Asset Management
Asset Standard
Odour Management Plan

Iver South SDC

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Next Review	October 2025	

0 Document Control & Procedures

0.1 Contents

Figures and Tables:

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For further information/advice, please e-mail: am.standards@thameswater.co.uk.

Owner Review Requirements

Document to be reviewed when any changes are made to the site or processes.

Local Review Requirements

Site Manager should be informed when handwritten amendments are made to this document.

Revision No	Reason for Revision	Prepared by	Approved by	Date
1.1	Update	[redacted]	[redacted]	Jan 2007
1.2	Update	[redacted]	[redacted]	Feb 2008
1.3	Update	[redacted]	[redacted]	June 2010
1.4	Update	[redacted]	[redacted]	Aug 2011
1.5	Update to H4 Guidelines	[redacted]	[redacted]	Nov 2011
1.6	Consistency with other OMPs	[redacted]	[redacted]	Oct 2012
1.7	Annual review	[redacted]	[redacted]	Oct 2013

Revision No	Reason for Revision	Prepared by	Approved by	Date
2.0	Conversion of OMP into new Standard format	[redacted]		October 2014
3.0	Review and update of OMP	[redacted]	[redacted]	September 2017 (Revised Draft)
4.0	Review and update of OMP	[redacted]	[redacted]	October 2024

0.4 Sign Off

Technical Lead	Asset Standards Team	Date: October 2024
Bioresources Manager	[redacted]	Date: October 2024
Performance Manager	[redacted]	Date: October 2024

0.5 Glossary of Terms

TERM	DESCRIPTION
CFT	Centrifuge Feed Tank
CoTC	Certificate of Technical Competence
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
EHO	Environmental Health Officer
EPR	Environmental Permitting Regulations
HACCP	Hazard Analysis and Critical Control Points
ICA	Instrumentation Control & Automation
OCU	Odour Control Unit
OOHC	Out of Hours Coordinator
OMP	Odour Management Plan
PM	Performance Manager
Receptors	Sensitive receptors are any fixed buildings or installations where odour annoyance may occur, such as residential homes, schools, hospital, offices, shops or garden centres. Open areas such as playgrounds and public footpaths should also be listed where these are known to have been affected by odour.
SAP	SAP is the Thames Water IT system for all finance and HR electronic processes

TERM	DESCRIPTION
SCADA	Supervisory Control And Data Acquisition
SDC	Sludge Dewatering Centre
SHT	Sludge Holding Tank
SOM	Site Operating Manual
STW	Sewage Treatment Works
TW	Thames Water
UWWTD	Urban Wastewater Treatment Directive
WOCC	Waste Operations Control Centre

1 Introduction

This Odour Management Plan (OMP) forms part of the Best Operating Practice (BOP) for Iver South Sludge Dewatering Centre (SDC) and Environmental Management System (EMS). A key related document is the Site Operating Manual (SOM); this document can be found in the Iver South SDC administration building and on Thames Water's EMS SharePoint. Other key related documents are the Environmental Management System itself and associated Accident Management Plan.

The purpose of this OMP is to define how the potential and actual generation of odour from Iver South Sludge Dewatering Centre (SDC) are identified, and how, as far as is reasonably practicable, they are controlled and recorded. It is primarily a management guide; detailed procedures are contained within the SOM referred to above.

This OMP is an operational document that has been developed following a review of the potential risk areas for odour release. It details operational and control measures appropriate to the reduction or elimination of the impact of odours from the sludge dewatering centre. It provides detail to allow operators and maintenance staff to understand the operational procedures for both normal and abnormal conditions.

This OMP was updated in 2024 to take account of changes to the standard rules SR2008 No. 19 permit. The SDC no longer meets the criteria for a standard rules permit and requires a bespoke permit under the Environmental Permitting Regulations (EPR) 2016 (as amended).

For known Odour Risk and Environmental Permitted sites (environmental permit under the Environmental Permitting Regulations 2016 relating to the import of non-hazardous sludges, any other permitted activity, with the potential to increase odour) this OMP will be reviewed at least annually, or sooner, if any of the following occur:

- If the site acquires any other permitted activity with the potential to increase the risk of odour off site.
- When significant changes are made to the site which may affect odour, e.g. capital spend, changes to the permitted activities.
- As a result of a change in pattern of odour complaints, increase in public concern and as soon as possible after a significant incident.
- When the site Process Manager changes.
- If there is a material change in relevant regulations or guidance.
- If there is an odour release incident.
- If a contingency measure is triggered.

Operationally, changes to local practices are captured in the SOM as part of the periodic reviews of this document. Changes following review of this Odour Management Plan may also impact on the SOM and will likewise be addressed at SOM reviews.

This OMP is stored electronically within the EMS SharePoint.

A hard copy is kept on site within the Site Operating Manual.

Regulatory Framework

Where this Odour Management Plan relates to sludge dewatering activities regulated under the Urban Wastewater Treatment Directive (UWWTD) this OMP may still draw upon elements of best practice taken from H4, but this should not be inferred as H4 being applicable to this location.

The following guidance has been used to inform the contents of the OMP where it relates to activities regulated under EPR through the SDC permit. This guidance does not apply to UWWTD activities:

- Environment Agency – How to comply with your permit – H4 Odour Management, March 2011 (H4)

The Environmental Permit covers the reception of non-indigenous sludge waste. The remainder of the treatment process is covered by the Urban Wastewater Treatment Directive (UWWTD). The Odour Management plan has been structured to distinguish between the two regulatory regimes, which are fully described in the Site Information chapter.

Copies of the Odour Risk Assessment, Odour Improvement Plan, Customer Communications Plan, Environmental Permit Activities and Site Drawings are included as Appendices 1-5.

Copies of forms in respect to H4, if required by the Local Authority or Environment Agency, are included in Appendix 4.

2 Site Information

2.1 Location and Receptors

Site Address:

Iver South Sludge Dewatering Centre
Lakeside Road
Colnbrook
Buckinghamshire
SL3 0ED

The Iver South SDC (Sludge Dewatering Centre) plant is located at the end of Lakeside Road, off the A4, just beyond the M25. The plant de-waters digested sludge that has been pumped from Mogden STW and has been built on the site of the previous Iver South STW. Sewage from the Iver South catchment area is returned to Mogden STW from a pumping station at Iver South SDC, along with wastewater from the de-watering process.

The catchment area that serves the return pumping station at Iver South SDC consists of Riching Park and Colnbrook Pumping Stations and Lakeside Road Pumping Station, which collects sewage from the Lakeside Industrial Estate and surface water from the Iver South SDC.

(For Site Location Map see Appendix 5.)

Receptors

The nearest receptors are given in Table 2.1:

Table 2.1 - Location of potentially sensitive odour receptors.

Receptor Address	Receptor type	Approximate distance to the nearest site boundary (m)	Direction from the site.
M4	Drivers	50m	To the north
Lakeside Road, Colnbrook, Buckinghamshire	Industrials	200m	To the east and to the south
Old Slade Lane, Iver, Buckinghamshire	Residential properties	200m	To the north

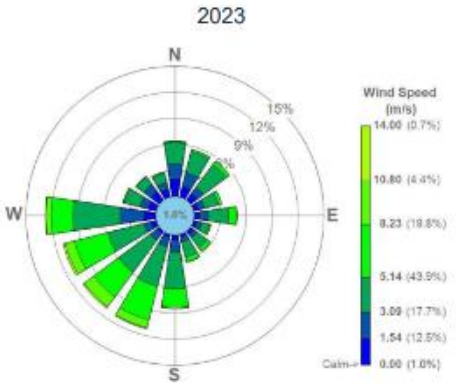
Off-site sources of odour

There is a waste incinerator facility at the entrance of Lakeside Road, which could potentially be a source of odour.

2.2 Wind Rose and Weather Monitoring

The Heathrow meteorological station located approximately 4 km southeast of the SDC, is considered the closest most representative meteorological monitoring station to the site. Data is recorded at the meteorological station in hourly measurements and the figure below represents the relationship between the frequency and speed of wind from compass point directions for 2023. The figure illustrates the predominant wind direction to be south-westerly, which means receptors northeast of the site would have the highest probability of experiencing potential increases in odour emissions.

Figure 2.2 – 2023 Wind Analysis



2.3 Layout and Treatment Processes

Details of the site layout and treatment processes are given in the following sections of the Site Operating Manual and are therefore only given summary attention in this OMP.

Section	Description
1	Governance & Control
2	Location, key layout plans and diagrams. Site services, including power, water, drainage, SCADA and ICA. Consent details, process overview, chemical and waste handling.
3	Detailed description of each treatment process, including sludge and odour control.
4	Maintenance
5	Plant control, monitoring, and logging.

Process Description

2.3.1 Permitted activities plus description

The Environmental Permit covers the reception of non-indigenous sludge waste. Sludge is received from Mogden STW via a pipeline.

- Sludge entering the site is directed to 2 no. Centrifuge Feed Tanks, which are covered and odour controlled.
- The sludge is fed to up to 4 no. de-watering process streams depending on demand. Each stream consists of a feed pump, macerator, polymer-dosing unit and centrifuge.
- The sludge cake is moved to storage bays on the hard standing areas.
- There are 6 no. emergency sludge holding tanks and a further emergency storage lagoon.

(See Appendix 5 for Process Flow Diagram illustrating the treatment phases of the works.)

3 Site Management Responsibilities and Procedures

3.1 Site Roles

Figure 3.1 – Organisational Structure

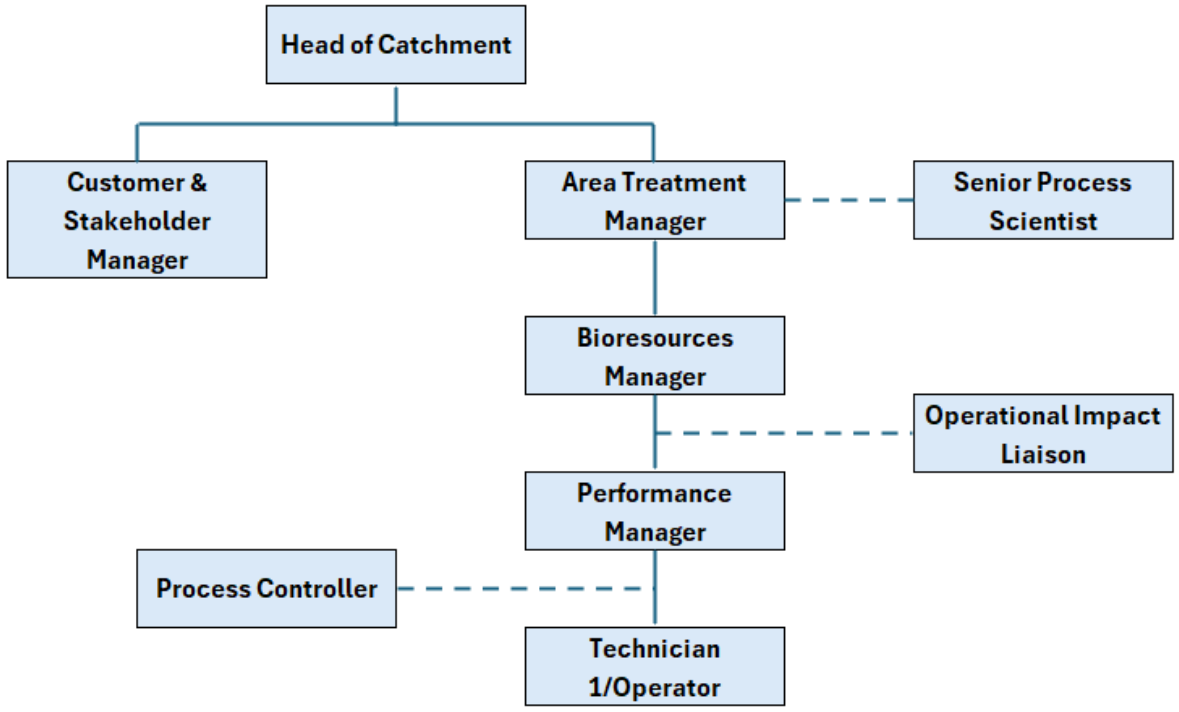


Table 3.1 - Tasks and Responsibilities

Role	Tasks and Responsibilities
Head of Catchment	Responsible for the overall performance of Treatment, Pumping and Network operations within the Catchment.
Area Treatment Manager	Responsible for the performance of Sewage Treatment Works within the Catchment.
Bioresources Manager	Responsible for the performance of sludge treatment assets at Mogden STW and Iver South SDC.
Performance Manager	Responsible for the performance of Iver South SDC, including but not limited to: • Odour control and management at the site • Day-to-day implementation of the OMP • Investigating and resolving customer complaints • Assessing the scope of, and updating, the OMP as it is implemented.

Role	Tasks and Responsibilities
Technician 1/Operator	Day to day duties include maintaining and operating process equipment at the SDC.
Process Controller	Monitoring and controlling process plant at Mogden STW and Iver South SDC.
Senior Process Scientist	Process monitoring, improvement and troubleshooting.
Customer and Stakeholder Manager	Responsible for managing liaison with all external customers and stakeholders in collaboration with the customer centre, escalation team, local govt. liaison team etc.
Operational Impact Liaison	Responsible for supporting the Performance Manager with investigating customer complaints and preparing reports. Manages service contracts for OCU equipment across Mogden STW and Iver South SDC.
Duty Manager	The duty manager is centrally based (off-site) and is responsible for event management across the business.
Customer Centre	Responsible for receiving all customer calls, logging them and passing them to the appropriate operational departments.

The site is manned Monday to Friday from 07:30hrs to 15:30hrs. The Mogden STW Control Room also monitors the Iver South SDC via SCADA out of hours with support from both operations and MEICA call out resource as and when required.

3.2 Key Contacts

Thames Water Website – www.thameswater.co.uk

Role	Name	Email address	Phone Number
Area Treatment Manager	[redacted]	[redacted]	-
Bioresources Manager	[redacted]	[redacted]	-
Performance Manager	[redacted]	[redacted]	-
Customer and Stakeholder Manager	[redacted]	[redacted]	-
Customer Centre	[redacted]	[redacted]	0800 316 9800

3.3 Staff Training

Staff working on site undergo a site induction that is carried out by the Performance Manager. The site induction includes direction to the presence and location of the various operational procedures which include the SOM and the OMP. In addition, site Tech 1's undergo a specific programme of training which covers management of activities on site.

The SDC permit requires that a Technically Competent Manager holding a relevant WAMITAB qualification is in place at the site and meets a weekly site attendance requirement.

All records of staff training are held on the company HR training database in Learning on Tap or within the local Team Skills Register.

4 Odour Critical Plant Operation, Monitoring and Management Procedures

4.1 Odour Sources, Critical Issues and History

Few odour complaints have been received by Thames Water for Iver South SDC over the past 5 years. A temporary liming trial of imported raw cake was undertaken between March and September 2024. The liming trial was concluded on 3rd September 2024 with no current plans to reintroduce the process on site.

An Odour Risk Assessment is included as Appendix 1.

An Odour Improvement Plan is included (where applicable) as Appendix 2.

Critical Odour Issues, Emergency Response and Mitigation Measures are summarised in Table 4.1 (where applicable).

4.2 Identification of Odour Critical Plant

4.2.1 Odour Risk Assessment

An Odour Risk Assessment has been carried out on 28th August 2014 and reviewed October 2024. A copy is included as Appendix 1.

The Odour Risk Assessment is not a 'one-off' exercise but an on-going process. The Odour Risk Assessment should be reviewed whenever the site undergoes an operational or capital change which could significantly affect odour.

It is constructed in the following manner:

- Each part of the treatment process is considered under different operating modes – e.g. normal, failure, abnormal: system overload, summer conditions, maintenance etc.
- The nearest customers to the particular odour source are identified.
- The likely frequency and duration of occurrence for each eventuality is identified.
- A score is assigned to the severity (0 – 5) of odour under each operating mode.
- A score is assigned to the probability (0 – 5) of causing an odour nuisance for each operating mode.
- Multiplying the severity of odour and probability of causing an odour nuisance generates a 'Current Odour Emission Risk' score. Between 0 (zero risk) and 25 (maximum risk), this is used to decide where mitigation should be applied in the short term and determine where in the longer-term enhanced improvement measures are required. Where improvements are identified as necessary (i.e., where suitable mitigation measures are not already in place), entries are made onto the Odour Improvement Plan.
- The need for operational mitigation, enhanced measures and customer communication is stated and brief details given.

4.2.2 Potential Odour Sources

The following list of potential odour sources at Iver South has been identified during the risk assessment (UWWTD & EPR):

- Storm sump (UWWTD)
- Centrifuge feed tanks
- Centrifuges
- Sludge reception, washdown & drainage
- Sludge dewatering
- Liquor return pumping station
- Cake pad and drainage
- Vehicle movements and wash down
- Odour control unit

4.2.3 Odour Critical Plant

Odour critical plant is equipment that may cause off-site odour if not operating correctly. Following the Risk Assessment, the Odour Control Unit within the site is classified as odour critical plant.

4.3 Control Measures

The SOM referred to above complies with Thames Water's Asset Standards – Operating Standards. It states the operational procedures to be followed in order to maintain and operate the plant to agreed company standards. These standards include, where appropriate, procedures for ensuring that generation of odour is kept to a minimum. Refer to risk assessment in Appendix 1 where these measures are summarised as "Normal Mitigation".

4.3.1 Odour Control Unit

The odour control packaged plant system extracts odours from certain areas of the dewatering plant. This includes:

- Centrifuge Feed Tanks
- Storm Sump
- Return Pumping Station

The odour control plant is a two stage Odour Control Unit (OCU), which consists of a biofilter followed by carbon polishing.

The performance of the biofilter is currently under review following recent refurbishment works to the OCU. Information is included within the Odour Improvement Plan as Appendix 2.

The Odour Risk Assessment that considers odour mitigation during abnormal operation of the site is contained as Appendix 1.

4.3.2 Spillages

Spillages significant enough to cause odorous emissions will be cleared as soon as practicable. The person discovering the spillage will act immediately and inform site management if extra resource is required to clear it.

Spill response guidance is also available in the Pollution Prevention Essential standard at Environmental Management System - Pollution Prevention (sharepoint.com).

4.4 Routine Monitoring

Details of routine monitoring tasks are included in the Site Operating Manual.

4.4.1 Performance Checks and Testing

The Odour Control unit is monitored for odour removal performance through an on-line H_2S monitor, which is visible on SCADA within the on-site and Mogden STW Control Rooms.

Routine inspection and testing performed on the OCU are in line with the Asset Standards requirements and are performed on a monthly basis by a specialist contractor.

4.5 Record Keeping

Contractor service reports for the Odour Control Unit are held on SharePoint.

4.6 Emergency Response and Incident Response Procedures

In the event of power failure, the site will run on island mode for critical plant.

Emergencies such as fire, flood and severe weather are managed by Thames Water's Business Resilience and Security team. The processes employed can be found on Thames Water's portal intranet site and are entitled: 'Security and Emergency Risk Management Process' and 'Event Management Procedure'. These are company confidential documents and therefore, are not included in the Appendices of this document.

Hazard reporting and accidents are all recorded on the Health and Safety software database Spheracloud (Safeguard) and monitored by Thames Water's Health, Safety & Wellbeing team.

Absence of key staff does not affect the running of Iver South Sludge Dewatering Centre, as both Managers and/or Tech 1s from Mogden STW can be called upon to cover if required.

Table 4.1 - Summary of Critical Odour Issues, Emergency Response and Mitigation Measures

The purpose of Table 4.1 shall be to identify site specific emergency response procedures and mitigation measures relating to site odour generation and release. It shall include:

- Generic odour issues and mitigation measures relating to site-specific process stages; and,
- Additional site-specific odour issues and mitigation measures associated with process stages identified under the site Odour Risk Assessment.

Odour Critical Plant	Mitigation	Emergency Response
Odour Control Unit (including extraction fans)	Monthly inspection and performance testing by specialist contractor. PPM tasks for specific mechanical and electrical assets as per SAP Maintenance Schedule.	Local Operations and/or MEICA team for first line response to reactive process, mechanical or electrical issues. Escalation to specialist contractor(s) for reactive issues outside of the scope of local operations and/or MEICA team. 3 no. trailer mounted odour suppression units available for emergency deployment from Mogden STW. Capital Maintenance Projects team for asset refurbishment and replacement activities or media replacement in line with Asset Standards.
Odour pipework and covers	Integrity checks as per Asset Standards.	2 no. Centrifuge Feed Tanks can be operated individually if required. Local Operations and/or MEICA team for first line response to reactive process, mechanical or electrical issues. Escalation to specialist contractor(s) for reactive issues outside of the scope of local operations and/or MEICA team. 3 no. trailer mounted odour suppression units available for emergency deployment from Mogden STW.

4.7 Odour Improvement Plan

Items scored in the Odour Risk Assessment with a risk score greater than 10, and where existing operational mitigation measures are not sufficiently robust, will have improvement actions generated to address the odour issues. A copy of the current Odour Improvement Plan is included as Appendix 2.

5 Maintenance and Inspection of Plant and Processes

5.1 Routine Maintenance

5.1.1 General Requirements

Site staff have a schedule to ensure routine maintenance for key mechanical items. In addition, a dedicated maintenance team provide additional support for more specialised equipment.

In addition to the routine operational tasks, planned preventative and reactive maintenance of plant is carried out. Plant which may have an impact on odour release is assigned an appropriate criticality rating to ensure effective performance is maintained. Plant assessed to be odour critical is listed in Section 4.1 above.

When maintenance operations will potentially cause odour problems off site, notification of this work together with the duration will be added to the Customer Centre Bulletin Board, a system that can be interrogated by customer agents when dealing with complaints. Mail shots may also be prepared and issued by the Customer and Stakeholder Manager.

All maintenance is captured on the corporate system SAP, which generates work requests and records completion for the various activities for the treatment process assets.

5.1.2 Maintenance of Odour Control Units

Operation and maintenance of OCUs is delivered in accordance with the Company's Asset Standards. Refer to Odour Control Unit Asset Standards and to the Site Operating Manual.

Comprehensive maintenance procedures are carried out by a specialist contractor on a monthly basis. Condition of the media in the OCU is monitored by performance checks and by additional testing as required.

5.1.3 Records

Maintenance records are held on SAP.

Contractor service reports are held on SharePoint.

5.2 Reporting

Faults identified during routine inspections are included on the service reports which are sent to the Operational Impact Liaison (OIL). Following an assessment by the OIL, tasks within the scope of the local Operations and/or MEICA team are raised with the relevant manager, who assesses criticality before entering the task into the job scheduling system for allocation to an appropriate person and to a timescale appropriate to the criticality. Tasks outside the scope of the local Operations and/or MEICA team are raised via specialist contractor.

5.3 Emergency Repairs

24-hour maintenance cover is available via an on-call rota. Out of hours call outs are raised by the Process Controller at Mogden STW on detection of alarms via SCADA.

Less urgent repairs are assessed for criticality and dealt with during normal working hours.

6 Customer Communications

The Customer Communication Plan, in Appendix 4, is a separate document which identifies how and when contact will be made with customers and stakeholders in relation to stable, unstable and emergency site operation.

6.1 Customer Odour Complaints Process

Customers / residents are encouraged to communicate with the local Thames Water Operations via the Customer Centre to report if they are noticing odour from Iver South Sludge Dewatering Centre, to ensure that all contacts are recorded and actioned.

customer.feedback@thameswater.co.uk with the subject 'Iver South Sludge Dewatering Centre'.

Thames Water Customer Services
Telephone: 0800 316 9800

Thames Water Website – www.thameswater.co.uk The form is called "Report A Problem".

Customer contacts regarding Iver South Sludge Dewatering Centre will be made via the Customer Centre, logged, and passed (directly, or via the WOCC) to the local Operations Team via e-mail. Operations will investigate and take appropriate action.

If the customer/resident would prefer to contact either the environmental services of Buckinghamshire Council, Slough Borough Council or the Environment Agency instead, their contact details are as follows:

Buckinghamshire Council – Environmental Services
https://www.buckinghamshire.gov.uk/environment/environmental-health-and-nuisance/noise-light-smoke-and-smells/how-to-deal-with-nuisance-smells/

Slough Borough Council – Environmental Services
Telephone: 01753 475111 (option 4)

For permitted sites:
Environment Agency Incident hotline: 0800 80 70 60

6.2 Customer Communication Plan

The Customer Communication Plan in Appendix 3 identifies how and when contact will be made with customers and stakeholders in relation to stable, abnormal and emergency site operation.

6.3 Notification of Operations with Potential to Cause an Odour Problem

Where operations may impact on local residents, notification will be made to the Customer Centre who will log the details on their Bulletin Board. This will be used to provide information directly to customers who call with queries. Local mail shots may also be used.

The Environmental Health Officers of Buckinghamshire Council and Slough Borough Council will be contacted directly if there are foreseeable risks of odour generation from process issues or planned maintenance activities (e.g. tank cleaning).

For assets under the SDC permit, we will notify the EA in accordance with the permit conditions and notifications procedure.

If notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, Thames Water shall revise the OMP to identify and mitigate the risks of pollution from odour and submit to the Environment Agency for approval within the specified period.

Appendices

Appendix 1. Odour Risk Assessment

AM-OMP - RA - Iver South SDC - Odour R

Appendix 2. Odour Improvement Plan

Odour Improvement Plan Iver South STW

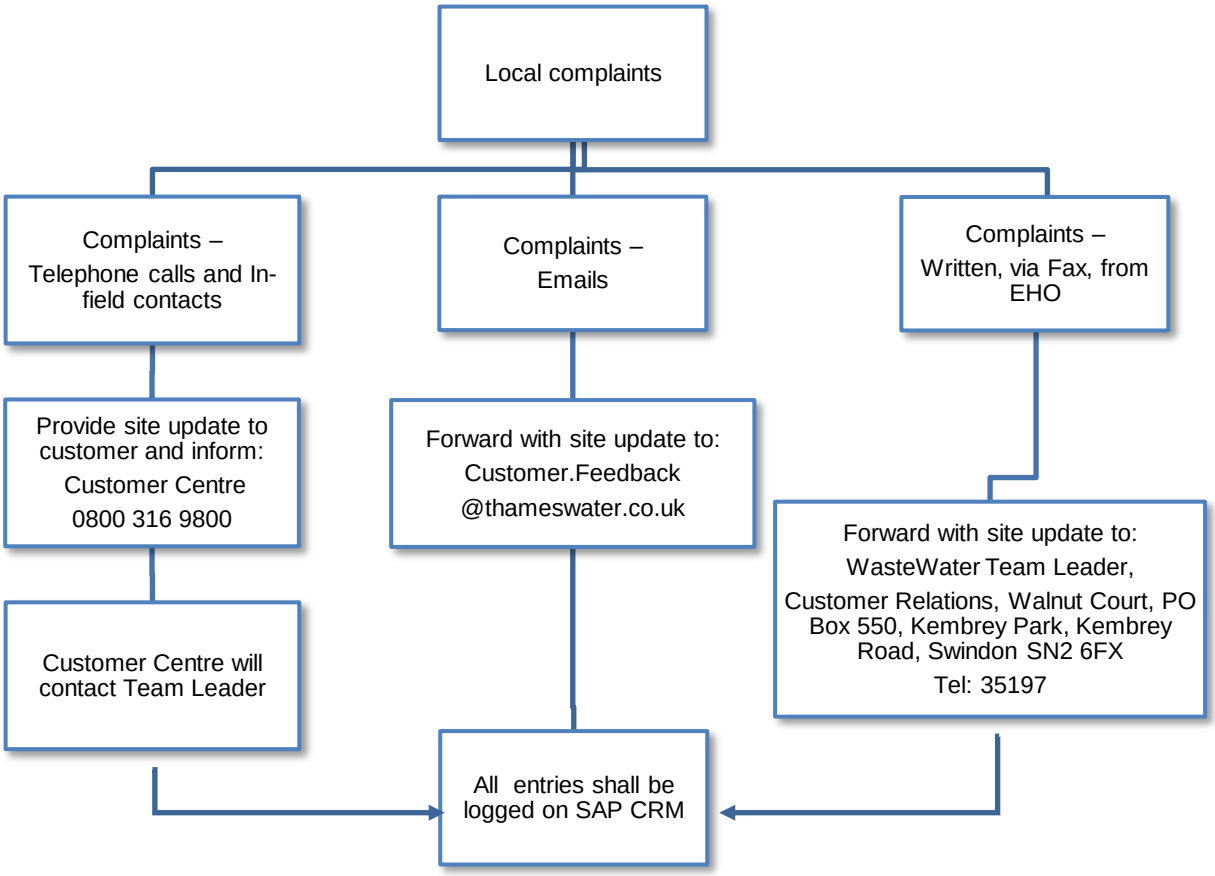
Last Review Date Oct-24

Process Stage	Owner	Plan	Action	Expected difficulties	Measures to mitigate	Timeframe
Odour Control Unit	Operations	Refurbishment	Refurbishment completed in 2023, biofilter currently in bypass for performance testing	Potential for elevated H2S at outlet stack of OCU	Return biofilter to service	To be reviewed in January 2025

Appendix 3. Customer Communications Plan

Complaints Process

All locally received complaints are re-directed to the Customer Centre. Please see below for details.



IMPORTANT NOTE:
Any communications received from the local Member of Parliament or senior council officers need to be forwarded to the Customer and Stakeholder Manager. Name: [redacted] Telephone: [redacted]

Communications

Level 1	Stable operations: Compliant with Operational Asset Standards.			
Communications Approach	Standard regular proactive contact with key stakeholders.			
Stakeholders External	**Frequency of Contact**	**Method of Contact**	**Aim of Contact**	**TW Contact/Level**
Local council(s) Environmental Health Department	As required	Telephone / email / meeting	Update on operational activity on site	Performance Manager / Customer and Stakeholder Manager
Local Environment Agency officer	As required	Telephone / email / meeting	Update on operational activity on site	Performance Manager / Customer and Stakeholder Manager
Local residents	As required	Telephone / email / meeting	Update on operational activity on site	Performance Manager / Customer and Stakeholder Manager
Stakeholders Internal	**Frequency of Contact**	**Method & Level of Contact**	**Aim of Contact**	**TW Contact/Level**
None				

Level 2	Unstable operations: • Non-compliant with Operational Asset Standards on one or more sub-processes leading to increased odour risk.			
Communications Approach	As Level 1 plus: • Use of Contact Centre Bulletin Boards / Briefing statement prepared for the press office (to use reactively). • Monthly discussions with site visits, if required, with the EHO. • Commence proactive communications with other stakeholders.			
Stakeholders External	**Frequency of Contact**	**Method & Level of Contact**	**Aim of Contact**	**TW Contact/Level**
Local council(s) Environmental Health Department	Immediately then monthly	Telephone / email / meeting	Report unstable operation with action plan	Performance Manager / Customer and Stakeholder Manager
Local Environment Agency officer	Immediately then monthly	Telephone / email / meeting	Report unstable operation with action plan	Performance Manager / Customer and Stakeholder Manager
Local residents	As required	Telephone / email / meeting	Report unstable operation with action plan	Performance Manager / Customer and Stakeholder Manager
Stakeholders Internal	**Frequency of Contact**	**Method of Contact**	**Aim of Contact**	**TW Contact/Level**
Press Office	Immediately then weekly	Q&A prepared for press office by Operations	To enable the press office to deal with queries from the press (reactive only).	Performance Manager / Customer and Stakeholder Manager
Customer Centre (Swindon)	Immediately then weekly	Telephone / email	To enable the Customer Centre to deal with queries from the residents (reactive only).	Performance Manager / Customer and Stakeholder Manager
Other areas/stakeholders outside Iver South Sludge Dewatering Centre potentially impacted				
Stakeholder	**Frequency of Contact**	**Method of Contact**	**Aim of Contact**	**TW Contact/Level**
Local businesses	Immediately then weekly	Telephone / email / meeting	Report unstable operation with action plan	Performance Manager / Customer and Stakeholder Manager

Level 3	Emergency • Temporary or transient activities not deemed to be compliant with Operational Asset Standards. High risk of odour emitting plant.			
Communications Approach	As level 2 plus: • Odour event set up internally (including Mogden OOHC cover and Duty Manager from WOCC (Kemble Court)). • Weekly discussions with EHO. • Monthly Stakeholder meetings, (internal and external – include MPs, Councillors, schools, businesses etc.). • Press release may be required.			
Stakeholder External	**Frequency of Contact**	**Method of Contact**	**Aim of Contact**	**TW Contact/Level**
Local council(s) Environmental Health Department	Immediately then weekly	Telephone / email / meeting	Report emergency event with action plan and update with progress	Area Treatment Manager
Local Environment Agency Officer	Immediately then weekly	Telephone / email / meeting	Report emergency event with action plan and update with progress	Area Treatment Manager
Local residents	Immediately then weekly	Telephone / email / meeting	Report emergency event with action plan and update with progress	Performance Manager / Customer and Stakeholder Manager
Councillors / MPs for local areas	Immediately then weekly	Telephone / email / meeting	Report emergency event with action plan and update with progress	Local / Regional Government Liaison Representative
Stakeholders Internal	**Frequency of Contact**	**Method of Contact**	**Aim of Contact**	**TW Contact/Level**
Press Office	Immediately then daily	Q&A and press release prepared by press office	To enable the press office to deal with reactive queries from the press and prepare a media strategy if required.	Event Manager
Customer Centre (Swindon)	Immediately then daily	Telephone / email	To enable the Customer Centre to deal with queries from customers (reactive only)	Event Manager
Other areas/stakeholders outside Iver South Sludge Dewatering Centre potentially impacted				

Stakeholder	Frequency of Contact	Method of Contact	Aim of Contact	TW Contact/Level
Local businesses	Immediately then weekly	Telephone / email / meeting	Report emergency event with action plan and update with progress	Performance Manager / Customer and Stakeholder Manager

Appendix 4. Environmental Permit Activities

Identification of potentially odorous permitted activities, control measures and approach to mitigation.

Table 1: Inventory of odorous materials

Odorous material	Management	Odour description	Hedonic tone	Quantity *	Process control	Process monitoring
Mogden STW digested sludge (normal operating conditions)	Pumped via the Iver South SDC Main into two centrifuge feed tanks (covered and odour controlled)	Digested sludge	Unpleasant	Up to 4,000m3/day, 7 days a week, 24 hours per day	Quantities dependent on sludge processing at Mogden STW (operation of digesters)	Flow meter at Iver south SDC records incoming flow of sludge on SCADA, instantaneous and trended (average recorded on daily log). Running time on centrifuges, plus process volumes logged. Levels in the sludge storage tanks are monitored by Process Controller via SCADA computer system at Mogden STW and Iver South SDC.
	Incoming flow exceeds centrifuge	Digested sludge	Unpleasant	Up to 4,000m^3/day, 7 days a week, 24	Quantities dependent on	Flow meter at Iver south SDC records

Odorous material	Management	Odour description	Hedonic tone	Quantity *	Process control	Process monitoring
	processing capacity Once SHTs full, flow discharged to six sludge holding tanks awaiting processing			hours per day. Capacity of holding tanks is 2125 m^3 each, 6No. tanks. Emergency lagoon capacity 15,500 m^3	sludge processing at Mogden STW (operation of digesters)	incoming flow of sludge on SCADA, instantaneous and trended (average recorded on daily log). Running time on centrifuges, plus process volumes logged. Levels in the sludge storage tanks are monitored by Process Controller via SCADA computer system at Mogden STW and Iver South SDC.
	Incoming flow exceeds centrifuge processing capacity Once SHTs full, flow discharged to six sludge holding tanks awaiting processing	Digested sludge	Unpleasant	Up to 4,000m^3/day, 7 days a week, 24 hours per day. Capacity of holding tanks is 2125 m^3 each, 6No. tanks. Emergency lagoon capacity 15,500 m^3	Quantities dependent on sludge processing at Mogden STW (operation of digesters)	Flow meter at Iver south SDC records incoming flow of sludge on SCADA, instantaneous and trended (average recorded on daily log). Running time on centrifuges, plus

Odorous material	Management	Odour description	Hedonic tone	Quantity *	Process control	Process monitoring
						process volumes logged. Levels in the sludge storage tanks are monitored by Process Controller via SCADA computer system at Mogden STW and Iver South SDC.
In a TW-wide sludge event blended indigenous and imported sludge imports by tanker	Discharge to open sludge holding tank	Septic sludge, sulphides	Unpleasant	Up to a maximum of 300 m^3/d (10 tankers per day)	Managed by TW Biorecycling and Site Operations	Checked weekly by CoTC holder and quantities monitored.
Cake sludge	Discharged from centrifuge from 4No. conveyors onto concrete hardstanding. Transfer by loader into covered cake bays.	Earthy	Acceptable	90,000 tonnes cake per year. Maximum of 40,000 tonnes stored on site	Quantity stored on site dependent on farmland demand and HACCP compliance	Quantity managed by TW Biorecycling to be within permit limits.
Sludge liquors (centrate)	Collected in return pumping station and returned to Mogden STW. Overflow to covered and odour-controlled	Slight ammonia smell	Unpleasant (but odour controlled)	Variable due to flow into pumping station	Flow meter alarm on SCADA system	Centrate quality is monitored via sampling, testing carried out by TW laboratory.

Odorous material	Management	Odour description	Hedonic tone	Quantity *	Process control	Process monitoring
	storm tank in case of emergency					
Local sewage	Local sewage collected in return pumping station and returned to Mogden STW. Overflow to covered and odour-controlled storm tank in case of emergency	Raw sewage, sulphides	Unpleasant (but odour controlled)	Variable due to flow into pumping station		Flow and level alarms on SCADA system
No exceptional materials other than specified above	-	-	-	-	-	-

*Typical values for annual imported waste. Permitted quantities for imported sludge is less than 250,000 m^3 per year under Waste Management Licence 100726 / EPR/DP3291SW.

Table 2: Odour mitigation measures– see also Appendix 1 Odour Risk Assessment for mitigation under varying and emergency conditions

Odorous material	Control of evaporation	Odour containment and abatement	Odour mitigation process control	Process monitoring
Sludge feed from Mogden STW	Mogden STW sludge discharged to 2No. covered centrifuge feed tanks.	Tanks vented to the Odour Control Unit	None required	Visual inspection by Tech 1 to ensure hatch is shut and no spillages in the area. As below for OCU monitoring.
Sludge feed from Mogden STW	6No. uncovered sludge holding tanks filled from the base of the tank to minimise splashing and evaporation	None	These tanks are only used when the covered tanks are full. If used, the SHTs are automatically emptied in sequence (oldest sludge first) as soon as possible.	Monitored via SCADA system at Mogden STW 24 hours per day.
Lagoon	Emergency sludge storage lagoon filled from the base to minimise splashing and evaporation	None	The lagoon is only used when SHTs are full and the contents are automatically returned as soon as the process allows	Lagoon high high level alarm monitored via SCADA system at Mogden STW 24 hours per day. Visual inspection of lagoons recorded on daily log sheet.

Odorous material	Control of evaporation	Odour containment and abatement	Odour mitigation process control	Process monitoring
Centrifuges	4No. centrifuges enclosed within a building. Centrate is discharged to a covered return pumping station.	Centrifuges contained within a building	Doors are kept shut and inspected daily by Tech 1	Monitored daily during the working week by Tech 1. Fixed H2S monitoring system present in building and maintained under service contract.
Centrate	Centrate is discharged to a covered and odour-controlled return pumping station	Return pumping station vents to odour control unit	As below for OCU monitoring	As below for OCU monitoring
Return Pumping Station / Storm Sump	Covered and odour controlled	Return pumping station and storm sump vented to odour control unit	As below for OCU monitoring.	As below for OCU monitoring
Cake storage area (covered bays)	Partially enclosed bays	Provision of curtains for fly control may provide some further odour mitigation (2012). Temporary hiring of odour suppression sprays, as required.	None	None
Cake storage area (open air)	None	Temporary hiring of odour suppression sprays, as required	This area is only used when the bays are full and is emptied first, where possible	None

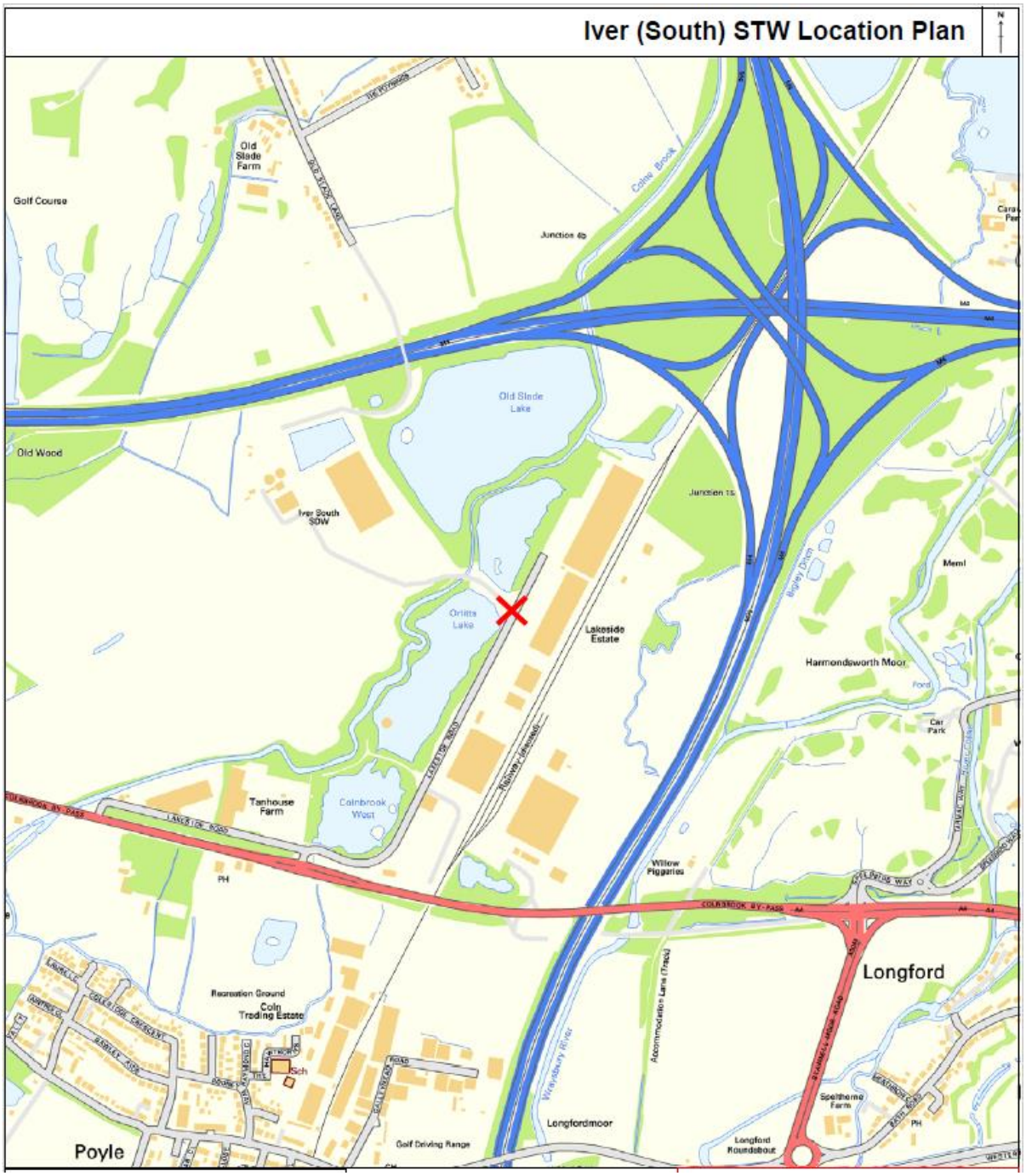
Odorous material	Control of evaporation	Odour containment and abatement	Odour mitigation process control	Process monitoring
Odour Control Unit	None	Enclosed system designed for treatment of odour. Duty/standby fans in case of asset failure.	Continuous operation with automatic operation of standby fan in event of duty asset failure	Daily (during working week) inspection of fan operation. Local alarm for fan failure on SCADA, linked to Mogden STW Control Room. Continuous monitoring of hydrogen sulphide level at OCU outlet stack, monitored and trended via SCADA. Local alarm for high H2S on SCADA, linked to Mogden STW Control Room. Inspection of OCU assets via monthly maintenance service contract with specialist contractor.
Odour control contingency measures	See Appendix 1: odour risk assessment			

Please ensure that the following guidance *RGN No.9 Surrender* is considered when deciding a course of action regarding the sites SPMP.

http://www.environment-agency.gov.uk/business/topics/permitting/36419.aspx

Appendix 5. Site Drawings

Figure A - Site Location Plan



Technical Lead: Asset Standards Team
AM-OMP Iver South SDC

Figure B - Site Plan

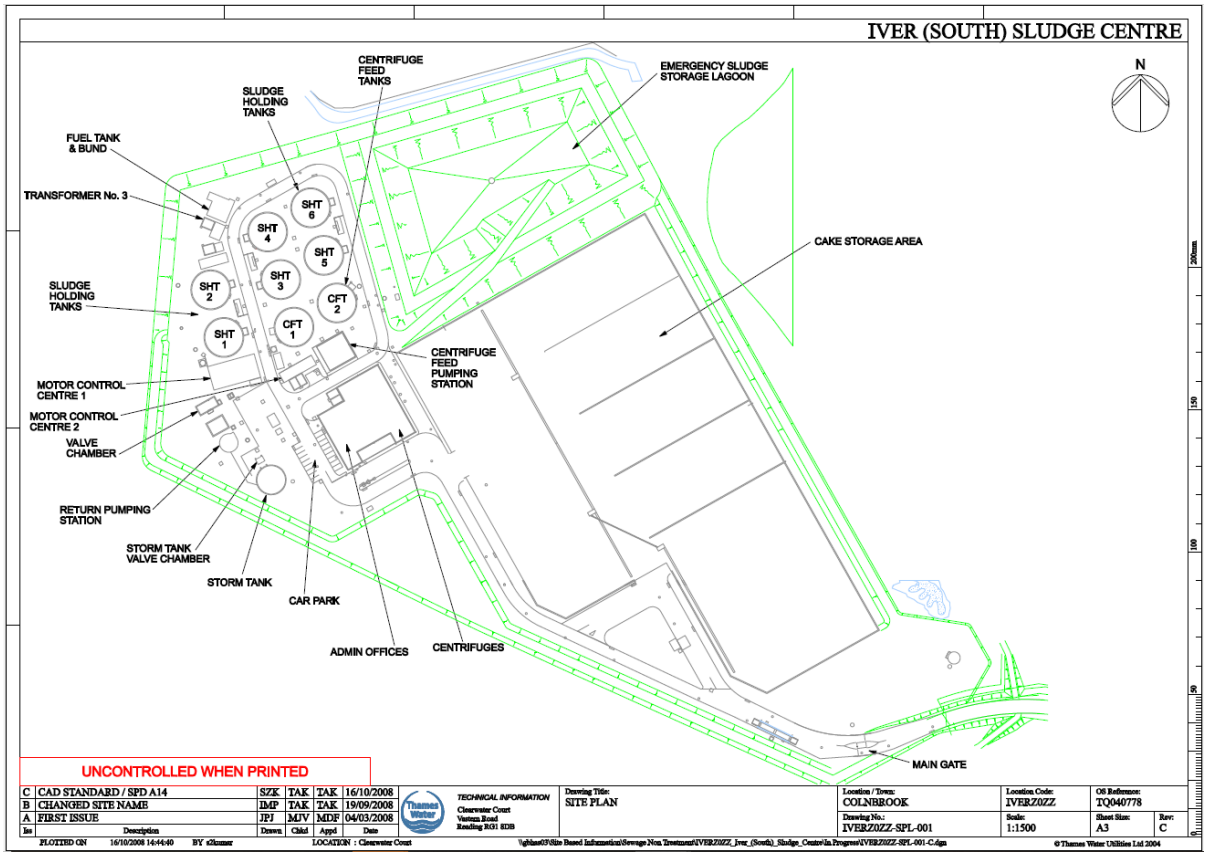
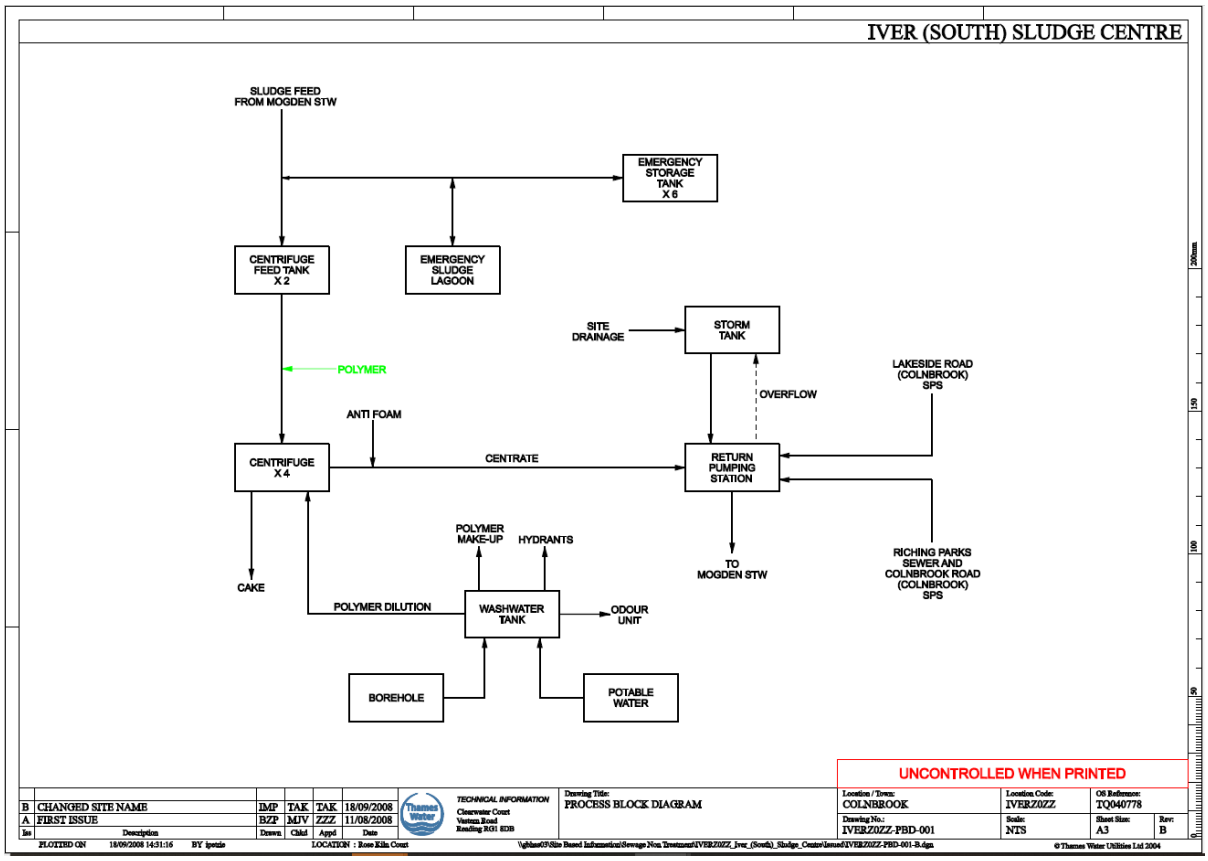


Figure C - Process Block Diagram



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