



**FOYLE MEATS
MELTON RD
SIX HILLS
MELTON MOWBRAY
LE14 3PR**

Environmental Permit Application

Emissions to Surfacewater

Document Ref: Attachment B.3.3

EMISSIONS TO SURFACE WATER

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1.0 DESCRIPTION OF EMISSIONS TO SURFACE WATER

There are three possible options to discharge the surface water runoff in accordance with requirement H3 of the Building Regulations 2002. Rainwater shall discharge to one of the following, listed in order of priority:

- an adequate soak-away or some other adequate infiltration system; or, where that is not reasonably practicable,
- a watercourse or where that is not reasonably practicable,
- a sewer.

It is necessary to identify the most appropriate method of controlling and discharging surface water. The design should seek to improve the local runoff profile by using systems that can either attenuate runoff and reduce peak flow rates or positively impact on the existing surface water runoff.

This site consists of a meat production factory. The surface water runoff from the site currently discharges to a stream. The existing drainage infrastructure at the site effectively manages surface water runoff that arises at the site.

There are three primary methods of disposal of surfacewater at the site:

1. [Directly to Ground](#)

This includes rainwater that falls upon the porous green area comprising of grass and upon the porous hardstand comprising of compacted hardcore stone material. Rainwater from the maintenance workshop also goes directly to ground via the porous hardstand.

2. [Effluent Sump or Truck-wash Sump](#)

This includes rainwater that falls upon the non-porous hardstand, comprising of poured concrete, is captured in the dirty yard drainage network and directed to either the Effluent Sump or the Truck-wash Sump for storage before removal off-site.

3. [Discharge to Surfacewater via SW-1](#)

This includes rainwater that falls upon the non-porous hardstand, comprising of poured concrete, is captured in the clean yard drainage network before entering the final discharge chamber at the western site boundary. Additionally, rainwater from the main production building is captured by guttering and downpipes, which are connected to the same clean yard drainage network.

The site is considering harvesting the clean rainwater from the main production building for cleaning purposes.

The site is located in a Groundwater Vulnerable Zone designated as "low". See Attachment B.2.3.B for further details.

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2.0 SURFACE WATER CONTRIBUTION

The average annual rainfall for the Melton Mowbray area is 0.72m meters per year.

Table 2.1: Average Annual Discharge per Catchment Area

Catchment	Discharged	Area M²	Average Annual Discharge M³
Dirty Yard	Storage in the Effluent Sump or Truck-wash Sump	3,120	2,250
Porous Hardstand	Directly to Ground	6,777	4,886
Green Areas	Directly to Ground	8,562	6,173
Roof Area 2	Directly to Ground via Pours Hardcore	145	105
Clean Yard	Discharge to surfacewater via SW-1	2,676	1,929
Roof Area 1	Discharge to surfacewater via SW-1	2,360	1,702
TOTAL via SW-1		5,036	3,631

See **Appendix C** for map of indication of catchment areas.

3.0 MONITORING OF EMISSIONS

Surface water run-off is not analysed by the site, as the site does not have a discharge licence.

This site also has a surfacewater specific operational procedure as part of their environmental management system entitled EMS OP05 – Surfacewater Protection Procedure, as per Appendix E below.

‘The purpose of this procedure is to identify methods of minimising unregulated discharges to surface water drains.’

Using internal audits and site checklists, designated personnel inspect the site and walk through every area, checking each item for wear, damage and function, ensuring that everything is in good working order, safe and ready to use.

If a fault or defect is found, the auditor reports the details using the Non-Conformance Log (EMS ER-07) and advises the site Environmental Manager.

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4.0 POTENTIAL CONTAMINATION

See Appendix B for the surface water drainage map of site.

Bulk chemicals and fuels are stored on bunds or on spill pallets. All chemicals are used in smaller quantities throughout the site.

Chemicals are stored or only used in area containing non-pours hardstand (i.e. concrete).

The following response procedures are in place which relate to surfacewater:

- OP01 Operational Control
- OP04 Disposal of Waste
- OP05 Surface Water Protection
- OP08 Receipt of Bulk Liquids
- OP09 Bund Inspection
- OP10 Legionella Procedures
- OP11 Spillage Response Procedure

Spill Kits

Spill kits for aggressive liquids (chemicals, acids, alkalis and solvents) are strategically placed around the site.

The contents of all spill kits are regularly inspected and is also included as part of the Site Inspection Procedure audit.

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5.0 DISCHARGE LOCATIONS

There is one discharge location for surfacewater generated on-site referenced SW-1.

Only a small volume of the surface-water, approximately 21.3%, generated at the site is collected by a clean surfacewater drainage network, which is then directed to the final surfacewater discharge chamber (SW-1) located at the at the western site boundary.

Table 5.1: List of Discharge Points

Reference	Description	Grid Reference
SW - 1	Surfacewater final discharge chamber, at the western site boundary.	SK 64546 21027

Grid Ref Source: <https://gridreferencefinder.com/>

Surfacewater from this final discharge chamber flows to the Kingston Brook stream, located approx. 150m to the west of the site boundary, via a culvert that passes under the A46 roadway.

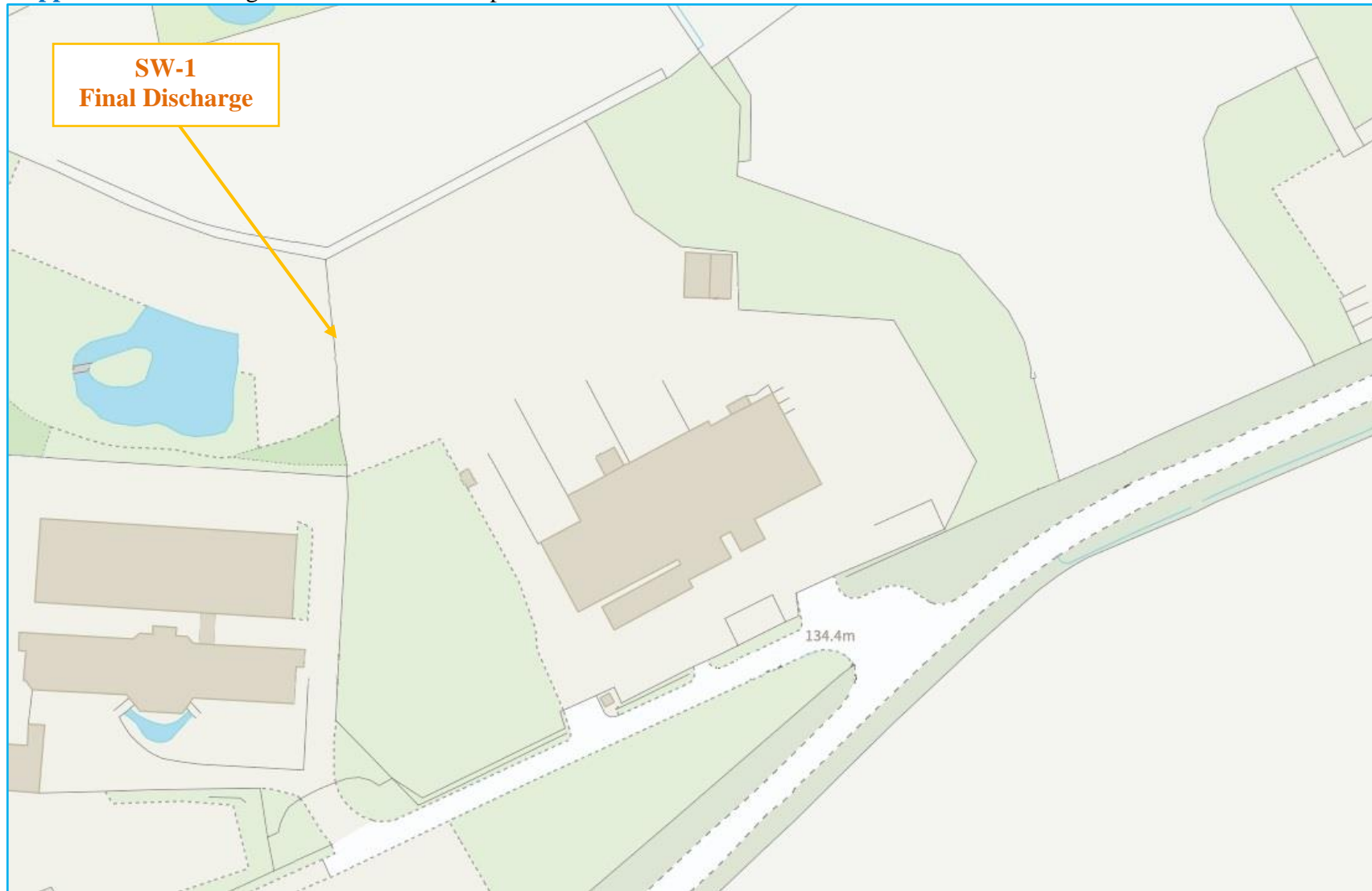
Surface-water from the Six Hills Ln (B676) road to the south of the site, and from the adjacent ditches, also discharge to the Kingston Brook stream via a new culvert that passes within the site boundary.

This runs from the south-eastern corner of the site in a north to north-westerly direction before turning west to north-westward towards the western site boundary.

See Appendix D for Photo Log.

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Appendix A: Discharge Points Locations Map



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Appendix B.1: Foyle Meats – Melton Mowbray Site Drainage Plan 1



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Appendix B.2: Foyle Meats – Melton Mowbray Site Drainage Plan 2



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Appendix C: Surface Water General Catchment Areas



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Appendix D: Photo Log



Figure D.1: Final Discharge Chamber SW-1



Figure D.2: Six Hills Ln Surface Drain



Figure D.3: Six Hills Ln Ditch Drain



Figure D.4: New Under Site Culvert – Start 1


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Figure D.5: New Under Site Culvert – Start 2



Figure D.6: New Under Site Culvert – Final Manhole

	Environmental And Energy Procedures Manual For Operational Control			
	Issue No.	1	Procedure Ref:	OP 05
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Procedure:	Surface Water Protection		Page No.	1 of 1

PURPOSE

The purpose of this procedure is to identify methods of minimising unregulated discharges to surface water drains.

RESPONSIBILITY

The Environmental Manager is responsible for the maintenance and implementation of this procedure.

SCOPE

This procedure is designed to cover all areas of the site.

PROCEDURE

All materials delivered to or leaving the site, will be handled in a manner to minimise the potential risk of contamination of the drainage system.

Vehicles will be offloaded, and items moved around the site on pallets by a Fork truck. The pallet will be transported at just above ground level.

All raw materials shall be offloaded in the correct location as designated by the Environmental manager. Waste materials are subject to the Procedure for the Disposal of Waste. Oil is delivered by tanker and stored in a bunded tank. Delivery of oil and other materials is the subject of the Procedure for the Receipt and Storage of Chemicals and Oils.

It is the responsibility of the Department Manager to ensure that employees, who are involved in vehicle unloading and movement of potentially polluting chemicals around the site, are made aware of safe handling procedures and comply with them.

In the event of an incident which could result in the release of chemicals or oils to the drainage system, appropriate action shall be taken immediately, according to the Emergency Response Procedure and EPA guidance.