

Our Ref: Le02 – Maple Lodge Variation Application

Sent Via Email

Date: 13 December 2018

Environment Agency
Permitting Support Centre
Quadrant 2
99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

Dear Sirs,

**The Environmental Permitting (England and Wales) Regulations 2016
Maple Lodge Waste Water Treatment Works - Variation to Permit Number
EPR/NP3497NN**

In response to your letter dated the 5th December 2018, please find below responses to the eight points raised.

1. Technical Competence

Please find attached Competence Management – EU Skills Group 2013 Certificate CMSS 608567. This information should be on file centrally with the Agency.

2. Site Plan

Drawing MPL LTP02 is attached, this does not differ from the extant plan included in the permit but for the inclusion of the oil separator and ancillary storage.

3. Provide a specific description of wastes you intend to accept under the following EWC codes, 13 05 07*, 13 05 08* & 19 02 03

Regrettably a typographical error was made and EWC 19 02 03 should read EWC 19 02 07. The limitations for acceptance of EWC 13 05 07, 13 05 08 and 19 02 07 are stated in Section 3.1 of the Operational Techniques document i.e. less than 5% oil, 20% solids and result in a non-hazardous effluent. A detailed audit will be undertaken to ensure that the source of the waste would not come from a site where contamination could take place which would render the waste unacceptable for acceptance and ultimately discharge.

4. Odour abatement

Page 12 of the Operating Techniques document details that *“The void space above all six liquid effluent reception tanks and the waste blending tank is connected to the odour control system consisting of the biofilter and air extraction equipment”*.

- a) Chemical oxygen demand (COD) is an indirect measurement of the amount of organic matter in a sample. This test measures virtually all organic compounds that can be digested by a digestion reagent. It is not an indicator of odour. Testing as written in the operating techniques document focuses on the parameters that are possibly going to impact on the environment and human health.

5. Provide details of the parameters and associated limits used to test the treated effluent from the blending tank prior to discharging to the WWTW.

The sites trade effluent consent sets limits on the process effluent discharged from the site. These limits, which the site adheres to, are as follows:

- Ammonical Nitrogen – 500 mg/l
- COD – 3,000 mg/l
- Suspended Solids – 500 mg/l
- Phosphate – 3 mg/l
- pH – 5 to 11

6. Provide the thresholds for each of key parameters tested prior to discharge from the break tank to the blending tank.

The oil monitoring unit will give an instantaneous signal if oil is detected above 30ppm and prevent it onward discharge to the break tank. COD will typically have to be <3,000mg/l. However, dependant on the COD loading in the blending tank at the time a higher value may be acceptable when dilution is taken in to account to ensure the discharge limit of 3,000 mg/l is met. The pH must be in the range of 5 and 11 to permit the discharge to the blending tank.

7. Provide details of the chemical analysis undertake as part of the hazardous waste pre-acceptance checks

At the pre-acceptance stage the supernatant will be analysed against the parameters, and the limits set out below:

- Ammonical Nitrogen – 500 mg/l
- COD – 3,000 mg/l
- Phosphate – 3 mg/l

- pH – 5 to 11
- Chromium (as Cr) – 3 mg/l
- Copper (as Cu) – 3 mg/l
- Lead (as Pb) – 3 mg/l
- Nickel (as Ni) – 2 mg/l
- Silver (as Ag) – 2 mg/l
- Zinc (as Zn) – 3 mg/l

As stated in Section 3.1 of the Operating Techniques the hazardous wastes must be:

- $\leq 5\%$ oil; and
- $\leq 20\%$ solid / sludge;

When the waste arrives, checks will be undertaken to ensure conformance with the to the precontact sample before its is discharged and treated.

8. Updated BAT assessment

An updated BAT assessment has been completed and is attached.

I trust that the addition information provided will allow the application to be Duly Made, please let me know if you require any further information.

Should you have any queries please do not hesitate to contact me.

Yours sincerely,



Aleks Dragicevic
Permitting Manager



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Enc.

CMSS Certificate
Drawing MPL LTP2
Updated BAT Assessment

- EP BOUNDARY
- BUNDED AREA (366m³)
- BUNDED AREA (93m³)
- LIQUID EFFLUENT RECEPTION PIT
- DRAINAGE
- LEACHATE PIPE
- TRADE EFFLUENT
- DIRECTION OF FLOW
- OVERFLOW
-  PUMP
-  AERIAL EMISSIONS



THIS DRAWING IS UNCONTROLLED CONTACT D.O. FOR LATEST ISSUE

viridor.co.uk viridorTV
 viridorUK /viridor

SITE NAME
MAPLE LODGE LTP

DRAWING TITLE
LIQUID EFFLUENT PROCESS FLOW DIAGRAM

SCALE 1:200
 O/DATE MAR 2018
 O/DRN RCB
 O/APP AD

MPL LTP2	
REVISION	TASK 11021
DRN	APP DATE
FOR REVISION INFORMATION, SEE D.O. REGISTER	
DRAWING BASED UPON :	

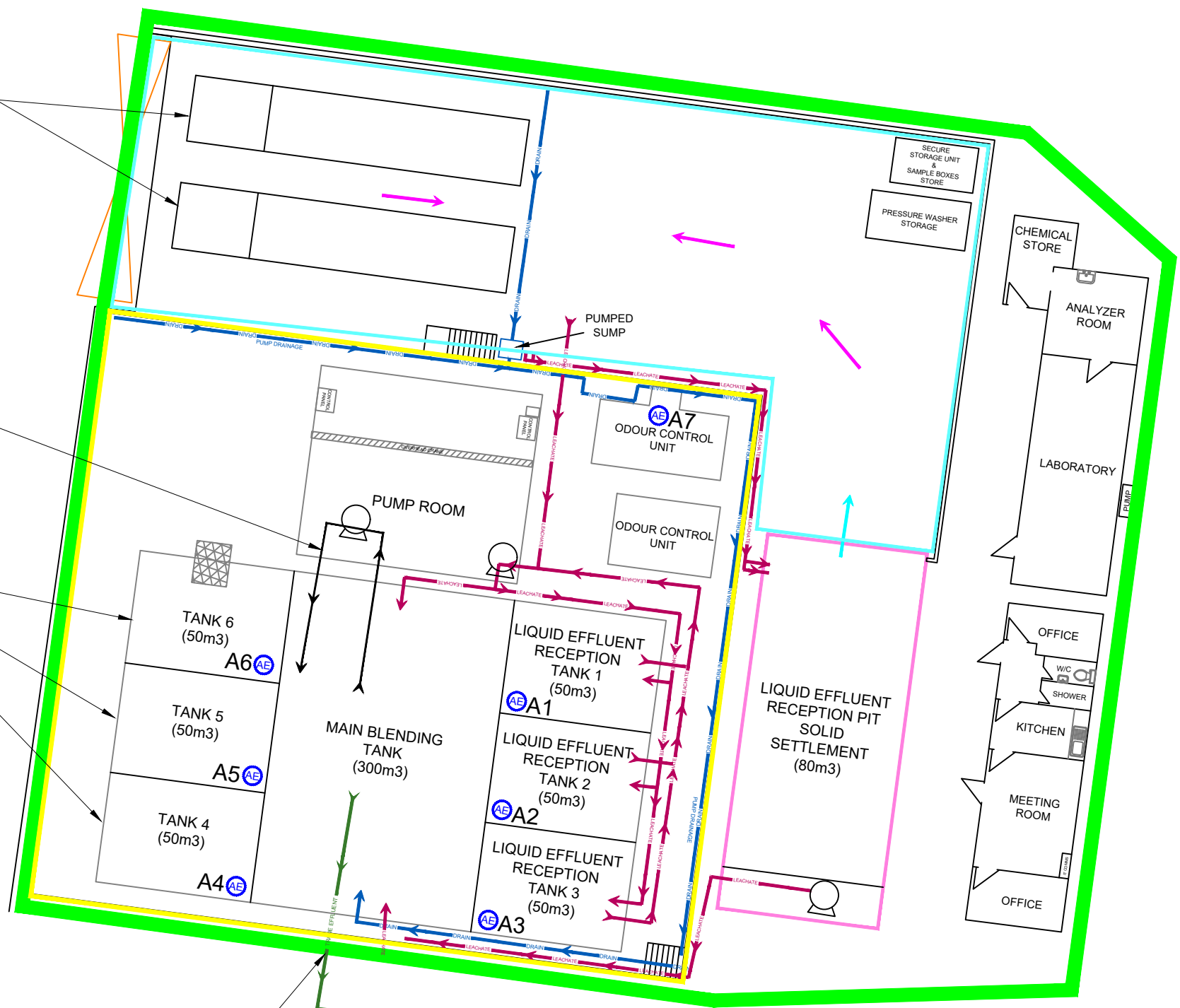
DISCHARGING TANKERS

RECIRCULATION LINE

TANKS 4,5,6 ARE NOT IN USE

TRADE EFFLUENT TO TWUL HEAD OF WORKS

S1





Maple Lodge – BAT-C Assessment

Prepared by:
Permitting Team
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Pilsworth Road
Bury
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Issued:
13 December 2018

Status:
FINAL



Document Control

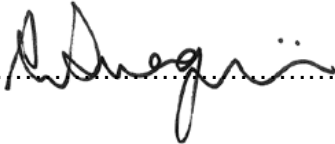
TITLE: Maple Lodge – BAT-C Assessment

DATE: 13 December 2018

STATUS: FINAL

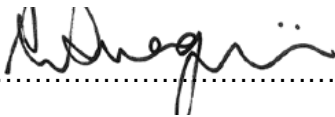
PREPARED BY:

(Permitting Manager)

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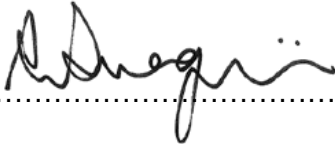
CHECKED BY:

(Permitting Manager)

A handwritten signature in black ink, appearing to read 'A. Negri', written over a horizontal dotted line.

APPROVED BY:

(Permitting Manager)

A handwritten signature in black ink, appearing to read 'A. Negri', written over a horizontal dotted line.

This document has been prepared with all reasonable skill, care and diligence.

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Assessment of BAT Conclusions for Waste Treatment (2018/1147)

Ref	BAT Conclusion	Management Technique	Meets BAT-C
BAT 1.	Implement and adhere to an environmental management system.	Viridor operates to an EMS which is fully implemented and adhered to.	✓
BAT 2a.	Set up and implement waste characterisation and pre-acceptance procedures.	Refer to Section 3.1 of the Operating Techniques	✓
BAT 2b.	Set up and implement waste acceptance procedures.	Refer to Section 3.1 of the Operating Techniques	✓
BAT 2c.	Set up and implement a waste tracking system and inventory.	All waste is logged as it arrives, and all stock levels are recorded to ensure adequate capacity is available for the safe acceptance and treatment	✓
BAT 2d.	Set up and implement an output quality management system.	The effectiveness of the treatment process is monitored, and all outputs tested	✓
BAT 2e.	Ensure waste segregation.	No incompatible wastes are accepted. Clear separation in the form of dedicated tanks and offloading points is provided to ensure non-hazardous waste is not mixed with hazardous waste.	✓



Ref	BAT Conclusion	Management Technique	Meets BAT-C
BAT 2f.	Ensure waste compatibility.	<p>Only well characterised and compatible wastes are accepted at the site.</p> <p>Pre-acceptance testing will establish if there is the possibility of incompatibility between wastes accepted at the Installation.</p>	✓
BAT 2g.	Sort incoming solid waste.	No solid wastes accepted.	N/A
BAT 3.	Establish and maintain an inventory of waste water and waste gas streams.	Detailed in the Operating Techniques for the facility. A single outlet to the waste water treatment works is in place and periodic testing of the composition of this discharge is carried out to ensure compliance with the TEDC limits. Odour is abated via a dedicated odour treatment plant prior to release to the atmosphere.	✓
BAT 4a.	Optimise storage location.	The storage made available at the site has been in place for a significant period and has not resulted in any adverse impact being reported / realised.	✓
BAT4b.	Adequate storage capacity.	All waste stored on site is measured against known limits to avoid over filling and is regularly monitored.	✓

Ref	BAT Conclusion	Management Technique	Meets BAT-C
BAT 4c.	Safe storage.	Storage vessels are labelled to show the contents and maximum volumes permitted for storage. The integrity of this infrastructure is monitored and where necessary repairs made to ensure storage is not compromised and a unwanted discharge experienced.	✓
BAT4d.	Separate storage area for handling of packaged hazardous waste.	N/A	N/A
BAT 5.	Implement handling and transfer procedures.	Detailed in Operating Techniques.	✓
BAT 6.	Monitor key process parameters for relevant emissions to water.	Key parameters are monitored prior to release to the Thames Water WWTW	✓
BAT 7.	Monitor emissions to water in accordance with BAT 7. Table.	Treated effluent is monitored ahead of its discharge to the Thames Water WWTW. Adherence to the TEDC consented limits is a priority. There are no direct discharges to water from the Installation.	✓
Bat 8.	Monitor channelled emissions to air for odour.	Only odour is relevant and this will be analysed in line with the BAT-C. Operating Techniques states how this will be undertaken.	✓
BAT 9.	Monitor diffuse emissions of organic compounds to air from the regeneration of spent solvents.	N/A	N/A



Ref	BAT Conclusion	Management Technique	Meets BAT-C
BAT 10.	Monitor odour where an odour nuisance at sensitive receptors is expected.	Not applicable – the nearest sensitive receptor is a significant distance from the facility and throughout the operational life of the site no complaints related to odour have been received or noted by Agency inspectors.	N/A
BAT 11.	Monitor consumption of water, energy and raw materials.	Viridor is committed to improving the environmental performance of the installation and will continue to explore new and improved technologies; there will be a commitment within the EMS to continually improve the environmental performance of the site.	✓
BAT 12.	Implement and review and Odour Management Plan.	Detailed in Operating Techniques and specifically Section 4.3.	✓
BAT 13.	Reduce odour by <ul style="list-style-type: none"> a. Minimising residence times b. Using chemical treatment c. Optimising aerobic treatment. 	<p>It is considered that the activities on site have a low potential for odour to be generated as generally malodorous wastes will not be handled.</p> <p>Given the limited storage capacity afforded at the Installation the operations are run in such a way that waste is not stored on site for any length of time – hence reducing the residence time.</p> <p>The use of chemicals is not appropriate to manage odour.</p> <p>Tertiary treatment in the form of a biofilter is provided to control the release of odour from the Installation.</p>	✓

Ref	BAT Conclusion	Management Technique	Meets BAT-C
BAT 14.	Use appropriate techniques to reduce diffuse emissions of dust, organic compounds and odour.	<p>Cleaning of waste storage areas is periodically undertaken. Storage tanks are periodically desludged.</p> <p>A documented leak detection and repair programme is in place to ensure diffuse environmental emissions are adequately managed to not cause an issue off site.</p>	✓
BAT 15.	Flare used only for safety reasons or for non-routine operation.	N/A	N/A
BAT 16.	Minimise emissions from flaring using correct design of flare and monitoring and recording as part of flare management.	N/A	N/A
BAT 17.	Implement and review a noise and vibration management plan.	<p>Noise and vibration from the Installation are not considered to be an issue and very unlikely to be detected at the nearest sensitive receptor to the site.</p> <p>Refer to ERA in Appendix 1 of the Operating Techniques.</p>	✓

Ref	BAT Conclusion	Management Technique	Meets BAT-C
BAT 18.	Use appropriate measures to reduce noise.	<p>It is deemed that appropriate measures are being delivered in the reduction of noise from the Installation. Measure taken include but are not limited to:</p> <ul style="list-style-type: none"> • Inspection and maintenance of equipment in accordance with manufactures requirements. • No noisy activates being undertaken at night. • Appropriately sized equipment utilised. • Equipment is operated by experience trained staff. 	✓
BAT 19.	Use appropriate measures to reduce emissions of waste water including segregation of water streams and adequate drainage.	<p>Water is not significantly consumed by the process and is limited to the biofilter.</p> <p>All tanks used to store waste are roofed to prevent water ingress.</p> <p>Surface water and process water are segregated.</p> <p>Impermeable surfacing is provided to the treatment area.</p> <p>All process pipework is above ground.</p>	✓
BAT 20.	Use appropriate measures to treat waste water.	The Installation is designed to treat aqueous wastes using physical separation methods which are detailed in the Operating Techniques (Section 2.1).	✓



Ref	BAT Conclusion	Management Technique	Meets BAT-C
BAT 21.	Limit environmental consequences of accidents by including protection measures managing accidental emissions incident/accident registration and assessment.	Refer to Section 9 and the ERA in Appendix 1 of the Operating Techniques.	✓
BAT 22.	Substitute raw materials with waste where appropriate.	N/A	N/A
BAT 23.	Implement and energy efficiency plan and energy balance record.	Viridor is committed to improving the environmental performance of the installation and will continue to explore new and improved technologies; there will be a commitment within the EMS to continually improve the environmental performance of the site.	✓
BAT 24.	Maximise reuse of packaging.	N/A – all waste delivered in bulk tankers	N/A
BAT 25, 26, 27, 28.	Applies to mechanical treatment of waste.	N/A	N/A
BAT 29, 30	Applies to treatment of WEEE.	N/A	N/A
BAT 31.	Applies to pre-treatment of waste for incineration.	N/A	N/A



Ref	BAT Conclusion	Management Technique	Meets BAT-C
BAT 32.	Applies to treatment of WEEE containing mercury.	N/A	N/A
BAT 33, 34, 35	Applies to the biological treatment of waste	N/A	N/A
BAT 36, 37.	Applies to aerobic treatment of waste.	N/A	N/A
BAT 38.	Applies to the anaerobic treatment of waste	N/A	N/A
BAT 39.	Applies to mechanical biological treatment of waste	N/A	N/A
BAT 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50 and 51	Apply to various physico-chemical treatment processes	N/A to the permitted activity	N/A
BAT 52	Treatment of water-based liquid waste – waste pre-acceptance and acceptance	Refer to sections 3.1 and 3.2 of the Operating Techniques	✓
BAT 53	Treatment of water-based liquid waste – emissions to air	Refer to Section 4.3 of the Operating Techniques	✓