SITE CONDITION REPORT TEMPLATE

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

COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION

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

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

1.0 SITE DETAILS

Name of the applicant	Fine Organics Limited
Activity address	Fine Organics Seal Sands Facility Seal Sands Road Middlesbrough Cleveland TS2 1UB
National grid reference	NZ532242

Document reference and dates for Site Condition Report at permit application and surrender	PP3439GG_FOL_SCR Update PP3439GG_FOL_Variation Application V008 Prepared June 2026 Supporting documents: •5 Year Groundwater Monitoring Report (Geosyntec, April 2023) •Environmental Risk Assessment – FCM Process (2026)

Document references for site plans (including location and boundaries)	PP3439GG_FOL_Site Plan_SL-0-1605-C

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

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

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

2.0 Condition of the land at permit issue

Environmental setting including: • geology • hydrogeology • surface waters	The site is located at Seal Sands, an industrialised area on Teesside. Groundwater occurs in made ground deposits overlying estuarine sediments. Groundwater flow is inferred to be from west to east / south-east towards the River Tees. There is no evidence of significant tidal influence on groundwater flow. A localised shallow groundwater recharge feature has been identified in the vicinity of the site effluent/surface water storage basin ("Cathedral"). This feature has been consistently observed in 2003, 2018 and 2023 monitoring and results in localised groundwater mounding. The monitoring report notes that this feature is not necessarily indicative of leakage from the structure and is not associated with contamination.

Pollution history including: • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures	The site has historically been used for chemical manufacturing since the 1970s (with previous operators also). Records indicate that no significant pollution incidents (2007 – present) have resulted in contamination of unmade ground. All recorded losses have been contained within secondary containment or hardstanding areas draining to effluent treatment systems.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	A site wide baseline investigation undertaken in 2003 identified groundwater contamination associated with historic site activities, particularly within the tank farm areas. Subsequent monitoring in 2018 and 2023 demonstrates: •Significant improvement in groundwater quality between 2003 and 2018 •Stable conditions between 2018 and 2023
Baseline soil and groundwater reference data	Baseline groundwater reference data is available from: •2003 baseline investigation •2018 Soil and groundwater monitoring •2023 Groundwater monitoring Groundwater monitoring is undertaken at least every 5 years and soil monitoring every 10 years in line with the requirements of EPR/PP3439GG. Groundwater quality is characterised by localised contamination including: Volatile organic compounds (e.g. dichloromethane, toluene, MTBE, xylenes) and Petroleum hydrocarbons (TPH). The primary source of contamination is historic losses associated with the WS1 and WS2 tank farm areas. Contaminant distribution is spatially limited, with highest concentrations in the tank farm and downgradient areas. The wider site exhibits low or trace concentrations. There is no evidence of ongoing contamination arising from current site activities. Observed contaminant trends, magnitudes and spatial distribution are consistent with historic sources predating current operations. Groundwater conditions have remained stable between 2018 and 2023.
Supporting information	• 5-Year Groundwater Monitoring Report (April 2023) • Historical baseline report (2003) • 2018 Groundwater & Soil Monitoring Report • Site plans and monitoring well locations

3.0 Permitted activities	
Permitted activities	The installation is permitted for the manufacture of organic chemicals and associated activities including: •Bulk storage and handling of materials •Operation of utilities and abatement systems The permit variation introduces the manufacture of Flocoumafen (FCM) within existing facilities. No change to installation boundary is proposed. A detailed Environmental Risk Assessment has been undertaken for the proposed process. This identifies hazardous substances, assesses potential pollutant linkages and demonstrates that risks to soil and groundwater are low and appropriately controlled.
Non-permitted activities undertaken	
Document references for: • plan showing activity layout; and • environmental risk assessment.	PP3439GG_FOL_Variation Application V008 Details the Environmental Risk Assessment for FCM process.

Note:

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

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

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

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

4.0 Changes to the activity	
Have there been any changes to the activity boundary?	No changes to the activity boundary.
Have there been any changes to the permitted activities?	A new manufacturing process, FCM, to be introduced at the installation.
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	Yes. • Flocoumafen, • 1,2-dichloroethane (EDC) • Methanol • 4-hydroxycoumarin • Tetralol ether. A full inventory and assessment of hazardous substances is provided within the Permit Variation Application V008. The Environmental Risk Assessment demonstrates that although relevant hazardous substances are present, there are no credible pollutant pathways to soil or groundwater due to: •Fully enclosed process systems •Bunded storage •Controlled drainage to effluent treatment •Established management systems and spill response procedure Therefore, the proposed variation does not introduce a significant risk of contamination to groundwater / soil / land.
Checklist of supporting information	•PP3439GG_FOL_Variation Application V008 •PP3439GG_FOL_Confidential Document_Substance Hazard Classification

4.1 Identification and Assessment of Relevant Hazardous Substances (IED Article 22 / Schedule 7 Assessment)	
4.1.1 Introduction	In accordance with Article 22 of the Industrial Emissions Directive (IED), Schedule 7 of the Environmental Permitting Regulations 2016, and EC Commission Guidance on baseline reporting (2014/C 136/03), an assessment has been undertaken to: • Identify hazardous substances associated with the proposed FCM process • Determine which substances constitute Relevant Hazardous Substances (RHS) • Assess whether these substances have the potential to cause soil and/or groundwater contamination
4.1.2 Stage 1 – Identification of Hazardous Substances	The proposed FCM process introduces the following hazardous substances: • Flocoumafen (final product) • 1,2-dichloroethane (EDC) • Methanol • 4-hydroxycoumarin • Tetralol ether These substances are handled as raw materials, intermediates, or products within the process.
4.1.3 Stage 2 – Identification of Relevant Hazardous Substances	An assessment of the chemical and physical properties of each hazardous substance associated with the proposed FCM process has been undertaken to determine whether they meet the definition of a Relevant Hazardous Substance (RHS), having regard to their potential to cause soil and/or groundwater contamination. FCM is a solid compound with very low water solubility and low mobility in soil. However, it is highly toxic and persistent in the environment, with the potential to bioaccumulate. Although its capacity to migrate to groundwater is limited, its persistence and toxicity mean that, in the event of a release to ground, it could result in long-term contamination of soils. On this basis, FCM is a Relevant Hazardous Substance. 1,2-dichloroethane (EDC) is a liquid with moderate solubility in water and high mobility in the subsurface. It is a known groundwater contaminant and is toxic to human health and the environment. Due to its ability to migrate readily through soil and dissolve into groundwater, it has a clear potential to cause groundwater pollution if

	released. Accordingly, 1,2-dichloroethane is classified as a Relevant Hazardous Substance. Methanol is a fully water-miscible liquid with very high mobility in the subsurface. Although it is less persistent than chlorinated solvents, it can migrate rapidly through soil and into groundwater and therefore has the potential to give rise to contamination following a loss of containment. Methanol is therefore also considered to be a Relevant Hazardous Substance. 4-hydroxycoumarin is a solid with low solubility and limited mobility in soil. While it exhibits moderate toxicity, its physical properties suggest a relatively low potential for migration to groundwater. However, in the event of direct release to soil, localised contamination could occur. It is therefore considered a potential Relevant Hazardous Substance, although of lower concern compared to more mobile compounds. Tetralol ether is an organic liquid with low to moderate solubility and moderate mobility in the subsurface. Although detailed environmental fate data is limited, its chemical nature indicates that it could persist in soils and has the potential to migrate under certain conditions. On a precautionary basis, it could be considered as a potential Relevant Hazardous Substance. In summary, based on their properties, Flocoumafen, 1,2-dichloroethane and methanol are classified as Relevant Hazardous Substances (RHS) due to their toxicity, mobility and/or persistence. The other two hazardous substances could be included as a precaution; however, they are not definitively classified as RHS'.
4.1.4 Stage 3 – Assessment of Potential for Soil and Groundwater Contamination	**Potential pollution linkages; Source → Pathway → Receptor** **Sources** • Chemical storage tanks • Process vessels and pipework • Transfer operations **Pathways** • Loss of containment from tanks/ vessels / during transport operations • Infiltration through hardstanding defects • Migration through made ground to shallow groundwater

	Receptors
	• Shallow groundwater beneath site
	• River Tees via groundwater flow
	
	Assessment of Pollutant Linkages
	The assessment considers a reasonable worst-case scenario, including failure of primary containment.
	
	• **1,2-Dichloroethane and methanol**
	  ○ High mobility → capable of migrating to groundwater
	• **FCM**
	  ○ Low mobility but high persistence → may accumulate in soils if released
	
	In addition, the potential for releases of lower mobility substances such as 4-hydroxycoumarin and Tetralol ether has been considered. Due to their lower solubility and limited mobility, any release would be expected to result in localised contamination within shallow soils rather than significant migration to groundwater. Nevertheless, the same engineered containment systems, impermeable surfacing and drainage controls apply, such that the potential for these substances to reach underlying soils or groundwater is appropriately controlled.
	
	Controls
	• All substances are handled within fully enclosed systems
	• Storage is bunded (≥110% capacity)
	• Site operational areas = impermeable hardstanding
	• Drainage routes liquids to controlled systems
	
	Stage 3 Conclusion
	Although intrinsic properties of RHS' indicate potential to contaminate soil/groundwater, the combination of engineering controls, site infrastructure and operational management systems means that no credible pollutant linkages are established under normal or reasonably foreseeable conditions.
	
	Whilst the likelihood is low due to controls, a pathway can't be fully ruled out under abnormal conditions. The site operates established emergency response procedures, including spill containment, incident response and staff training, which are designed to manage abnormal events and minimise the potential for releases to reach soil or groundwater.

4.1.5 Baseline Reference Condition and Monitoring Requirements	Baseline soil and groundwater conditions at the site are well characterised through: • 2003 baseline investigation • 2018 soil/groundwater monitoring • 2023 groundwater monitoring This dataset provides a robust reference condition against which future changes can be assessed (the next groundwater and soil monitoring will be completed in 2028, in line with permit conditions). Given that Relevant Hazardous Substances have been identified, there is no credible pollutant linkages and existing baseline data is comprehensive – there is no requirement to complete additional baseline investigation or monitoring to support this permit variation.

5.0 Measures taken to protect land	
A range of engineering, operational and management controls have been implemented during the life of the permit to protect soil and groundwater. These measures include: •Storage of hazardous substances within engineered containment systems, including bunds with a minimum capacity of 110% of tank volume •Impermeable surfacing across process, storage and handling areas •Drainage systems designed to collect and route all surface water and process effluent to on-site effluent storage which is transferred to offsite ETP •Use of enclosed transfer systems and dedicated pipelines to minimise the risk of releases •Implementation of an Environmental Management System (EMS), certified to ISO 14001, including procedures for inspection, maintenance and incident response •Routine inspection / maintenance of tanks, pipelines, bunds and drainage infrastructure Inspection and maintenance records indicate that pollution prevention measures have been effectively implemented and maintained throughout the life of the permit. Groundwater monitoring undertaken in 2018 and 2023 demonstrates that groundwater conditions have remained stable over time and do not indicate deterioration resulting from current site operations. Where contamination is present, it is consistent with historic sources predating current operations.	
Checklist of supporting information	•Inspection records and summary of findings of inspections for all pollution prevention measures •Records of maintenance, repair and replacement of pollution prevention measures

6.0 Pollution incidents that may have had an impact on land, and their remediation	
Site records covering the period 2007 to present identify a number of minor losses of containment incidents involving process materials. These include, for example: •Minor leaks from valves, hoses, or instrumentation •Spills during transfer or handling operations In all cases: •Releases were contained within secondary containment systems (bunds) or on impermeable hardstanding •No releases to unmade ground were recorded •No remediation was required The incidents were investigated and corrective actions were implemented where necessary to prevent recurrence. There is no evidence that any recorded incidents have impacted soil or groundwater at the site. This is supported by groundwater monitoring data, which shows stable conditions over time and no indication of deterioration attributable to operational activities.	
Checklist of supporting information	•Records of pollution incidents that may have impacted on land •Records of their investigation and remediation

7.0 Soil gas and water quality monitoring (where undertaken)	
Groundwater and soil monitoring has been undertaken at the installation in accordance with EPR requirements, with periodic monitoring carried out at least every five years (groundwater) and ten years (soil). The most recent groundwater monitoring event was undertaken in 2023, comprising sampling of a network of shallow groundwater monitoring wells across the site. Monitoring results confirm that groundwater quality at the site is characterised by: •Localised contamination by volatile organic compounds (VOCs), including dichloromethane (DCM), methyl tert-butyl ether (MTBE), toluene and xylenes •Occasional detections of petroleum hydrocarbons (TPH) •Generally low or non-detect concentrations across the wider site The spatial distribution and composition of contaminants are consistent with historic sources, particularly associated with the WS1/2 tank farm areas. Comparison of data collected in 2003, 2018 and 2023 demonstrates that: •Groundwater quality improved significantly between 2003 and 2018 •Groundwater conditions have remained broadly stable between 2018 and 2023 There is no evidence of widespread deterioration in groundwater quality attributable to current site operations. Localised changes identified during the 2023 monitoring event, including elevated dichloromethane in one monitoring location and the detection of cis-1,3-dichloropropene in the tank farm area, are limited in extent and subject to ongoing review. These do not indicate a site-wide deterioration in groundwater conditions. The groundwater monitoring report concludes that the nature, distribution and magnitude of contamination are consistent with historic sources, and do not suggest ongoing losses from current site activities. Overall, the available monitoring data demonstrates that the condition of the land has not deteriorated as a result of permitted activities.	
Checklist of supporting information	•5-Year Groundwater Monitoring Report (April 2023) •Historical baseline report (2003) •2018 Groundwater & Soil Monitoring Report •Site plans and monitoring well locations

8.0 Decommissioning and removal of pollution risk	
N/A for this report	
Checklist of supporting information	□N/A for this report

9.0 Reference data and remediation (where relevant)	
N/A for this report	
Checklist of supporting information	•N/A for this report

10.0 Statement of site condition
This SCR update supports a variation to Environmental Permit EPR/PP3439GG. Baseline groundwater and soil data from 2003, 2018 and 2023 demonstrates that contamination is localised and associated with historic activities predating current operations. Monitoring shows that groundwater quality improved between 2003 and 2018 and has remained stable since, with no evidence of deterioration attributable to permitted activities. The existing monitoring data provides a robust baseline reference condition. Operational incidents have been minor, contained within engineered systems, and have not impacted soil or groundwater. Appropriate measures to protect land, including containment, impermeable surfacing and controlled drainage, are in place and effective. The Environmental Risk Assessment confirms that, although hazardous substances are used, there are no credible pollutant pathways to soil or groundwater. It is therefore concluded that: •The condition of the land has not deteriorated because of permitted activities •The site is in a satisfactory state •No additional soil/groundwater monitoring is required to support this permit variation