forest Parks	0	0	0	0	0
48	11.10	Marine Conservation Zones	0	0	0	0	0
48	11.11	Green Belt	0	0	0	0	0
48	11.12	Proposed Ramsar sites	0	0	0	0	0
48	11.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
49	11.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
49	11.15	Nitrate Sensitive Areas	0	0	0	0	0
49	11.16	Nitrate Vulnerable Zones	0	0	0	0	0
50 >	**11.17 >**	**SSSI Impact Risk Zones >**	2	-	-	-	-
51	11.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
52	12.1	World Heritage Sites	0	0	0	-	-
52	12.2	Area of Outstanding Natural Beauty	0	0	0	-	-
52	12.3	National Parks	0	0	0	-	-
52	12.4	Listed Buildings	0	0	0	-	-
53	12.5	Conservation Areas	0	0	0	-	-
53	12.6	Scheduled Ancient Monuments	0	0	0	-	-
53	12.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
54 >	**13.1 >**	**Agricultural Land Classification >**	Grade 4 (within 250m)				
55	13.2	Open Access Land	0	0	0	-	-
55	13.3	Tree Felling Licences	0	0	0	-	-
55 >	**13.4 >**	**Environmental Stewardship Schemes >**	0	0	1	-	-
56 >	**13.5 >**	**Countryside Stewardship Schemes >**	0	0	1	-	-
Page	Section	**Habitat designations >**	On site	0-50m	50-250m	250-500m	500-2000m
57 >	**14.1 >**	**Priority Habitat Inventory >**	0	0	8	-	-
58 >	**14.2 >**	**Habitat Networks >**	1	0	1	-	-
58	14.3	Open Mosaic Habitat	0	0	0	-	-
58	14.4	Limestone Pavement Orders	0	0	0	-	-

Recent aerial photograph

Capture Date: 24/04/2021

Site Area: 1.79ha

Recent site history - 2018 aerial photograph



Capture Date: 23/05/2018

Site Area: 1.79ha

Recent site history - 2014 aerial photograph

Capture Date: 24/06/2014

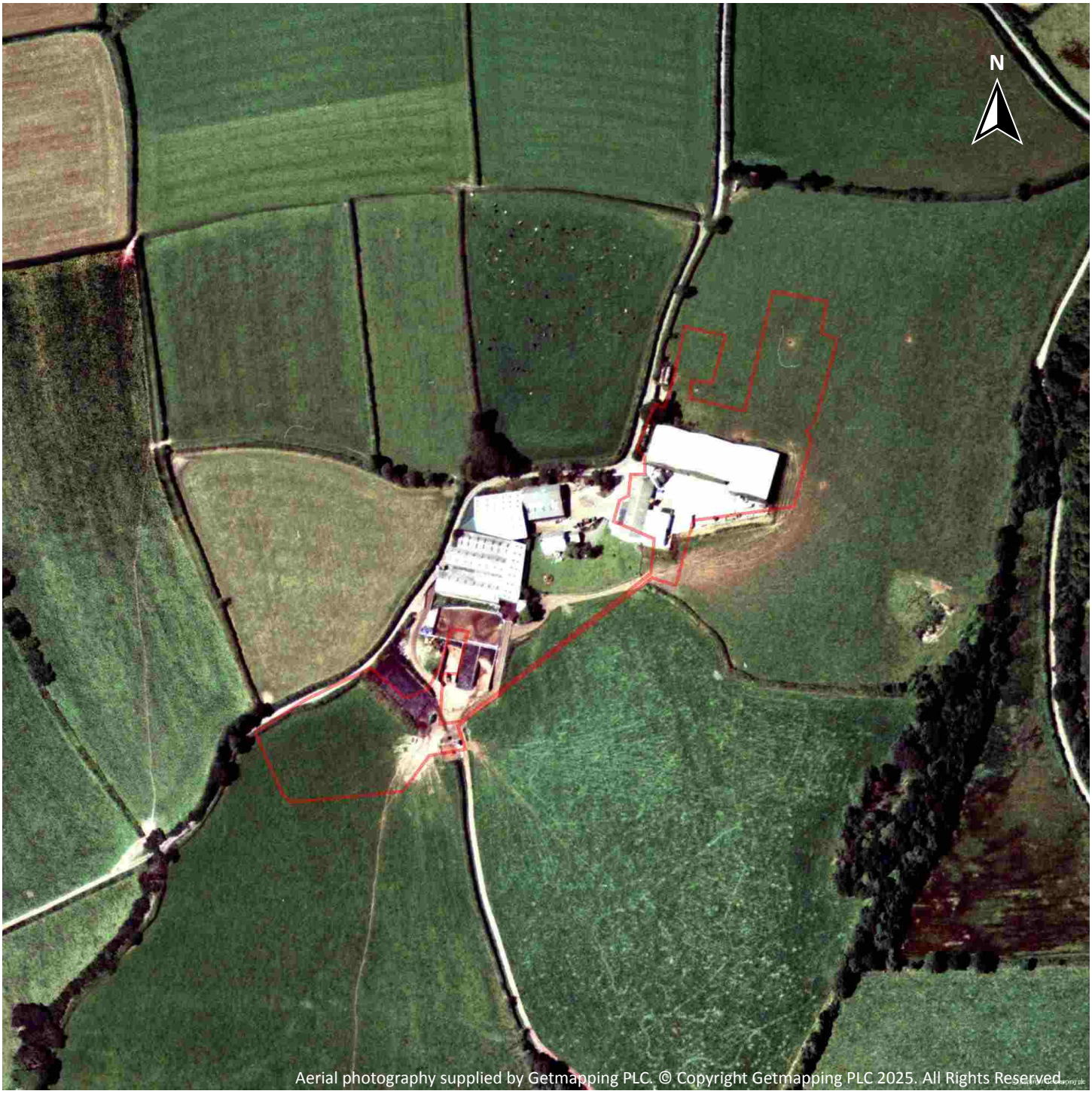
Site Area: 1.79ha

Recent site history - 2006 aerial photograph

Capture Date: 01/06/2006

Site Area: 1.79ha

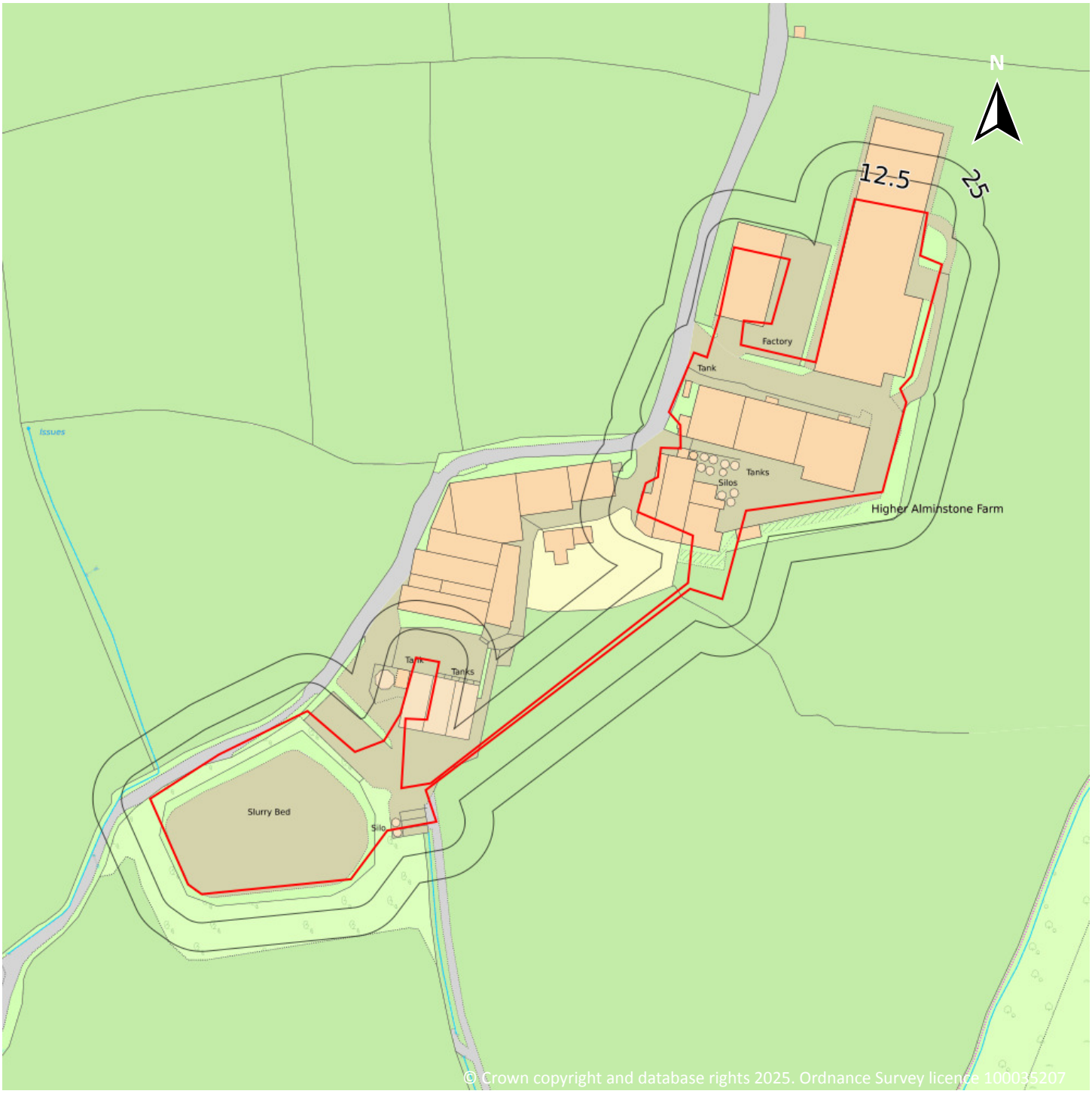
Recent site history - 1999 aerial photograph



Capture Date: 11/07/1999

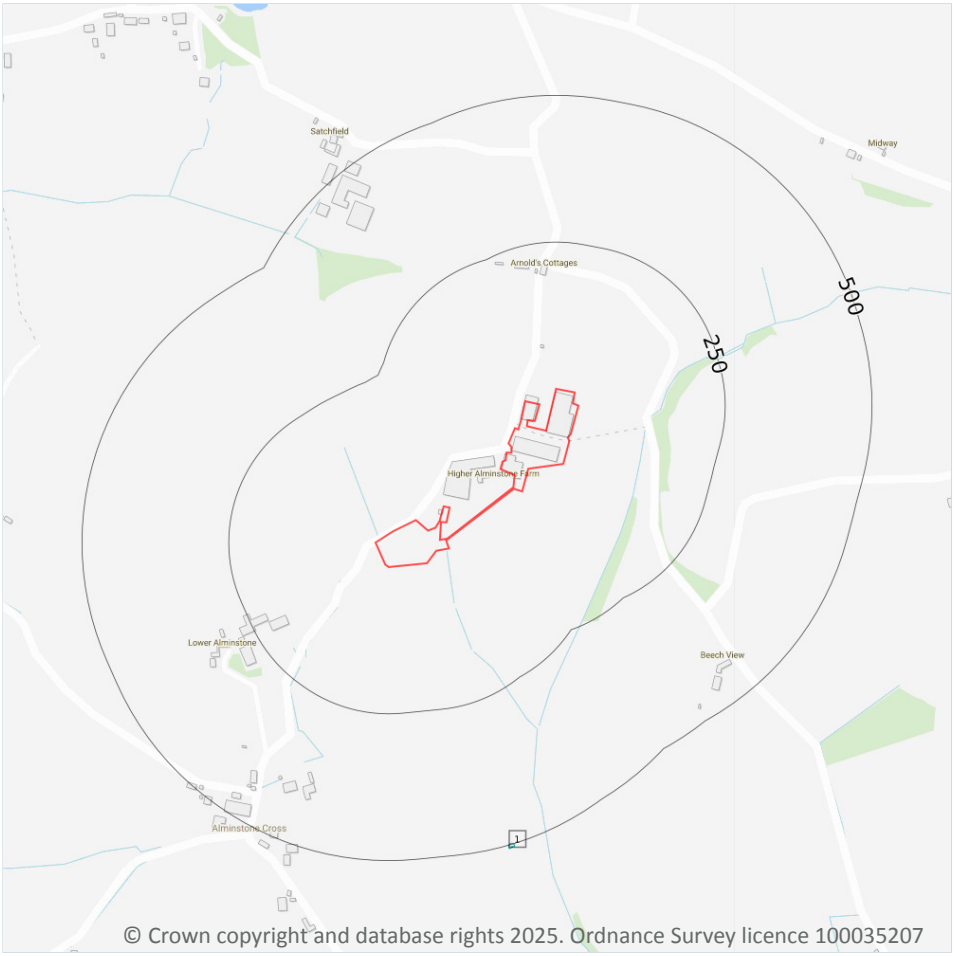
Site Area: 1.79ha

OS MasterMap site plan



Site Area: 1.79ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

1.1 Historical industrial land uses

Records within 500m	1

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 12 >**

ID	Location	Land use	Dates present	Group ID
1	498m S	Unspecified Old Quarry	1884	338133

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

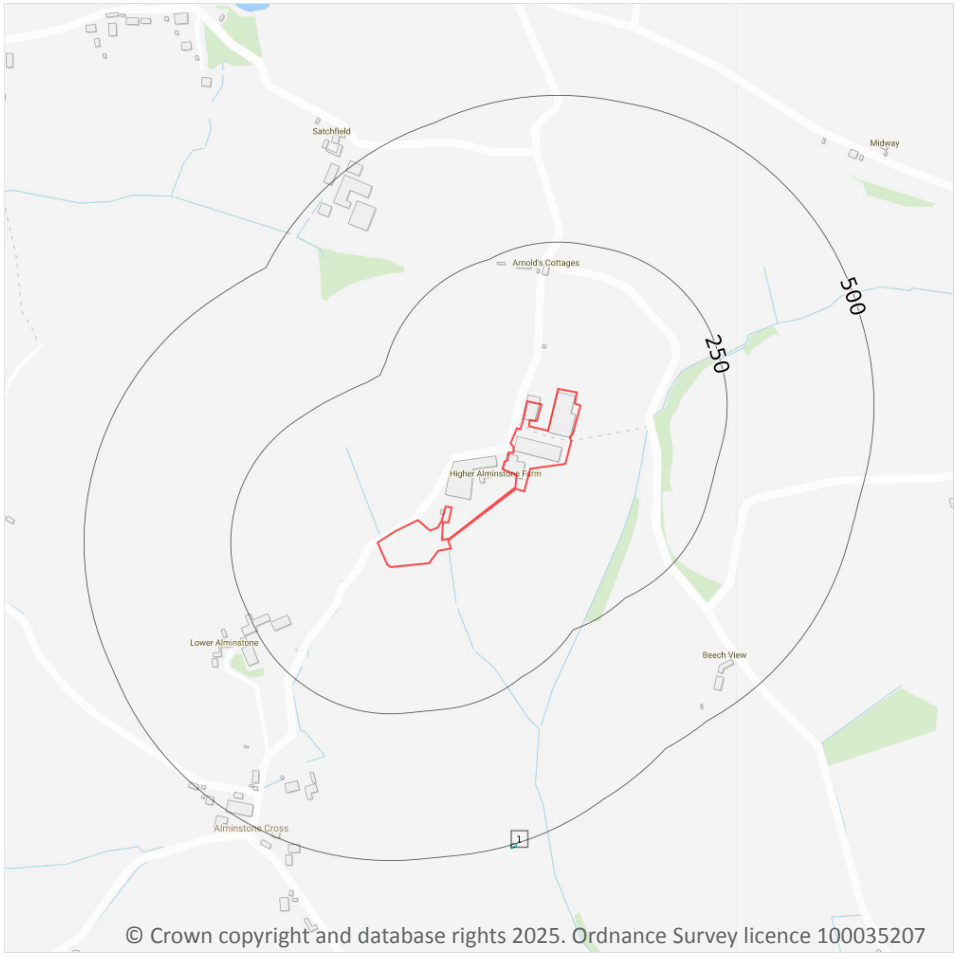
1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

2.1 Historical industrial land uses

Records within 500m	1

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 15 >**

ID	Location	Land Use	Date	Group ID
1	498m S	Unspecified Old Quarry	1884	338133

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

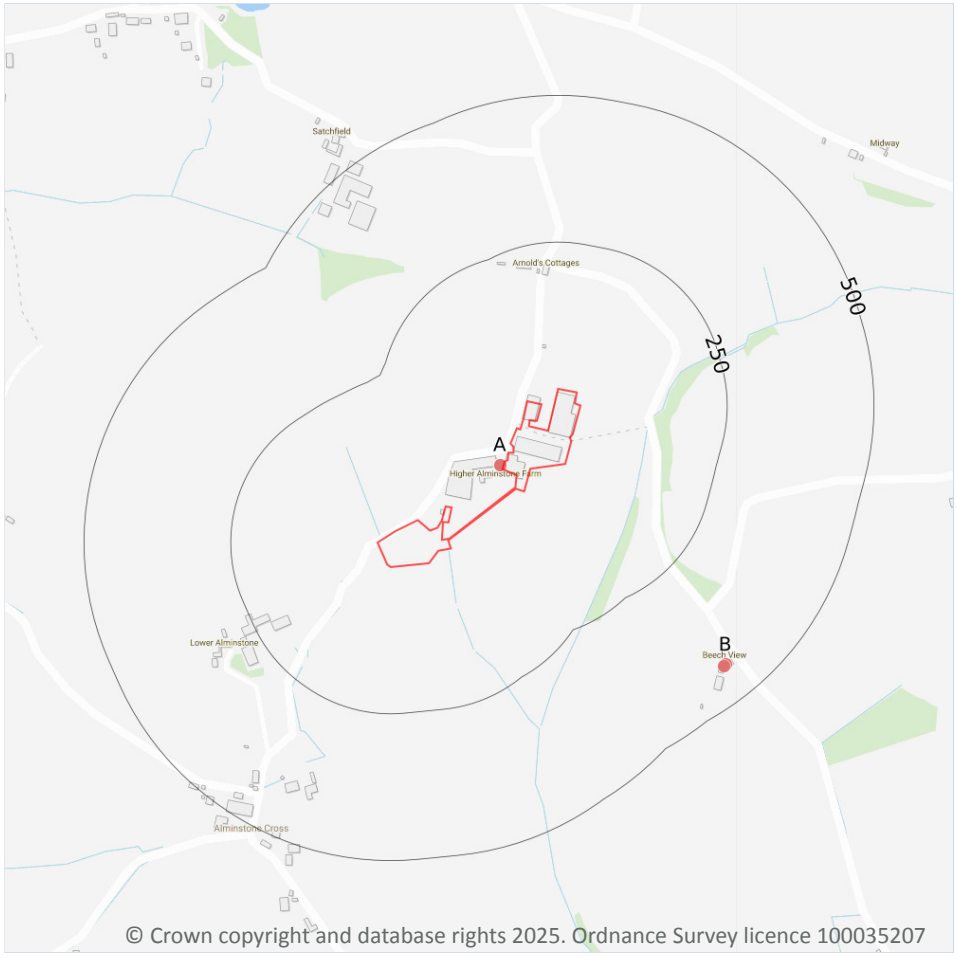
2.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m	0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m	0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m	0

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m	9

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 17 >**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	7m W	Higher Alminstone Farm Bideford Devon Ex39 5px	EPR/NF0634WV/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction

ID	Location	Site	Reference	Category	Sub-Category	Description
A	7m W	Higher Alminstone Farm Bideford Devon Ex39 5px	EPR/NF0634WV/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading of plant matter to confer benefit
A	7m W	Higher Alminstone Farm Bideford Devon Ex39 5px	EPR/NF0634WV/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste for a specified purpose
A	7m W	Higher Alminstone Farm Bideford Devon Ex39 5px	EPR/NF0634WV/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
A	7m W	Higher Alminstone Farm Bideford Devon Ex39 5px	EPR/NF0634WV/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on agricultural land to confer benefit
B	437m SE	Beechview, Woolsery, Bideford, Ex39 5pu	WEX108611	Storing waste exemption	On a farm	Storage of waste in a secure place
B	437m SE	Beechview, Woolsery, Bideford, Ex39 5pu	WEX108611	Using waste exemption	On a farm	Use of waste in construction
B	438m SE	Beechview Bideford Devon Ex39 5pu	EPR/QE5140XX/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in a secure place
B	438m SE	Beechview Bideford Devon Ex39 5pu	EPR/QE5140XX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use

Site Outline

Search buffers in metres (m)

Recent industrial land uses

NGD current or recent tanks

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	4

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 20 >**

ID	Location	Company	Address	Activity	Category
1	On site	Factory	Devon, EX39	Unspecified Works Or Factories	Industrial Features
2	On site	Slurry Bed	Devon, EX39	Waste Storage, Processing and Disposal	Infrastructure and Facilities
A	On site	Parkham Farms Ltd	Higher Alminstone Farm, Woolsery, Devon, EX39 5PX	Dairy Products	Foodstuffs

ID	Location	Company	Address	Activity	Category
4	243m SW	Slurry Bed	Devon, EX39	Waste Storage, Processing and Disposal	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m	7

Current or recent tanks identified from the Ordnance Survey NGD.

Features are displayed on the Current industrial land use map on **page 20 >**

ID	Location	Tank description	Activity	Date first identified
A	**On site**	**Roofed Storage Tank**	**Commercial Activity: Distribution Or Storage**	**14/07/2006**
A	**On site**	**Roofed Storage Tank**	**Commercial Activity: Distribution Or Storage**	**11/06/2003**
B	**On site**	**Open Storage Tank**	**Commercial Activity: Distribution Or Storage**	**09/04/2015**
B	**On site**	**Open Storage Tank**	**Commercial Activity: Distribution Or Storage**	**09/04/2015**
B	**On site**	**Open Storage Tank**	**Commercial Activity: Distribution Or Storage**	**09/04/2015**
B	5m NW	Open Storage Tank	Commercial Activity: Distribution Or Storage	09/04/2015
B	6m W	Open Storage Tank	Commercial Activity: Distribution Or Storage	27/07/2011

This data is sourced from Ordnance Survey.

4.3 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.7 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.8 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.10 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed industrial activities (Part A(1))

Records within 500m	0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.12 Licensed pollutant release (Part A(2)/B)

Records within 500m	0

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from Local Authority records.

4.13 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Licensed Discharges to controlled waters

Records within 500m	2

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 20 >**

ID	Location	Address	Details	
3	133m SE	PARKHAM FARMS, HGHER ALMINSTONE, WOOLSERY, BIDEFORD, DEVON, EX39 5PX	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRBB3595WU Permit Version: 1 Receiving Water: TRIBUTARY OF DIPPLE WATER	Status: NEW ISSUED UNDER EPR 2010 Issue date: 24/10/2014 Effective Date: 24/10/2014 Revocation Date: -
5	359m SW	LOWER ALMINSTONE FARM, ALMINSTONE, DEVON	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: NRA-SW-3081 Permit Version: 1 Receiving Water: SOAKAWAY	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 29/08/1991 Effective Date: 29/08/1991 Revocation Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 List 2 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution Incidents (EA/NRW)

Records within 500m	6

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 20 >**

ID	Location	Details	
A	**On site**	**Incident Date: 04/09/2021** **Incident Identification: 1988844** **Pollutant: Agricultural Materials and Wastes** **Pollutant Description: Other Agricultural Material or Waste**	**Water Impact: Category 1 (Major)** **Land Impact: Category 4 (No Impact)** **Air Impact: Category 4 (No Impact)**
A	27m SW	Incident Date: 16/01/2002 Incident Identification: 52795 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Food and Drink	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
A	34m NW	Incident Date: 26/06/2001 Incident Identification: 11657 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Food and Drink	Water Impact: Category 2 (Significant) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)
6	383m S	Incident Date: 11/06/2001 Incident Identification: 8467 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Food and Drink	Water Impact: Category 2 (Significant) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
7	424m SW	Incident Date: 16/01/2002 Incident Identification: 52797 Pollutant: Agricultural Materials and Wastes Pollutant Description: Slurry and Dilute Slurry	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
8	500m SW	Incident Date: 17/07/2017 Incident Identification: 1540673 Pollutant: Agricultural Materials and Wastes Pollutant Description: Silage Liquors	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.20 Pollution inventory substances

Records within 500m	0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.22 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Geology (basic)

5.1 Superficial geology (625k)

Records within 500m	0

Generalised geology data based on BGS's published poster maps of the UK (North and South). Superficial related themes digitised from 1977 first edition Quaternary map (North and South).

This data is sourced from the British Geological Survey.

5.2 Bedrock geology (625k)

Records within 500m	1

Generalised geology data based on BGS's published poster maps of the UK (North and South). Bedrock related themes created through generalisation of 1:50,000 data.

Location	Lex code	Description	Rock type
On site	**HOWY-MDSS**	**HOLSWORTHY GROUP**	**MUDSTONE, SILTSTONE AND SANDSTONE**

This data is sourced from the British Geological Survey.

6 Hydrogeology - Superficial aquifer

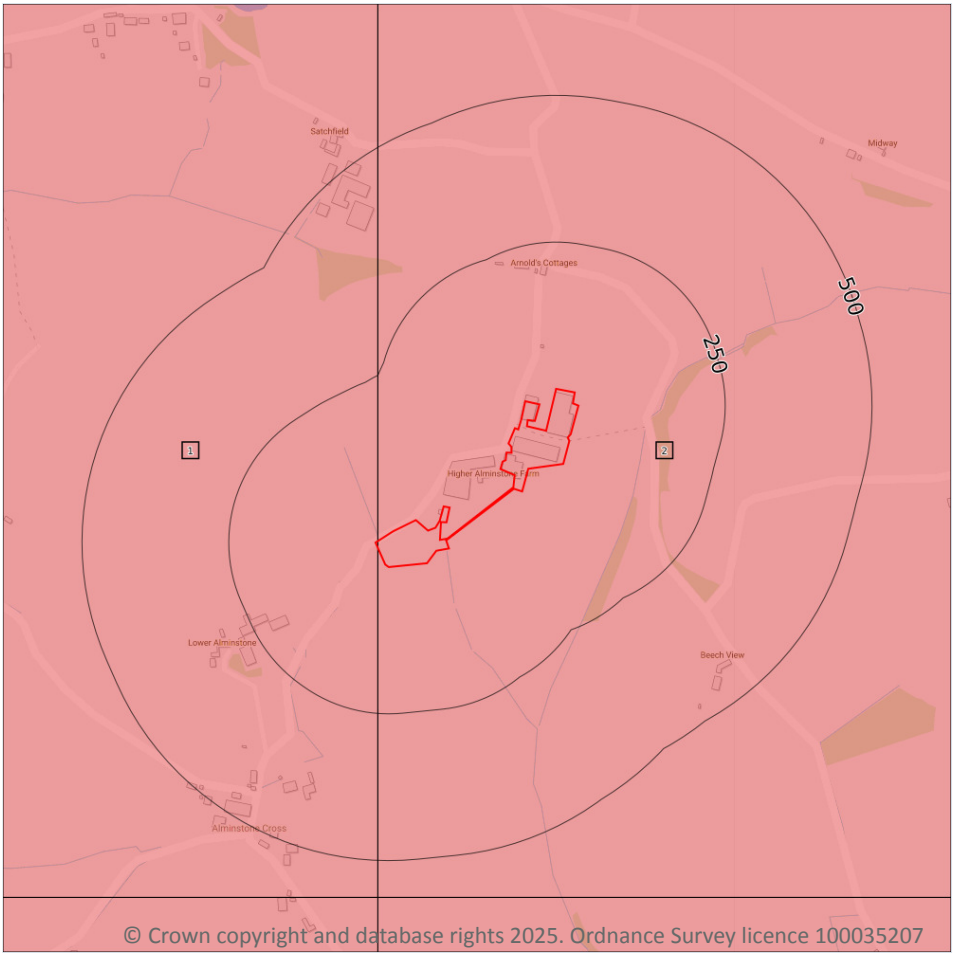
6.1 Superficial aquifer

Records within 500m	0

Aquifer status of groundwater held within superficial geology.

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

6.2 Bedrock aquifer

Records within 500m	2

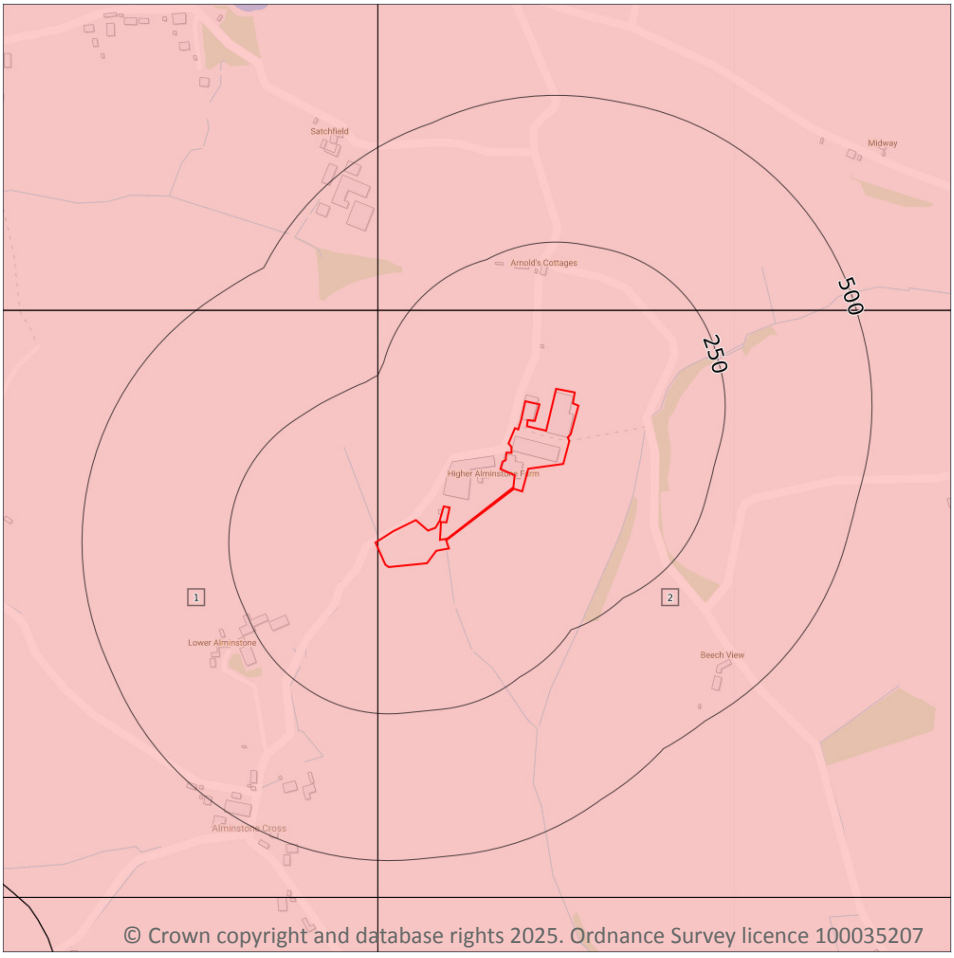
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 29 >**

ID	Location	Designation	Description
1	On site	Secondary A	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 aquifers formerly classified as minor aquifers
2	On site	Secondary A	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 aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

6.3 Groundwater vulnerability

Records within 50m	2

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 31 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

6.4 Groundwater vulnerability- soluble rock risk

Records on site	0

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

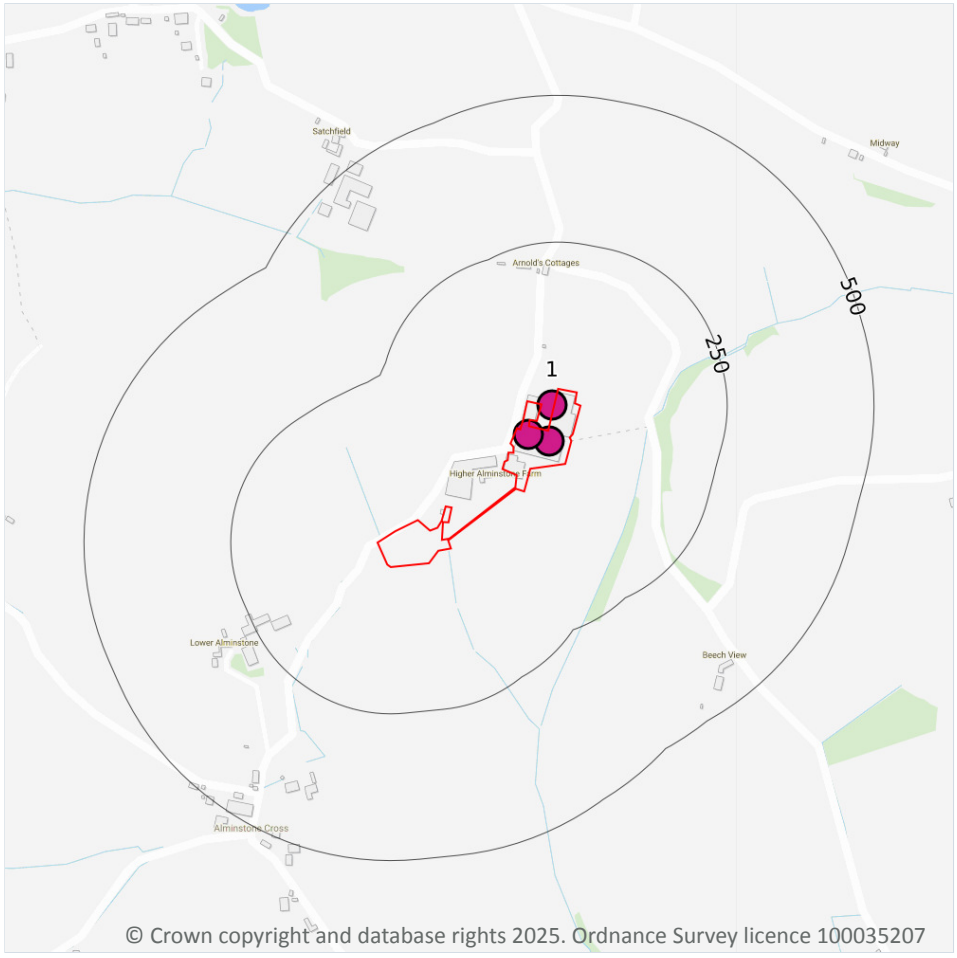
6.5 Groundwater vulnerability- local information

Records on site	0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

6.6 Groundwater abstractions

Records within 2000m	3

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 33 >**

ID	Location	Details	
A	**On site**	**Status: Active** **Licence No: SW/050/0007/020** **Details: General Farming & Domestic** **Direct Source: Ground Water - Fresh** **Point: HIGHER ALMINSTONE FARM BOREHOLE C** **Data Type: Point** **Name: Willes** **Easting: 235289** **Northing: 120778**	**Annual Volume (m^3): 7446** **Max Daily Volume (m^3): 20.4** **Original Application No: NPS/NA/001298** **Original Start Date: 16/03/2021** **Expiry Date: 31/03/2027** **Issue No: 1** **Version Start Date: 16/03/2021** **Version End Date: -**
A	**On site**	**Status: Active** **Licence No: SW/050/0007/020** **Details: General Farming & Domestic** **Direct Source: Ground Water - Fresh** **Point: HIGHER ALMINSTONE FARM BOREHOLE B** **Data Type: Point** **Name: Willes** **Easting: 235253** **Northing: 120788**	**Annual Volume (m^3): 7446** **Max Daily Volume (m^3): 20.4** **Original Application No: NPS/NA/001298** **Original Start Date: 16/03/2021** **Expiry Date: 31/03/2027** **Issue No: 1** **Version Start Date: 16/03/2021** **Version End Date: -**
1	4m W	Status: Active Licence No: SW/050/0007/020 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: HIGHER ALMINSTONE FARM BOREHOLE A Data Type: Point Name: Willes Easting: 235293 Northing: 120839	Annual Volume (m^3): 7446 Max Daily Volume (m^3): 20.4 Original Application No: NPS/NA/001298 Original Start Date: 16/03/2021 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 16/03/2021 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

6.7 Surface water abstractions

Records within 2000m	**0**

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

6.8 Potable abstractions

Records within 2000m	0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

6.9 Source Protection Zones

Records within 500m	0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

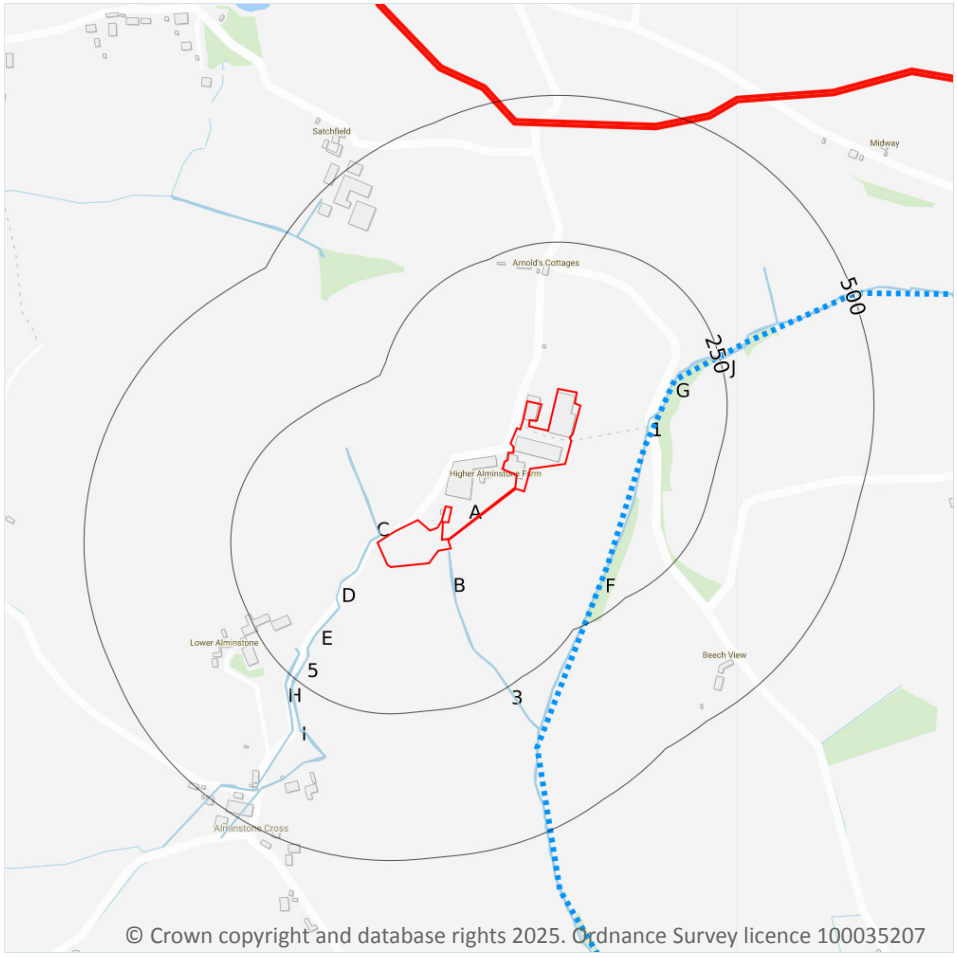
6.10 Source Protection Zones (confined aquifer)

Records within 500m	0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

7 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

7.1 Water Network (OS MasterMap)

Records within 250m	18

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 36 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
B	4m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
C	7m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	82m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	84m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	92m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	96m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	104m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	109m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
1	120m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
F	120m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	120m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	165m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
3	171m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	208m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
H	211m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	226m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	232m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	232m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

7.2 Surface water features

Records within 250m	10

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 36 >**

This data is sourced from the Ordnance Survey.

7.3 WFD Surface water body catchments

Records on site	1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 36 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	**On site**	**River**	**Dipple Water**	**GB108050014370**	**Torridge**	**North Devon**

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 WFD Surface water bodies

Records identified	1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on **page 36 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
2	120m E	River	Dipple Water	GB108050014370 ↗	Moderate	Fail	Moderate	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 WFD Groundwater bodies

Records on site	1

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 36 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	**On site**	**Torridge and Hartland Streams**	**GB40802G800600 ↗**	**Poor**	**Poor**	**Good**	**2019**

This data is sourced from the Environment Agency and Natural Resources Wales.

8 River and coastal flooding

8.1 Risk of flooding from rivers and the sea

Records within 50m	0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

8.2 Historical Flood Events

Records within 250m	0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

8.3 Flood Defences

Records within 250m	0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.

8.4 Areas Benefiting from Flood Defences

Records within 250m	0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

8.5 Flood Storage Areas

Records within 250m	0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones

8.6 Flood Zone 2

Records within 50m	0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

8.7 Flood Zone 3

Records within 50m	0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

9 Surface water flooding

9.1 Surface water flooding

Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

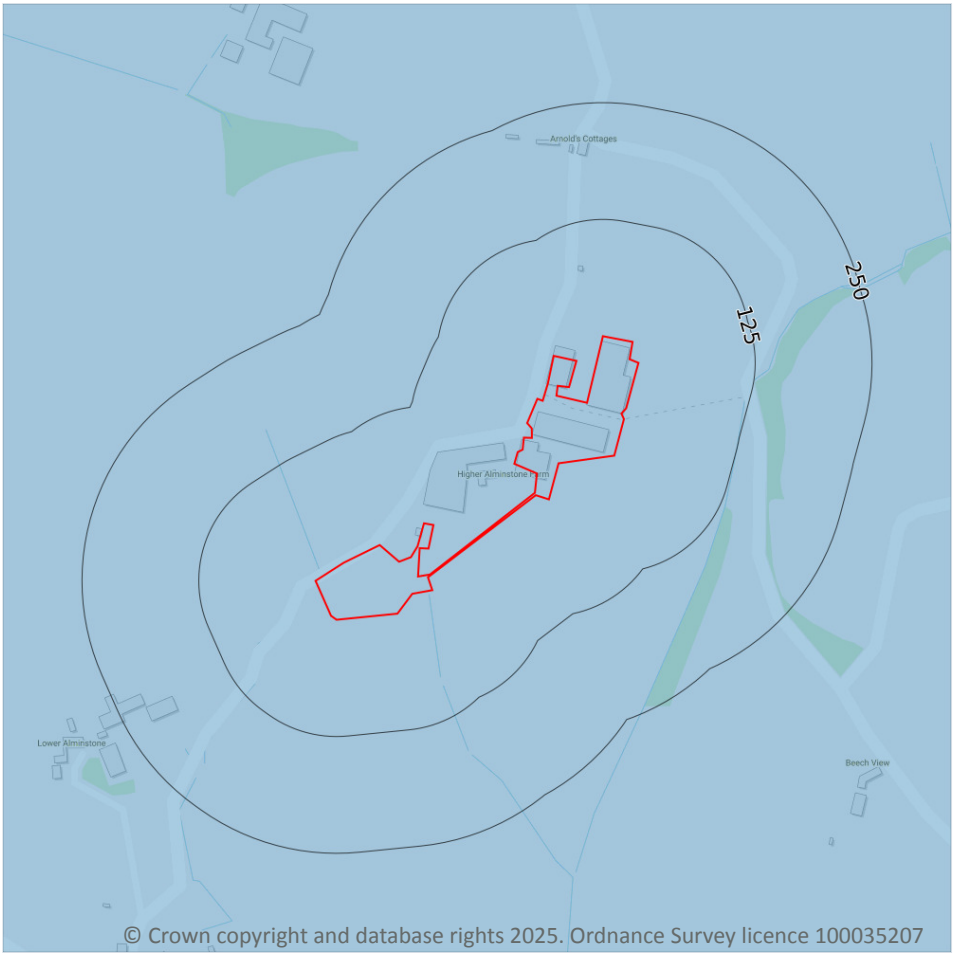
Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site. The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.

10 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

10.1 Groundwater flooding

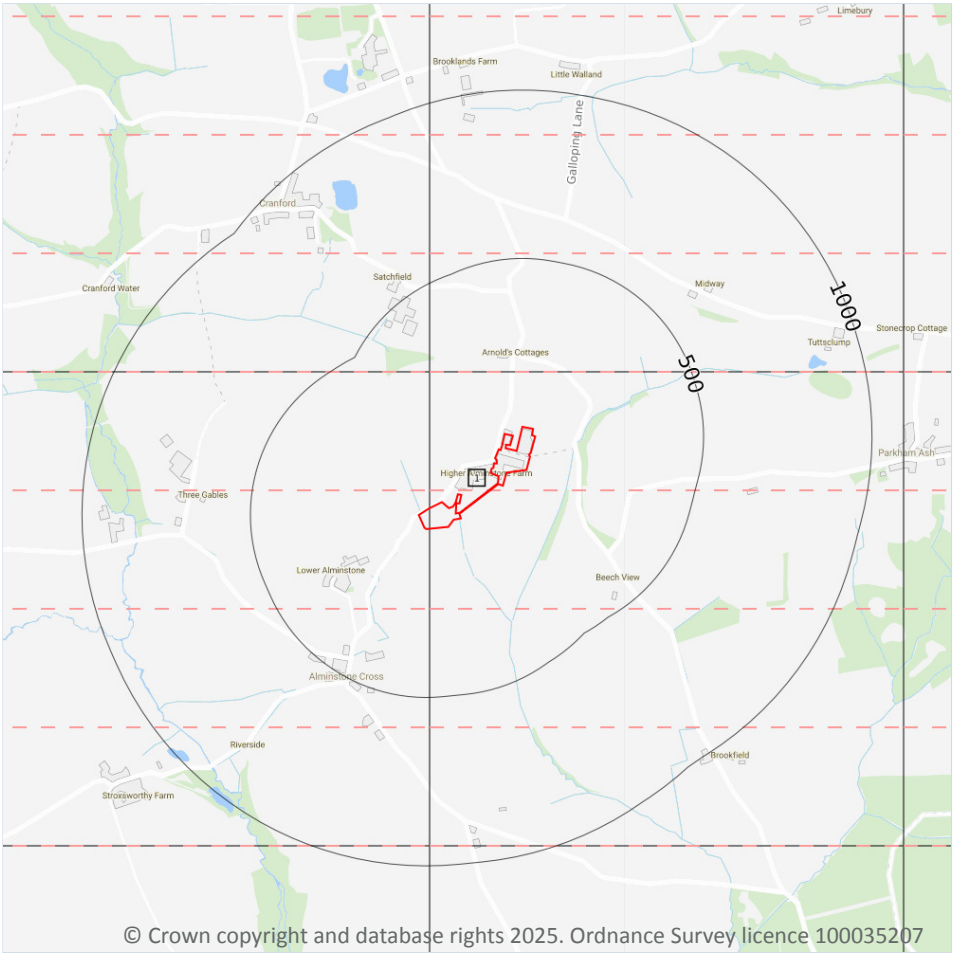
Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 44 >**

This data is sourced from Ambiental Risk Analytics.

11 Environmental designations



Site Outline

Search buffers in metres (m)

Designated Ancient Woodland

Biosphere Reserves

11.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 Special Areas of Conservation (SAC)

Records within 2000m	0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.5 National Nature Reserves (NNR)

Records within 2000m	0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.6 Local Nature Reserves (LNR)

Records within 2000m	0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.7 Designated Ancient Woodland

Records within 2000m	1

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on **page 45 >**

ID	Location	Name	Woodland Type
-	1868m N	Bucks Cross Wood	Ancient Replanted Woodland

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.8 Biosphere Reserves

Records within 2000m	1

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

Features are displayed on the Environmental designations map on **page 45 >**

ID	Location	Name	Status
1	**On site**	**North Devon**	**Declared**

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

11.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

11.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

11.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

11.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

11.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

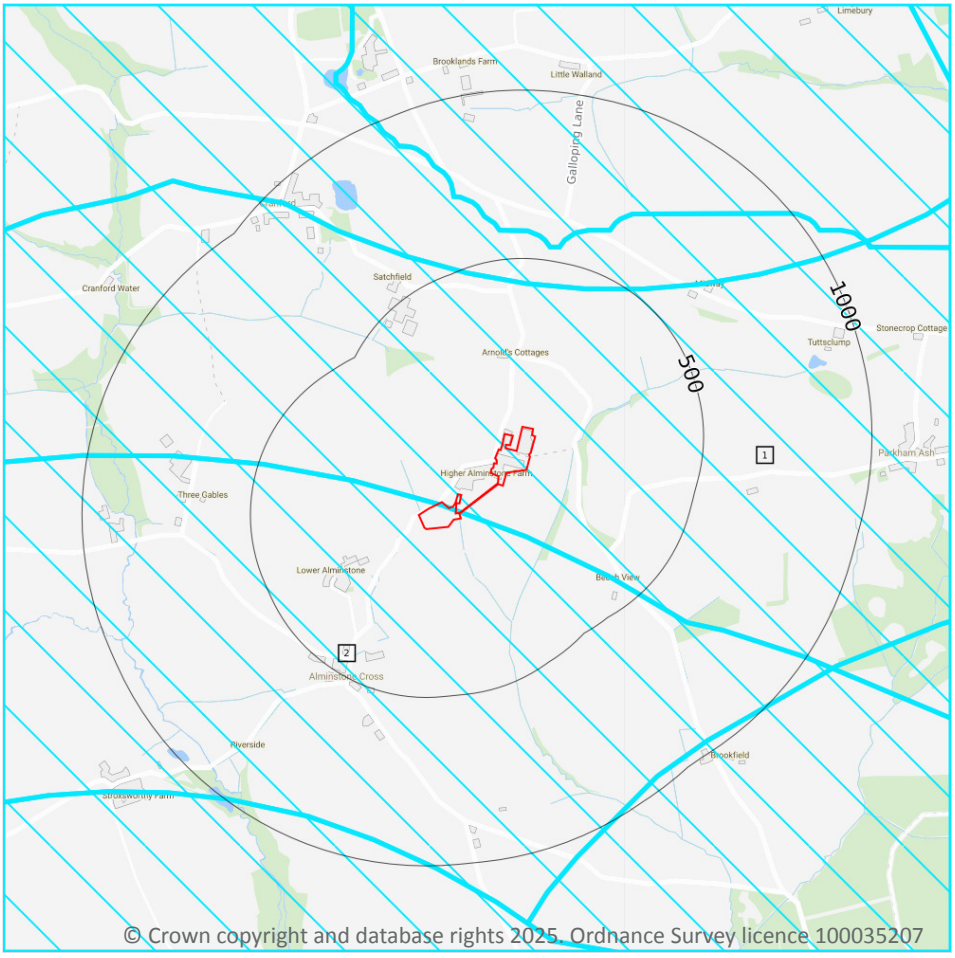
11.16 Nitrate Vulnerable Zones

Records within 2000m	0

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

11.17 SSSI Impact Risk Zones

Records on site	2

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 50 >**

ID	Location	Type of developments requiring consultation
1	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0300000430050&notes=&location=231302,119679%20(IRZ%20polygon%20centre)
2	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0301000430040&notes=&location=231807,118802%20(IRZ%20polygon%20centre)

This data is sourced from Natural England.

11.18 SSSI Units

Records within 2000m	0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.

12 Visual and cultural designations

12.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

12.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

12.4 Listed Buildings

Records within 250m	0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12.6 Scheduled Ancient Monuments

Records within 250m	0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

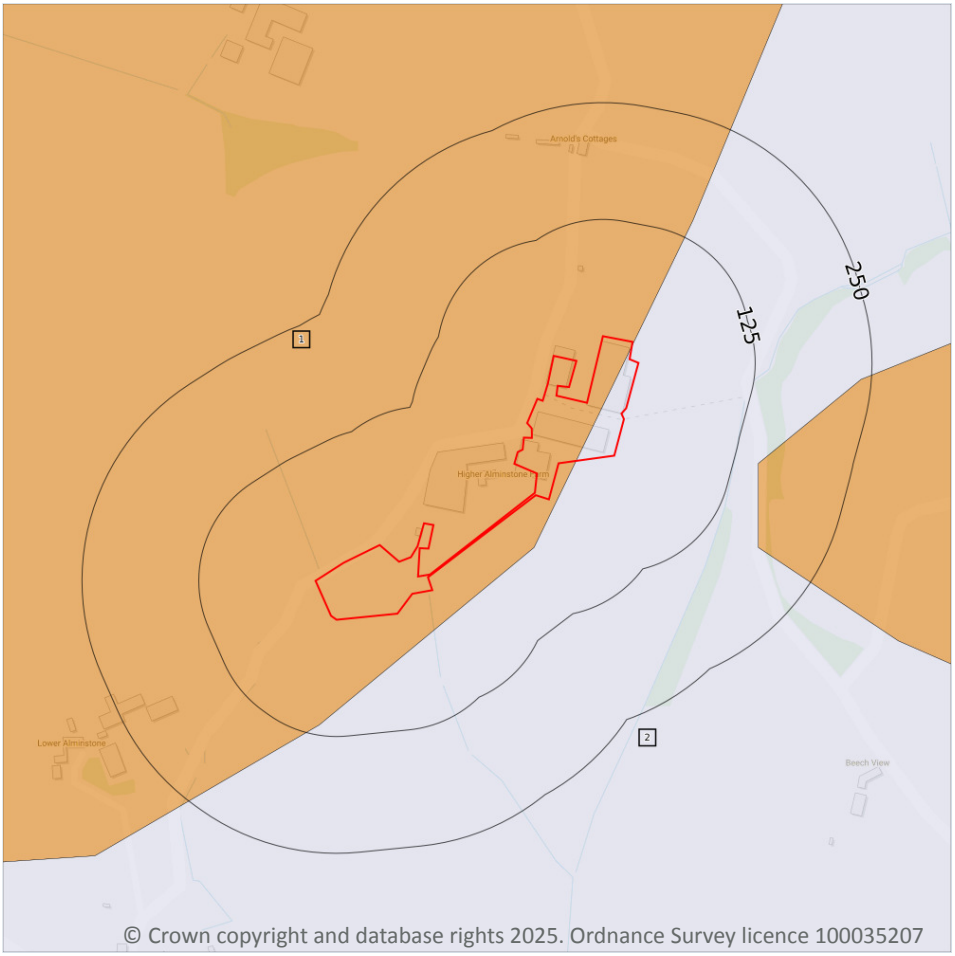
12.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

13 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

13.1 Agricultural Land Classification

Records within 250m	2

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 54 >**

ID	Location	Classification	Description
1	On site	Grade 3	**Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.**

ID	Location	Classification	Description
2	**On site**	**Grade 4**	**Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.**

This data is sourced from Natural England.

13.2 Open Access Land

Records within 250m	**0**

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

13.3 Tree Felling Licences

Records within 250m	**0**

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

13.4 Environmental Stewardship Schemes

Records within 250m	**1**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

Location	Reference	Scheme	Start Date	End date
122m E	AG00471022	Entry Level plus Higher Level Stewardship	01/10/2013	30/09/2023

This data is sourced from Natural England.

13.5 Countryside Stewardship Schemes

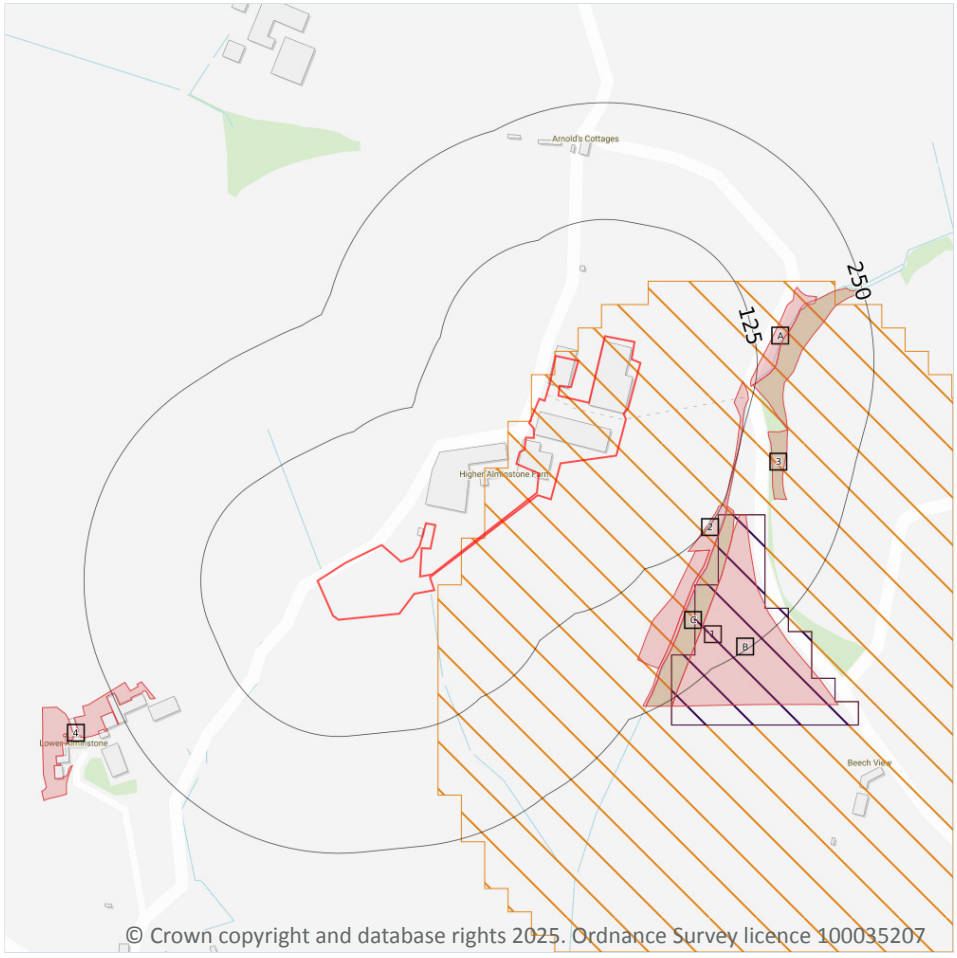
Records within 250m	1

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

Location	Reference	Scheme	Start Date	End Date
123m E	1510818	Countryside Stewardship (Middle Tier)	01/01/2024	31/12/2028

This data is sourced from Natural England.

14 Habitat designations



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks

Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

14.1 Priority Habitat Inventory

Records within 250m	8

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 57 >**

ID	Location	Main Habitat	Other habitats
2	108m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	120m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	123m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
C	130m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
C	133m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	147m SE	Purple moor grass and rush pastures	Main habitat: PMGRP (INV > 50%)
3	151m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	210m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

14.2 Habitat Networks

Records within 250m	2

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

Features are displayed on the Habitat designations map on **page 57 >**

ID	Location	Type	Habitat
1	**On site**	**Network Enhancement Zone 1**	**Not specified**
B	126m SE	Primary Habitat	Purple moor grass and rush pasture

This data is sourced from Natural England.

14.3 Open Mosaic Habitat

Records within 250m	0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

14.4 Limestone Pavement Orders

Records within 250m	0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to

remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗.

Appendix B: Section 21 (Soil Chemistry) Enviro Geo Insight Report (May 2025)

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Parkham Farms Higher Alminstone Farm, Bideford EX39 5PX

Order Details

Date: 23/05/2025

Your ref: ETL928 Parkham Farms Ltd

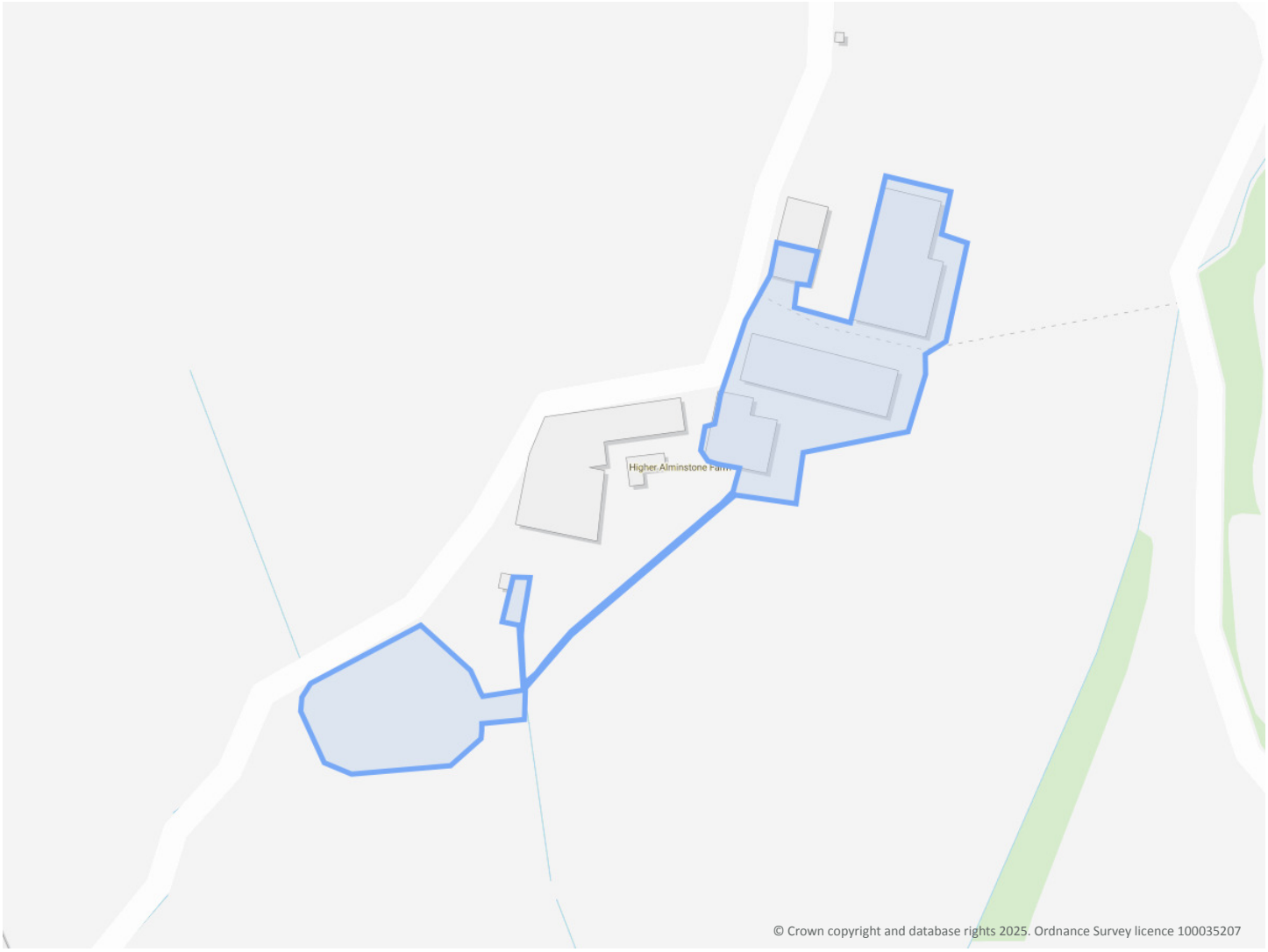
Our Ref: GS-Z66-8LF-IYW-OIY

Site Details

Location: 235205 120716

Area: 1.78 ha

Authority: Torridge District Council ↗



Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	0	0	0	1	-
16	1.2	Historical tanks	0	0	0	0	-
16	1.3	Historical energy features	0	0	0	0	-
16	1.4	Historical petrol stations	0	0	0	0	-
16	1.5	Historical garages	0	0	0	0	-
17	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
18 >	2.1 >	Historical industrial land uses >	0	0	0	1	-
19	2.2	Historical tanks	0	0	0	0	-
19	2.3	Historical energy features	0	0	0	0	-
19	2.4	Historical petrol stations	0	0	0	0	-
19	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
20	3.1	Active or recent landfill	0	0	0	0	-
20	3.2	Historical landfill (BGS records)	0	0	0	0	-
21	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
21	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
21	3.5	Historical waste sites	0	0	0	0	-
21	3.6	Licensed waste sites	0	0	0	0	-
21 >	3.7 >	Waste exemptions >	0	5	0	9	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
23 >	4.1 >	Recent industrial land uses >	12	1	1	-	-
24	4.2	Current or recent petrol stations	0	0	0	0	-
24	4.3	Electricity cables	0	0	0	0	-
25	4.4	Gas pipelines	0	0	0	0	-
25	4.5	Sites determined as Contaminated Land	0	0	0	0	-

25	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
25	4.7	Regulated explosive sites	0	0	0	0	-
25	4.8	Hazardous substance storage/usage	0	0	0	0	-
26	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
26	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
26	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
26	4.12	Radioactive Substance Authorisations	0	0	0	0	-
26 >	**4.13 >**	**Licensed Discharges to controlled waters >**	0	0	1	1	-
27	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
27	4.15	Pollutant release to public sewer	0	0	0	0	-
27	4.16	List 1 Dangerous Substances	0	0	0	0	-
28	4.17	List 2 Dangerous Substances	0	0	0	0	-
28 >	**4.18 >**	**Pollution Incidents (EA/NRW) >**	1	2	0	3	-
29	4.19	Pollution inventory substances	0	0	0	0	-
29	4.20	Pollution inventory waste transfers	0	0	0	0	-
29	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
30	5.1	Superficial aquifer	None (within 500m)				
31 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
33 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
34	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
34	5.5	Groundwater vulnerability- local information	None (within 0m)				
35 >	**5.6 >**	**Groundwater abstractions >**	2	1	0	0	0
36	5.7	Surface water abstractions	0	0	0	0	0
37	5.8	Potable abstractions	0	0	0	0	0
37	5.9	Source Protection Zones	0	0	0	0	-
37	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
38 >	**6.1 >**	**Water Network (OS MasterMap) >**	0	2	16	-	-

40 >	6.2 >	Surface water features >	0	2	8	-	-
40 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
41 >	6.4 >	WFD Surface water bodies >	0	0	1	-	-
41 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-

Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
42	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
42	7.2	Historical Flood Events	0	0	0	-	-
42	7.3	Flood Defences	0	0	0	-	-
43	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
43	7.5	Flood Storage Areas	0	0	0	-	-
44	7.6	Flood Zone 2	None (within 50m)				
44	7.7	Flood Zone 3	None (within 50m)				

Page	Section	Surface water flooding	
45	8.1	Surface water flooding	Negligible (within 50m)

Page	Section	Groundwater flooding >	
46 >	9.1 >	Groundwater flooding >	Negligible (within 50m)

Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
47	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
48	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
48	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
48	10.4	Special Protection Areas (SPA)	0	0	0	0	0
48	10.5	National Nature Reserves (NNR)	0	0	0	0	0
49	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
49 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	1
49 >	10.8 >	Biosphere Reserves >	1	0	0	0	0
50	10.9	Forest Parks	0	0	0	0	0
50	10.10	Marine Conservation Zones	0	0	0	0	0
50	10.11	Green Belt	0	0	0	0	0
50	10.12	Proposed Ramsar sites	0	0	0	0	0

50	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
51	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
51	10.15	Nitrate Sensitive Areas	0	0	0	0	0
51	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
52 >	**10.17 >**	**SSSI Impact Risk Zones >**	2	-	-	-	-
53	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
54	11.1	World Heritage Sites	0	0	0	-	-
54	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
54	11.3	National Parks	0	0	0	-	-
54	11.4	Listed Buildings	0	0	0	-	-
55	11.5	Conservation Areas	0	0	0	-	-
55	11.6	Scheduled Ancient Monuments	0	0	0	-	-
55	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
56 >	**12.1 >**	**Agricultural Land Classification >**	Grade 4 (within 250m)				
57	12.2	Open Access Land	0	0	0	-	-
57	12.3	Tree Felling Licences	0	0	0	-	-
57 >	**12.4 >**	**Environmental Stewardship Schemes >**	0	0	1	-	-
58 >	**12.5 >**	**Countryside Stewardship Schemes >**	0	0	1	-	-
Page	Section	**Habitat designations >**	On site	0-50m	50-250m	250-500m	500-2000m
59 >	**13.1 >**	**Priority Habitat Inventory >**	0	0	8	-	-
60 >	**13.2 >**	**Habitat Networks >**	1	0	1	-	-
60	13.3	Open Mosaic Habitat	0	0	0	-	-
60	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	**Geology 1:10,000 scale >**	On site	0-50m	50-250m	250-500m	500-2000m
62 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
63	14.2	Artificial and made ground (10k)	0	0	0	0	-
64	14.3	Superficial geology (10k)	0	0	0	0	-

64	14.4	Landslip (10k)	0	0	0	0	-
65	14.5	Bedrock geology (10k)	0	0	0	0	-
65	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	**Geology 1:50,000 scale >**	On site	0-50m	50-250m	250-500m	500-2000m
66 >	15.1 >	50k Availability >	Identified (within 500m)				
67	15.2	Artificial and made ground (50k)	0	0	0	0	-
67	15.3	Artificial ground permeability (50k)	0	0	-	-	-
68	15.4	Superficial geology (50k)	0	0	0	0	-
68	15.5	Superficial permeability (50k)	None (within 50m)				
68	15.6	Landslip (50k)	0	0	0	0	-
68	15.7	Landslip permeability (50k)	None (within 50m)				
69 >	15.8 >	Bedrock geology (50k) >	2	1	0	3	-
70 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
70 >	15.10 >	Bedrock faults and other linear features (50k) >	1	0	1	1	-
Page	Section	**Boreholes >**	On site	0-50m	50-250m	250-500m	500-2000m
71 >	16.1 >	BGS Boreholes >	0	1	0	-	-
Page	Section	**Natural ground subsidence >**					
72 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
74 >	17.2 >	Running sands >	Negligible (within 50m)				
76 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
77 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
78 >	17.5 >	Landslides >	Low (within 50m)				
80 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
82 >	18.1 >	BritPits >	0	0	0	1	-
83	18.2	Surface ground workings	0	0	0	-	-
83	18.3	Underground workings	0	0	0	0	0
83	18.4	Underground mining extents	0	0	0	0	-
84	18.5	Historical Mineral Planning Areas	0	0	0	0	-

84 >	18.6 >	Non-coal mining >	0	0	0	2	2
85	18.7	JPB mining areas	None (within 0m)				
85	18.8	The Coal Authority non-coal mining	0	0	0	0	-
85	18.9	Researched mining	0	0	0	0	-
85	18.10	Mining record office plans	0	0	0	0	-
86	18.11	BGS mine plans	0	0	0	0	-
86	18.12	Coal mining	None (within 0m)				
86	18.13	Brine areas	None (within 0m)				
86	18.14	Gypsum areas	None (within 0m)				
86	18.15	Tin mining	None (within 0m)				
87	18.16	Clay mining	None (within 0m)				

Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
88	19.1	Natural cavities	0	0	0	0	-
88	19.2	Mining cavities	0	0	0	0	0
88	19.3	Reported recent incidents	0	0	0	0	-
88	19.4	Historical incidents	0	0	0	0	-

Page	Section	Radon >					
90 >	20.1 >	Radon >	Between 3% and 5% (within 0m)				

Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
92 >	21.1 >	BGS Estimated Background Soil Chemistry >	2	2	-	-	-
92	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
92	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
93	22.1	Underground railways (London)	0	0	0	-	-
93	22.2	Underground railways (Non-London)	0	0	0	-	-
93	22.3	Railway tunnels	0	0	0	-	-
93	22.4	Historical railway and tunnel features	0	0	0	-	-
93	22.5	Royal Mail tunnels	0	0	0	-	-
94	22.6	Historical railways	0	0	0	-	-

94	22.7	Railways	0	0	0	-	-
94	22.8	Crossrail 2	0	0	0	0	-
94	22.9	HS2	0	0	0	0	-

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	4

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
19m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

Appendix C: Site Walkover Photographs (5 November 2024 & 28 May 2025)

Photograph 1 – Milk reception and storage

Photograph 2 – Site yard, looking south west

Photograph 3– Chemical storage on concrete surfacing

Photograph 4 – Silos and chemical storage on concrete surfacing

Photograph 5 – Storage silos

Photograph 6 – South eastern extent of the Site yard

Photograph 7 – location of proposed Deluge Pit

Photograph 8 – Site yard, looking to the north

Photograph 9– Site yard area (upper yard)

Photograph10– Bunded Diesel Tank (DERV Tank)

Photograph 11 –Bunded kerosene tank and water storage

Photograph 12 –Bunded white diesel tank for generator

Photograph 13 –Cheese storage

Photograph 14 –Concrete Dirty Water Tank (below ground) and Lactose Tanks

Photograph 15 – Concrete Dirty Water Tank (above ground) and adjacent yard

Photograph 16 –Dirty Water Lagoon

Appendix D – Engine & Transmission Oil Safety Data Sheets

SAFETY DATA SHEET

Q8 T 904 10W-40

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name : Q8 T 904 10W-40

Viscosity or Type : SAE 10W-40

1.2 Relevant identified uses of the substance or mixture and uses advised against

Material uses : Lubricating oil for automotive engines

1.3 Details of the supplier of the safety data sheet

Manufacturer / Distributor : Kuwait Petroleum Companies in the Benelux
Company Office: Brusselstraat 59, 2018 Antwerp, Belgium
Contactaddress: Petroleumkaai 7, 2020 Antwerp, Belgium
Tel. +32 3 247 38 11, Fax +32 3 216 03 42

e-mail address of person responsible for this SDS : SDSinfo@Q8.com, communication preferably in English only.

1.4 Emergency telephone number

Europe : +44 (0) 1235 239 670

Global (English only) : +44 (0) 1865 407 333

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity : None.

Ingredients of unknown ecotoxicity : None.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : P103 - Read label before use.
P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

SECTION 2: Hazards identification

Supplemental label elements : Contains Benzenesulfonic acid methyl-, mono C20-26 branched alkyl derivs., calcium salt, Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts and N,N-bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amine. May produce an allergic reaction. Safety data sheet available on request.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type	Notes
Distillates (petroleum), hydrotreated heavy paraffinic	REACH #: 01-2119484627-25 EC: 265-157-1 CAS: 64742-54-7 Index: 649-467-00-8	≥25 - ≤50	Not classified.	[2]	L
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	REACH #: 01-2119474889-13 EC: 276-738-4 CAS: 72623-87-1 Index: 649-483-00-5	≥25 - ≤50	Not classified.	[2]	L
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	REACH #: 01-2119474889-13 EC: 276-738-4 CAS: 72623-87-1 Index: 649-483-00-5	≥10 - ≤25	Asp. Tox. 1, H304	[1] [2]	H-L
Mineral oil	CAS: *	≤10	Asp. Tox. 1, H304	[1] [2]	-
Mineral oil	CAS: *	≤10	Not classified.	[2]	-
bis(nonylphenyl)amine	REACH #: 01-2119488911-28 EC: 253-249-4 CAS: 36878-20-3	≤3	Aquatic Chronic 4, H413	[1]	-
Phosphorodithioic acid, mixed O, O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	REACH #: 01-2119657973-23 EC: 272-238-5 CAS: 68784-31-6	≤1.3	Eye Dam. 1, H318 Aquatic Chronic 2, H411 **See Section 16 for the full text of the H statements declared above.**	[1]	-

SECTION 3: Composition/information on ingredients

* CAS: 64741-88-4, 67471-89-5, 64741-95-3, 64741-96-4, 64741-97-5, 64742-01-4, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-65-0, 64742-71-8, 72623-83-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0.

The mineral oils in the product contain < 3% DMSO extract (IP 346).

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
[5] Substance of equivalent concern
[6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, alcohol-resistant foam or water spray (fog).

Unsuitable extinguishing media : Do not use water jet.

SECTION 5: Firefighting measures

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

SECTION 7: Handling and storage

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Distillates (petroleum), hydrotreated heavy paraffinic	**Limit values (Belgium, 12/2020).** TWA: 5 mg/m³ 8 hours. Form: mist STEL: 10 mg/m³ 15 minutes. Form: mist
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	**Limit values (Belgium, 12/2020).** TWA: 5 mg/m³ 8 hours. Form: mist STEL: 10 mg/m³ 15 minutes. Form: mist
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	**Limit values (Belgium, 12/2020).** TWA: 5 mg/m³ 8 hours. Form: mist STEL: 10 mg/m³ 15 minutes. Form: mist
Mineral oil	**Limit values (Belgium, 11/2011).** TWA: 5 mg/m³ 8 hours. Form: mist STEL: 10 mg/m³ 15 minutes. Form: mist
Mineral oil	**Limit values (Belgium, 11/2011).** TWA: 5 mg/m³ 8 hours. Form: mist STEL: 10 mg/m³ 15 minutes. Form: mist

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Type	Exposure	Value	Population	Effects
bis(nonylphenyl)amine	DNEL	Long term Oral	0.25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	Workers	Systemic
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	DNEL	Long term Oral	0.21 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2.1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.93 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	10.42 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	11.75 mg/m³	General population	Systemic
	DNEL	Short term Dermal	50 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	100 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	198.6 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	496.4 mg/m³	Workers	Systemic

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves tested to EN374. Recommended: < 1 hour (breakthrough time): nitrile rubber 0.17 mm.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

SECTION 8: Exposure controls/personal protection

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Boiling point > 65 °C: A1; Boiling point < 65 °C: AX1; Hot material: A1P2.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [Oily liquid.]

Appearance : Clear.

Color : Brown.

Odor : Slight

Odor threshold : Not available.

pH : 8

Melting point/freezing point : <-30°C

Initial boiling point and boiling range : >300°C

Flash point : Open cup: >200°C [ASTM D92.]

Evaporation rate : Not available.

Flammability (solid, gas) : Not applicable.

Upper/lower flammability or explosive limits : Not available.

Vapor pressure : <0.01 kPa

Vapor density : Not available.

Density : 0.85 g/cm³

Solubility(ies) : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : >300°C

Decomposition temperature : >300°C

Viscosity (40°C) : 95 cSt

Viscosity (100°C) : 14 cSt

Explosive properties : Not applicable.

Oxidizing properties : Not applicable.

9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

SECTION 10: Stability and reactivity

10.5 Incompatible materials : Reactive or incompatible with the following materials:
Strong oxidizing materials

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
Mineral oil	LC50 Inhalation Dusts and mists	Rat - Male, Female	5.53 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Mineral oil	LC50 Inhalation Dusts and mists	Rat - Male, Female	5.53 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	LD50 Oral	Rat	3.4 g/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Mineral oil	N/A	N/A	N/A	N/A	5.53
Mineral oil	N/A	N/A	N/A	N/A	5.53
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	3400	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Mineral oil	Skin - Erythema/Eschar	Rabbit	0.17	72 hours	7 days
	Skin - Edema	Rabbit	0	72 hours	7 days
	Eyes - Iris lesion	Rabbit	0	48 hours	72 hours
	Eyes - Redness of the conjunctivae	Rabbit	0.33	48 hours	72 hours
Mineral oil	Skin - Erythema/Eschar	Rabbit	0.17	72 hours	7 days
	Skin - Edema	Rabbit	0	72 hours	7 days
	Eyes - Iris lesion	Rabbit	0	48 hours	72 hours
	Eyes - Redness of the conjunctivae	Rabbit	0.33	48 hours	72 hours

Conclusion/Summary : Not available.

Sensitization

SECTION 11: Toxicological information

Product/ingredient name	Route of exposure	Species	Result
Mineral oil	skin	Guinea pig	Not sensitizing
Mineral oil	skin	Guinea pig	Not sensitizing

Conclusion/Summary : Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Mineral oil	474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative
Mineral oil	474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative

Conclusion/Summary : Not available.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Mineral oil	Negative - Dermal - TC	Mouse - Female	-	78 weeks
Mineral oil	Negative - Dermal - TC	Mouse - Female	-	78 weeks

Conclusion/Summary : Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Mineral oil	Negative	Negative	Negative	Rat - Male, Female	Oral: 1000 mg/kg	-
Mineral oil	Negative	Negative	Negative	Rat - Male, Female	Oral: 1000 mg/kg	-

Conclusion/Summary : Not available.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Mineral oil	Negative - Dermal	Rat	2000 mg/kg	7 days per week
Mineral oil	Negative - Dermal	Rat	2000 mg/kg	7 days per week

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	ASPIRATION HAZARD - Category 1
Mineral oil	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

SECTION 11: Toxicological information

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Mineral oil	Sub-chronic NOAEL Oral	Rat - Male, Female	≥2000 mg/kg	13 weeks; 5 days per week
	Sub-acute LOAEL Oral	Rat - Male	125 mg/kg	13 weeks; 5 hours per day
	Sub-acute NOAEL Inhalation Vapor	Rat - Male	>980 mg/m³	4 weeks; 5 days per week
Mineral oil	Sub-chronic NOAEL Oral	Rat - Male, Female	≥2000 mg/kg	13 weeks; 5 days per week
	Sub-acute LOAEL Oral	Rat - Male	125 mg/kg	13 weeks; 5 hours per day
	Sub-acute NOAEL Inhalation Vapor	Rat - Male	>980 mg/m³	4 weeks; 5 days per week

Conclusion/Summary : Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	IC50 >100 mg/l	Fish	96 hours
Mineral oil	Acute NEL >100 mg/l Fresh water	Algae	72 hours
	Acute NEL >10000 mg/l Fresh water	Daphnia - Daphnia Magma	48 hours
	Acute NEL ≥100 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NEL 10 mg/l Fresh water	Daphnia - Daphnia magna	21 days
Mineral oil	Acute NEL >100 mg/l Fresh water	Algae	72 hours
	Acute NEL >10000 mg/l Fresh water	Daphnia - Daphnia Magma	48 hours
	Acute NEL ≥100 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NEL 10 mg/l Fresh water	Daphnia - Daphnia magna	21 days

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD 301B	49 % - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	-	-	Inherent
Mineral oil	-	-	Inherent
Mineral oil	-	-	Inherent

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	>6	-	high
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	>6	-	high
bis(nonylphenyl)amine	3.64 to 7.02	1730	high
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	4	-	high

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects

: No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

Hazard class for water (WGK) : 1

VOC content : Exempt.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : Not determined.

Europe : Not determined.

SECTION 15: Regulatory information

Japan : **Japan inventory (CSCL)**: Not determined.
Japan inventory (ISHL): Not determined.

New Zealand : Not determined.

Philippines : All components are listed or exempted.

Republic of Korea : All components are listed or exempted.

Taiwan : Not determined.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : Not determined.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of abbreviated H statements

H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Full text of classifications [CLP/GHS]

Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 4	AQUATIC HAZARD (LONG-TERM) - Category 4
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

Training advice : Ensure operatives are trained to minimise exposures.

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Version : 1.07

Prepared by : Kuwait Petroleum Research & Technology B.V., The Netherlands

Notice to reader

SECTION 16: Other information

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

SAFETY DATA SHEET

Q8 T 2200

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name : Q8 T 2200

1.2 Relevant identified uses of the substance or mixture and uses advised against

Material uses : Lubricating oil for tractor transmissions

1.3 Details of the supplier of the safety data sheet

Manufacturer / Distributor : Kuwait Petroleum Companies in the Benelux
Company Office: Brusselstraat 59, 2018 Antwerp, Belgium
Contactaddress: Petroleumkaai 7, 2020 Antwerp, Belgium
Tel. +32 3 247 38 11, Fax +32 3 216 03 42

e-mail address of person responsible for this SDS : SDSinfo@Q8.com, communication preferably in English only.

1.4 Emergency telephone number

Europe : +44 (0) 1235 239 670

Global (English only) : +44 (0) 1865 407 333

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity : None.

Ingredients of unknown ecotoxicity : None.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : P103 - Read label before use.
P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Contains C14-18 alpha-olefin epoxide, reaction products with boric acid. May produce an allergic reaction. Safety data sheet available on request.

SECTION 2: Hazards identification

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type	Notes
Distillates (petroleum), hydrotreated heavy paraffinic	REACH #: 01-2119484627-25 EC: 265-157-1 CAS: 64742-54-7 Index: 649-467-00-8	≥75 - ≤90	Not classified.	[2]	L
Mineral oil	CAS: *	≤10	Asp. Tox. 1, H304	[1] [2]	-
zinc bis[O,O-bis(2-ethylhexyl)] bis (dithiophosphate)	REACH #: 01-2119493635-27 EC: 224-235-5 CAS: 4259-15-8	<2.5	Eye Dam. 1, H318 Aquatic Chronic 2, H411 **See Section 16 for the full text of the H statements declared above.**	[1]	-

* CAS: 64742-54-7 / 64742-55-8 / 64742-56-9 / 64742-65-0

The mineral oils in the product contain < 3% DMSO extract (IP 346).

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
[5] Substance of equivalent concern
[6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, alcohol-resistant foam or water spray (fog).

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
phosphorus oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Distillates (petroleum), hydrotreated heavy paraffinic	**Limit values (Belgium, 1/2020).** TWA: 5 mg/m³ 8 hours. Form: mist STEL: 10 mg/m³ 15 minutes. Form: mist
Mineral oil	**Limit values (Belgium, 11/2011).** TWA: 5 mg/m³ 8 hours. Form: mist STEL: 10 mg/m³ 15 minutes. Form: mist

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
zinc bis[O,O-bis(2-ethylhexyl)] bis (dithiophosphate)	DNEL	Long term Oral	0.19 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.67 mg/m³	General population	Systemic
	DNEL	Long term Dermal	4.8 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	6.6 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	9.6 mg/kg bw/day	Workers	Systemic

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

SECTION 8: Exposure controls/personal protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves tested to EN374. Recommended: < 1 hour (breakthrough time): nitrile rubber 0.17 mm.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Boiling point > 65 °C: A1; Boiling point < 65 °C: AX1; Hot material: A1P2.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [Oily liquid.]

Appearance : Clear to slightly hazy liquid.

Color : Brown. [Light]

Odor : Slight

Odor threshold : Not available.

pH : 7

Melting point/freezing point : <-27°C

Initial boiling point and boiling range : >300°C

Flash point : Open cup: >200°C [ASTM D92.]

Evaporation rate : Not available.

Flammability (solid, gas) : Not applicable.

Upper/lower flammability or explosive limits : Not available.

Vapor pressure : <0.01 kPa

Vapor density : Not available.

Relative density : 0.882

Solubility(ies) : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : >300°C

Decomposition temperature : >300°C

Viscosity (40°C) : 55.2 cSt

Viscosity (100°C) : 9.8 cSt

Explosive properties : Not applicable.

Oxidizing properties : Not applicable.

9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : Reactive or incompatible with the following materials:
Strong oxidizing materials

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Mineral oil	LC50 Inhalation Dusts and mists	Rat - Male, Female	5.53 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
zinc bis[O,O-bis (2-ethylhexyl)] bis (dithiophosphate)	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	3.1 g/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Mineral oil	N/A	N/A	N/A	N/A	5.53
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	3100	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Mineral oil	Skin - Erythema/Eschar	Rabbit	0.17	72 hours	7 days
	Skin - Edema	Rabbit	0	72 hours	7 days
	Eyes - Iris lesion	Rabbit	0	48 hours	72 hours
	Eyes - Redness of the conjunctivae	Rabbit	0.33	48 hours	72 hours

Conclusion/Summary : Not available.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Mineral oil	skin	Guinea pig	Not sensitizing

Conclusion/Summary : Not available.

Mutagenicity

SECTION 11: Toxicological information

Product/ingredient name	Test	Experiment	Result
Mineral oil	474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative

Conclusion/Summary : Not available.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Mineral oil	Negative - Dermal - TC	Mouse - Female	-	78 weeks

Conclusion/Summary : Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Mineral oil	Negative	Negative	Negative	Rat - Male, Female	Oral: 1000 mg/kg	-

Conclusion/Summary : Not available.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Mineral oil	Negative - Dermal	Rat	2000 mg/kg	7 days per week

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Mineral oil	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

SECTION 11: Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Mineral oil	Sub-chronic NOAEL Oral	Rat - Male, Female	≥2000 mg/kg	13 weeks; 5 days per week
	Sub-acute LOAEL Oral	Rat - Male	125 mg/kg	13 weeks; 5 hours per day
	Sub-acute NOAEL Inhalation Vapor	Rat - Male	>980 mg/m³	4 weeks; 5 days per week

Conclusion/Summary : Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Mineral oil	Acute NEL >100 mg/l Fresh water	Algae	72 hours
	Acute NEL >10000 mg/l Fresh water	Daphnia - Daphnia Magma	48 hours
	Acute NEL ≥100 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NEL 10 mg/l Fresh water	Daphnia - Daphnia magna	21 days

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
zinc bis[O,O-bis (2-ethylhexyl)] bis (dithiophosphate)	-	5 % - 27 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Mineral oil	-	-	Inherent
zinc bis[O,O-bis (2-ethylhexyl)] bis (dithiophosphate)	-	-	Not readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
zinc bis[O,O-bis (2-ethylhexyl)] bis (dithiophosphate)	3.59	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-

SECTION 14: Transport information

14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

Hazard class for water (WGK) : 1

VOC content : Exempt.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

SECTION 15: Regulatory information

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	:	All components are listed or exempted.
Canada	:	All components are listed or exempted.
China	:	All components are listed or exempted.
Europe	:	All components are listed or exempted.
Japan	:	**Japan inventory (CSCL)**: All components are listed or exempted. **Japan inventory (ISHL)**: Not determined.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
Republic of Korea	:	All components are listed or exempted.
Taiwan	:	All components are listed or exempted.
Thailand	:	Not determined.
Turkey	:	Not determined.
United States	:	Not determined.
Viet Nam	:	Not determined.

15.2 Chemical Safety Assessment : Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :
ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of abbreviated H statements

H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

SECTION 16: Other information

Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

Training advice : Ensure operatives are trained to minimise exposures.

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Version : 1.09

Prepared by : Kuwait Petroleum Research & Technology B.V., The Netherlands

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

SAFETY DATA SHEET

Q8 T 45 LS 90

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name : Q8 T 45 LS 90

Viscosity or Type : SAE 90

1.2 Relevant identified uses of the substance or mixture and uses advised against

Material uses : Lubricating oil for automotive transmissions

1.3 Details of the supplier of the safety data sheet

Supplier : Kuwait Petroleum Companies in the Benelux
Company Office: Brusselstraat 59, 2018 Antwerp, Belgium
Contactaddress: Petroleumkaai 7, 2020 Antwerp, Belgium
Tel. +32 3 247 38 11, Fax +32 3 216 03 42

Manufacturer / Distributor : Kuwait Petroleum Belgium N.V./S.A.
Petroleumkaai 7
B-2020 Antwerp
Belgium
/ Q8Oils Italia S.r.l.
Via Volpedo 2
15050 Castellar Guidobono (AL)
Italy

e-mail address of person responsible for this SDS : SDSinfo@Q8.com, communication preferably in English only.

PCN Information contact : PCNinfo@Q8.com, communication preferably in English only.

1.4 Emergency telephone number

Europe : +44 (0) 1235 239 670

Global (English only) : +44 (0) 1865 407 333

CARECHEM24

National advisory body/Poison Center

Belgium : Poison Centre : +32 (0)70 245 245

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity : None.

Ingredients of unknown ecotoxicity : None.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

SECTION 2: Hazards identification

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Contains Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) and Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.. May produce an allergic reaction.
Safety data sheet available on request.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Detergents - Regulation (EC) No 648/2004 : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation. May cause endocrine disruption.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Severely refined mineral oil (C15 - C50) * - Not classified.	-	≥75 - ≤90	Not classified.	-	[2]
Distillates (petroleum), hydrotreated heavy naphthenic	REACH #: 01-2119467170-45 EC: 265-155-0 CAS: 64742-52-5 Index: 649-465-00-7	≤3	Not classified.	-	[2]
Reaction products of bis (4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	REACH #: 01-2119493620-38 EC: 931-384-6	≤2.3	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	ATE [Oral] = 2000 mg/kg Eye Irrit. 2, H319: C ≥ 50% Skin Sens. 1, H317: C ≥ 9.39%	[1]
Reaction Products of alcohols, C14-18, C18 unsat., esterified with	REACH #: 01-2119978530-33 EC: 939-591-3	≤1.7	Aquatic Chronic 3, H412	-	[1]

SECTION 3: Composition/information on ingredients

phosphorus pentoxide and salted with amines, C12-14, -tert-alkyl	CAS: 1471315-74-8				
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	REACH #: 01-2119971727-23 EC: 939-460-0 CAS: 1471311-26-8	≤0.3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412 **See Section 16 for the full text of the H statements declared above.**	-	[1] [3]

* Contains one or more of the following:
CAS: 101316-69-2, EC: 309-874-0, EU REACH: 01-2119486948-13
CAS: 64742-54-7, EC: 265-157-1, EU REACH: 01-2119484627-25
CAS: 64742-55-8, EC: 265-158-7, EU REACH: 01-2119487077-29
CAS: 64742-56-9, EC: 265-159-2, EU REACH: 01-2119480132-48
CAS: 64742-57-0, EC: 265-160-8, EU REACH: 01-2119489287-22
CAS: 64742-65-0, EC: 265-169-7, EU REACH: 01-2119471299-27

The mineral base oils contained in this product are severely refined and contain less than 3% DMSO extract according to IP 346 method, and are therefore not classified as carcinogen according to Regulation (EC) No 1272/2008, note L.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

SECTION 4: First aid measures

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, alcohol-resistant foam or water spray (fog).

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

SECTION 6: Accidental release measures

6.3 Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Severely refined mineral oil (C15 - C50) * - Not classified.	**Limit values (Belgium, 5/2021). []** TWA: 5 mg/m³ 8 hours. Form: mist STEL: 10 mg/m³ 15 minutes. Form: mist **EU OEL (Europe).** TWA: 5 mg/m³ 8 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist
Distillates (petroleum), hydrotreated heavy naphthenic	**Limit values (Belgium, 5/2021). [Mineral oils]** TWA: 5 mg/m³ 8 hours. Form: mist STEL: 10 mg/m³ 15 minutes. Form: mist **EU OEL (Europe).**

SECTION 8: Exposure controls/personal protection

	TWA: 5 mg/m³, (oil Mist)

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Distillates (petroleum), hydrotreated heavy naphthenic	DNEL	Long term Oral	0.74 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.97 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.19 mg/m³	General population	Local
	DNEL	Long term Inhalation	2.73 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	5.58 mg/m³	Workers	Local
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	DNEL	Long term Oral	0.33 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.58 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	2.35 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	33.33 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	66.7 mg/kg bw/day	Workers	Systemic

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

SECTION 8: Exposure controls/personal protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves tested to EN374. Recommended: < 1 hour (breakthrough time): nitrile rubber 0.17 mm. Provide employee with skin care programmes.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Boiling point > 65 °C: A1; Boiling point < 65 °C: AX1; Hot material: A1P2.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [Oily liquid.]

Appearance : Clear.

Color : Yellow

Odor : Characteristic.

Odor threshold : Not available.

Melting point/freezing point : Not applicable.

Pour point : <-24°C (<-11.2°F) [ASTM D 97]

Initial boiling point and boiling range : >300°C (>572°F)

Flammability : Not applicable.

Lower and upper explosion limit : Not available.

Flash point : Open cup: >200°C (>392°F) [ASTM D 92]

Auto-ignition temperature : >300°C (>572°F)

Decomposition temperature : >300°C

pH : Not applicable.

Viscosity : Kinematic (40°C (104°F)): 170 mm^2/s (170 cSt) [ASTM D 445]
Kinematic (100°C (212°F)): 16.7 mm^2/s (16.7 cSt) [ASTM D 445]

Solubility(ies) :

Media	Result
cold water	Not soluble
hot water	Not soluble

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Vapor pressure : <0.01 kPa (<0.075006 mm Hg)

SECTION 9: Physical and chemical properties

Density : 0.9 g/cm³ [15°C (59°F)] [ASTM D 4052]

Vapor density : Not available.

Explosive properties : Not applicable.

Oxidizing properties : Not applicable.

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties : Not applicable.

Oxidizing properties : Not applicable.

9.2.2 Other safety characteristics

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : Reactive or incompatible with the following materials:
Strong oxidizing materials

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	LC50 Inhalation Dusts and mists	Rat - Male, Female	5.53 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5000 mg/kg	-
Reaction products of bis (4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	LD50 Oral	Rat - Male, Female	2000 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Q8 T 45 LS 90	123571.2	N/A	N/A	N/A	N/A
Severely refined mineral oil (C15 - C50) * - Not classified.	N/A	N/A	N/A	N/A	5.53
Reaction products of bis(4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	2000	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Severely refined mineral oil (C15 - C50) * - Not classified.	Eyes - Iris lesion	Rabbit	0	48 hours	72 hours
	Eyes - Redness of the conjunctivae	Rabbit	0.33	48 hours	72 hours
	Skin - Edema	Rabbit	0	72 hours	7 days
	Skin - Erythema/Eschar	Rabbit	0.17	72 hours	7 days

Conclusion/Summary : Not available.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Severely refined mineral oil (C15 - C50) * - Not classified.	skin	Guinea pig	Not sensitizing
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	skin	Guinea pig	Sensitizing

Conclusion/Summary : Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Severely refined mineral oil (C15 - C50) * - Not classified.	474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative

Conclusion/Summary : Not available.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	Negative - Dermal - TC	Mouse - Female	-	78 weeks

Conclusion/Summary : Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	Negative	Negative	Negative	Rat - Male, Female	Oral: 1000 mg/kg	-

Conclusion/Summary : Not available.

Teratogenicity

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	Negative - Dermal	Rat	2000 mg/kg	7 days per week

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	Sub-acute LOAEL Oral	Rat - Male	125 mg/kg	13 weeks; 5 hours per day
	Sub-chronic NOAEL Oral	Rat - Male, Female	≥2000 mg/kg	13 weeks; 5 days per week
	Sub-acute NOAEL Inhalation Vapor	Rat - Male	>980 mg/m³	4 weeks; 5 days per week

Conclusion/Summary : Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

SECTION 11: Toxicological information

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	Acute NEL >100 mg/l Fresh water	Algae	72 hours
	Acute NEL >10000 mg/l Fresh water	Daphnia - *Daphnia Magma*	48 hours
	Acute NEL ≥100 mg/l Fresh water	Fish - *Pimephales promelas*	96 hours
	Chronic NEL 10 mg/l Fresh water	Daphnia - *Daphnia magna*	21 days

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl	-	17.4 % - 28 days	-	-
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	-	17.4 % - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Severely refined mineral oil (C15 - C50) * - Not classified.	-	-	Inherent
Distillates (petroleum), hydrotreated heavy naphthenic	-	-	Inherent
Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl	-	-	Not readily
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	-	-	Not readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl	9.4	-	High
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	9.4	-	High

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

May cause endocrine disruption.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Substance of equivalent concern for environment	Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	Listed	-	-
Endocrine disrupting properties for environment	reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) (with ≥ 0,1 % w/w 4-heptylphenol, branched and linear)	Listed	57	01-05-2022

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Substance of equivalent concern for environment	Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	Candidate	-	-
Endocrine disrupting properties for environment	reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl)	Recommended	ED/01/2018	01-10-2019

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

No listed substance

SECTION 15: Regulatory information

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

Germany

Hazard class for water (WGK) : 2

Switzerland

VOC content : Exempt.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Eurasian Economic Union : **Russian Federation inventory**: Not determined.

Japan : **Japan inventory (CSCL)**: All components are listed or exempted.
Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Republic of Korea : All components are listed or exempted.

Taiwan : All components are listed or exempted.

Thailand : Not determined.

SECTION 15: Regulatory information

Turkey : Not determined.

United States of America : All components are active or exempted.

Viet Nam : Not determined.

15.2 Chemical Safety Assessment : Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ASTM = American Society for Testing and Materials
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DIN = German Institute for Standardization
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EC = European Commission
EC50 = Half maximal effective concentration
EN = European Standard (Norm)
EUH statement = CLP-specific Hazard statement
GHS - Globally Harmonized System of Classification and Labeling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IC50 = Half maximal inhibitory concentration
IMDG = International Maritime Dangerous Goods
IMO = International Maritime Organisation
ISO = International Organization for Standardization
LC50 = Median lethal concentration
LD50 = Median lethal dose
LOAEL / LOAEC = Lowest Observed Adverse Effect Level / Concentration
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
NOAEL / NOAEC = No Observed Adverse Effect Level / Concentration
NOEL / NOEC = No Observed Effect Level / Concentration
OECD = Organisation for Economic Co-operation and Development
OEL = Occupational Exposure Limit
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS = Safety Data Sheet
SVHC = Substances of Very High Concern
STEL = Short Term Exposure Limit
TLV = Threshold Limit Value
TWA = Time Weighted Average
UFI = Unique Formula Identifier
UN = United Nations
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

SECTION 16: Other information

The mineral base oils contained in this product are severely refined and contain less than 3% DMSO extract according to IP 346 method, and are therefore not classified as carcinogen according to Regulation (EC) No 1272/2008, note L.

Note L: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 "Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Full text of abbreviated H statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1B	SKIN SENSITIZATION - Category 1B

Training advice : Ensure operatives are trained to minimise exposures.

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Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.