BIO DYNAMIC UK LIMITED
PERMIT VARIATION APPLICATION

Emissions Points Monitoring

July 2022

biodynamic
Bio Dynamic UK limited

Client: Bio Dynamic UK Limited

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REPORT SCHEDULE

Operator: Bio Dynamic UK Limited

Client: Bio Dynamic UK Limited

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Project Director: Joanna Holland

Project Manager: Jo Chapman

AUTHOR	DATE
Jo Chapman	15th July 2022
REVIEWER	DATE
Joanna Holland	13th August 2022
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CONTENTS

1. EMISSIONS POINTS MONITORING

Emission Point Reference and Location	Monitoring Method	Monitoring Frequency	Relevant Procedures
A1-Engine Exhaust CHP Engine 1	Monitoring to be carried annually for hourly average emissions rates for given variables.	Annual monitoring exercise.	To be carried out by third party contractor with MCERTS accreditation per appropriate BS EN methodology for given variables.
A2-Engine Exhaust CHP Engine 2	Monitoring to be carried annually for hourly average emissions rates for given variables.	Annual monitoring exercise.	To be carried out by third party contractor with MCERTS accreditation per appropriate BS EN methodology for given variables.
A3- Emergency Flare Stack 01	Flare use time logged on SCADA system. Monitoring to be carried annually for hourly average emissions rates for given variables.	Annual if required if flare operational more than 10% of year. Flare use time logged on SCADA system.	To be carried out by third party contractor with MCERTS accreditation per appropriate BS EN methodology for given variables.
A4- Emergency Flare Stack 02	Flare use time logged on SCADA system. Monitoring to be carried annually for hourly average emissions rates for given variables.	Annual if required if flare operational more than 10% of year. Flare use time logged on SCADA system.	To be carried out by third party contractor with MCERTS accreditation per appropriate BS EN methodology for given variables.

Emission Point Reference and Location	Monitoring Method	Monitoring Frequency	Relevant Procedures
A5 – Engine Exhaust CHP Engine 3	Monitoring to be carried annually for hourly average emissions rates for given variables.	Annual monitoring exercise.	To be carried out by third party contractor with MCERTS accreditation per appropriate BS EN methodology for given variables.
A6 – Engine Exhaust CHP Engine 4	Monitoring to be carried annually for hourly average emissions rates for given variables.	Annual monitoring exercise.	To be carried out by third party contractor with MCERTS accreditation per appropriate BS EN methodology for given variables.
A7- Under/over pressure relief valve on digester	Use of valves, including events leading to use, time in use, and corrective measures taken to be recorded.	Ongoing – every time in use. Times in use subject to audit and review. Daily visual inspection.	Incident reporting procedures, daily checks sheets, and standard operating procedures, annual performance review and audits.
A8- Under/over pressure relief valve on digester	Use of valves, including events leading to use, time in use, and corrective measures taken to be recorded.	Ongoing – every time in use. Times in use subject to audit and review. Daily visual inspection.	Incident reporting procedures, daily checks sheets, and standard operating procedures, annual performance review and audits.
A9- Under/over pressure relief valve on digester.	Use of valves, including events leading to use, time in use, and corrective measures taken to be recorded.	Ongoing – every time in use. Times in use subject to audit and review. Daily visual inspection.	Incident reporting procedures, daily checks sheets, and standard operating procedures,

Emission Point Reference and Location	Monitoring Method	Monitoring Frequency	Relevant Procedures
			annual performance review and audits.
A10- Under/over pressure relief valve on digester	Use of valves, including events leading to use, time in use, and corrective measures taken to be recorded.	Ongoing – every time in use. Times in use subject to audit and review. Daily visual inspection.	Incident reporting procedures, daily checks sheets, and standard operating procedures, annual performance review and audits.
A11- Under/over pressure relief valve on digester	Use of valves, including events leading to use, time in use, and corrective measures taken to be recorded.	Ongoing – every time in use. Times in use subject to audit and review. Daily visual inspection.	Incident reporting procedures, daily checks sheets, and standard operating procedures, annual performance review and audits.
A12- Under/over pressure relief valve on digester	Use of valves, including events leading to use, time in use, and corrective measures taken to be recorded.	Ongoing – every time in use. Times in use subject to audit and review. Daily visual inspection.	Incident reporting procedures, daily checks sheets, and standard operating procedures, annual performance review and audits.
A13- Under/over pressure relief valve on digester	Use of valves, including events leading to use, time in use, and corrective measures taken to be recorded.	Ongoing – every time in use. Times in use subject to audit and review. Daily visual inspection.	Incident reporting procedures, daily checks sheets, and standard operating procedures, annual performance review and audits.

Emission Point Reference and Location	Monitoring Method	Monitoring Frequency	Relevant Procedures
A14 – Exhaust stack backup dual fuel (biogas/diesel) boiler	Daily sniff test monitoring for odours. May require annual exhaust emissions monitoring if required by permit.	Daily sniff test for odour. Annual emissions monitoring if required by permit.	Incident reporting procedures, daily checks sheets, and standard operating procedures, annual performance review and audits. Exhaust emissions monitoring methodology provided by third party contractor if required.
A15 – Odour abatement unit vent	Stack emissions monitoring according to parameters outlined in permit (third party assessment) Odour sniff tests Process monitoring visual and functional checks. Whole system efficiency test (third party assessment)	Every 6 months Daily Daily/weekly/continuous Annually	Outlined in Odour Management Plan, Regular checks schedules, and Maintenance and monitoring Schedules.
A16 - Under/over pressure relief valve on digester	Use of valves, including events leading to use, time in use, and corrective measures taken to be recorded.	Ongoing – every time in use. Times in use subject to audit and review. Daily visual inspection.	Incident reporting procedures, daily checks sheets, and standard operating procedures, annual performance review and audits.

Emission Point Reference and Location	Monitoring Method	Monitoring Frequency	Relevant Procedures
A17 - Under/over pressure relief valve on digester	Use of valves, including events leading to use, time in use, and corrective measures taken to be recorded.	Ongoing – every time in use. Times in use subject to audit and review. Daily visual inspection.	Incident reporting procedures, daily checks sheets, and standard operating procedures, annual performance review and audits.
A18 – Odour abatement unit vent (tanker offtake point abatement unit)	Stack emissions monitoring according to parameters outlined in permit (third party assessment) Odour sniff tests Process monitoring visual and functional checks. Whole system efficiency test (third party assessment)	Every 6 months Daily Daily/weekly/continuous Annually	Outlined in Odour Management Plan, Regular checks schedules, and Maintenance and monitoring Schedules.
A19 – Vent from waste reception tank farm displaced air odour abatement unit.	Stack emissions monitoring according to parameters outlined in permit (third party assessment) Odour sniff tests Process monitoring visual and functional checks.	Every 6 months Daily Daily/weekly/continuous	Outlined in Odour Management Plan, Regular checks schedules, and Maintenance and monitoring Schedules.

Emission Point Reference and Location	Monitoring Method	Monitoring Frequency	Relevant Procedures
	Whole system efficiency test (third party assessment)	Annually	
A20 – Dewatering system tank (MBR) pressure relief valve	Use of valves, including events leading to use, time in use, and corrective measures taken to be recorded.	Ongoing – every time in use. Times in use subject to audit and review. Daily visual inspection.	Incident reporting procedures, daily checks sheets, and standard operating procedures, annual performance review and audits.
W1 – Discharge point to surface water (the river Trent) from dewatering (MRP).	Visual inspection for odours and visible oils/suspended solids. Monitoring schedule for parameters outlined in BAT 8	Daily visual inspection of release point from site. Monthly	Daily environmental monitoring checks. Water quality discharge parameter benchmark levels.

h&c consultancy

Registered office:
Staffordshire House
Beechdale Road
Nottingham NG8 3FH
Company No. 7861810

0115 923 2253
07506 658098 / 07525 211381
www.hc-consultancy.co.uk