

# Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2016

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**Western Bio-Energy Limited**

**Western Wood Energy Plant - Margam  
Longlands Lane  
Margam  
Port Talbot  
SA13 2NR**

Variation number

**EPR/AB1234CD/V005**

Permit number

**EPR/ZP3939GL**

# Western Wood Energy Plant - Margam

## Permit number EPR/ZP3939GL

### Introductory note

#### **This introductory note does not form a part of the notice**

The following notice gives notice of the variation of an environmental permit.

This variation permits the installation of Selective Non-Catalytic Reduction (SNCR) to the process and adds four waste types to the permit, as identified by European Waste Catalogue (EWC) waste classification code:

Waste code	Description
02 03 04	Materials unsuitable for consumption or processing that are exempt from the requirements of Chapter IV of the Industrial Emissions Directive 2010/75/EU.
03 01 99	Wastes not otherwise specified that are exempt from the requirements of Chapter IV of the Industrial Emissions Directive 2010/75/EU. (Non-hazardous waste wood fibre and pellets only).
19 05 01	Non-composted fraction of municipal and similar wastes that are exempt from the requirements of Chapter IV of the Industrial Emissions Directive 2010/75/EU. (Oversize arboricultural cuttings removed from pre-composting collections, consisting of non-hazardous virgin wood only.)
20 01 38	Wood other than that mentioned in 20 01 37 that is exempt from the requirements of Chapter IV of the Industrial Emissions Directive 2010/75/EU.

SNCR is used for the abatement of oxides of nitrogen in emissions to air from the combustion process. Aqueous urea is injected into the boiler, resulting in the breakdown of NO into N<sub>2</sub> and CO<sub>2</sub>. Increased emissions of NH<sub>3</sub> and N<sub>2</sub>O are possible by-products of the use of SNCR, so monitoring of both and Emission Limit Values (ELV) for NH<sub>3</sub> are added to the permit as detailed below. The ELV for oxides of nitrogen is unchanged, and the addition of SNCR will allow enhanced performance to the current ELV, and greater flexibility in fuel choice by the operator. An improvement condition will ensure that the installed SNCR system is installed, commissioned and optimised satisfactorily.

All additional wastes are exempt from the requirements of Industrial Emissions Directive Chapter IV as listed in point (b) of point 31 of Article 3;

- (i) vegetable waste from agriculture and forestry
- (v) wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating and which includes, in particular, such wood waste originating from construction and demolition waste

There are no changes to the permitted annual feedstock or thermal input capacity, although the use of alternative fuels may result in a lower throughput.

The schedules specify the changes made to the original permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application received EPR/ZP3939GL/A001	Duly made 16/09/08	
Additional information requested	11/09/08	Received 03/10/08
Additional information submitted		Received 21/10/08
Additional information requested	27/11/08	Received 23/12/08 and 17/02/09
Permit determined EPR/ZP3939GL	18/08/09	Permit issued
Environment Agency led variation determined	04/03/13	Environment Agency led variation to implement changes introduced by IED
Transfer application EPR/QP333WH/T001	Duly made 12/08/14	Application to transfer the permit in full to PX Limited from Western Bio-Energy Limited
Transfer application EPR/QP333WH/T001 determined	01/10/14	Full transfer of permit complete
NRW led variation determined EPR/ZP3939GL/V002	01/06/16	NRW led variation to change permit number back to original
Transfer application EPR/ZP3939GL/T003	Duly made 14/10/19	Application to transfer the permit in full to Western Bio-Energy Limited from PX Limited
Transfer application determined EPR/ZP3939GL/T003	22/10/19	Full transfer of permit complete
Minor technical variation application EPR/ZP3939GL/V004	Duly made 23/10/19	Minor technical variation to add two waste codes to permit
Minor technical variation determined EPR/ZP3939GL/V004	04/11/19	Minor technical variation complete

Variation application PAN-011056	Duly made 26/01/21	Normal Variation to add SNCR for NO <sub>x</sub> control and addition of EWC codes.
Additional information requested	18/01/21	Received 25/01/21, 26/01/21
Schedule 5 Notice requiring further information	19/02/21	
Schedule 5 response received from applicant	25/03/21	04/03/21, 05/03/21, 25/03/21
Variation determined EPR/ZP3939GL/V005 (PAN-011056)	26/04/21	Varied permit issued.

End of introductory note

## Notice of variation

Environmental Permitting (England and Wales) Regulations 2016

The Natural Resources Body for Wales (“Natural Resources Wales”) in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number  
**EPR/ZP3939GL**

issued to  
**Western Bio-Energy Limited** (“the operator”)

whose registered office is  
**Longlands Lane**  
**Margam**  
**Port Talbot**  
**SA13 2NR**

company registration number **04622111**

to operate a regulated facility at  
**Western Wood Energy Plant – Margam**  
**Longlands Lane**  
**Margam**  
**Port Talbot**  
**SA13 2NR**

to the extent set out in the schedules.

The notice shall take effect from 26/04/2021

Signed

Date

**Holly Noble**

**26/04/2021**

Authorised on behalf of Natural Resources Wales

## **Schedule 1 – conditions to be deleted**

None

## **Schedule 2 – conditions to be amended**

The following conditions are amended as a result of the application made by the operator

### **2.3.3 Waste shall only be accepted if:**

- (a) it is of a type and quantity listed in schedule 3 table S3.2; and
- (b) it conforms to the description in the documentation supplied by the producer or holder; and
- (c) it having been separately collected for recycling, it is subsequently unsuitable for recovery by recycling.

- 4.3.1 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
- (i) inform Natural Resources Wales,
  - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) in the event of a breach of any permit condition the operator must immediately—
- (i) inform Natural Resources Wales, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made “immediately”, in which case it may be provided by telephone

Table S1.2 is amended and replaced with the following:

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application	The response to sections 2.1 and 2.2 in the Application.	16/09/08
Application	The response to questions 1, 2, 4, 5, 7,13,15, 16,17,18 and 20 of the Schedule 4 Notification for the original application, now considered part of this application.	16/09/08
Receipt of additional information to the application	Information relating to bag filter abatement equipment and operation of wood chipping plant.	21/10/08
Response to further information request dated 27/11/08	Information relating to supply sources of waste wood and biomass fuels. Operating procedures relating to the control and acceptance of incoming biomass fuels to the site.	17/02/09
Variation Application PAN-011056 (V005)	Application Form C2, C3, and supporting information submitted in respect of questions on those forms.	23/07/20
Response to further information request dated 18/01/21	Waste acceptance procedures WBEF 01, WBEF 02, WBEF 03 and WBEF 04 and explanation of waste types proposed under "99" codes	25-26/01/21
Response to Schedule 5 Notice dated 19/02/21	Justification of various matters including co-incineration status, BREF applicability, correct waste codes, and SNCR commissioning plan.	04/03/21

Table S1.3 is amended and replaced with the following:

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC1	The Operator shall undertake a study of the options for collecting rainwater from roofs and hard standing areas of the site for subsequent reuse in process activities of the installation. A written report to record the findings of this study shall be submitted to the Agency for approval. The report shall include a timetable to implement any proposed changes concluded from the study. The Operator shall implement the proposed changes as approved in writing by the Environment Agency.	<del>31/01/10</del> Complete
IC2	The Operator shall undertake a study of the options for utilising waste heat from the process to pre-dry incoming biomass fuel to improve the energy generation efficiency of the plant. A written report to record the findings of this study shall be submitted to the Agency for approval. The report shall include a timetable to implement any proposed changes concluded from the study. The Operator shall implement the proposed changes as approved in writing by the Environment Agency.	<del>28/02/10</del> Complete
IC3	The Operator shall provide the Environment Agency with a written report that includes details of the discharge consent obtained from Welsh Water, the monitoring programme established under the consent, and a suite of representative monitoring data to enable the Environment Agency to consider whether any additional limits and monitoring requirements need to be imposed under the conditions of the permit.	<del>31/10/09</del> Complete

**Table S1.3 Improvement programme requirements**

Reference	Requirement	Date
IC4	<p>The Operator shall provide the Environment Agency with a written report that includes proposals for a procedure to sample and analyse the composition of incoming biomass fuel. This should include, but not be limited to, the moisture, chlorine and sulphur content of the biomass fuel. The report should make correlation with the monitoring data of emissions to air from the main stack and the monitoring data relating to Bottom Ash and Flue Gas Residues. The report shall have regard to the WRAP 'Waste Protocols Project – Wood' and the Environment Agency 'Position Statement – The Environmental Regulation of Wood'.</p> <p>The Operator shall implement the proposals as approved in writing by the Environment Agency.</p>	<p>30/11/09</p> <p>Complete</p>
IC5	<p>The Operator shall provide the Environment Agency with a written report justifying the requirement for bag filter bypass operation and detailing proposals that will control and limit the time and periods when the bag filter bypass system can be in operation. The report shall include a timetable for implementation of the control measures identified, and be submitted to the Agency for approval.</p> <p>The Operator shall implement the proposed changes identified within the report as approved in writing by the Environment Agency.</p>	<p>31/11/09</p> <p>Complete</p>
IC6	<p>The Operator shall undertake a review of the measures described in Section 2.8 of the application for the minimisation of risk from accidents now that the plant is in full operation. A site specific Accident Management Plan shall be produced and submitted to the Environment Agency for approval.</p>	<p>31/12/09</p> <p>Complete</p>
IC7	<p>The Operator shall undertake a review of all liquid, chemical, waste material and effluent storage and containment measures at the site. This should include bunding and containment of above ground storage facilities and associated hardstanding areas and integrity testing and assessment of subsurface drainage and sump systems. A report shall be submitted to the Agency that details the findings of the review and makes proposals for the ongoing inspection, testing and assessment of this infrastructure, having regard to the Agency H5 Site Condition Report Guidance and EPR 9 of the Regulatory Guidance Series.</p> <p>The Operator shall implement the proposals as approved in writing by the Environment Agency.</p>	<p>31/12/09</p> <p>Complete</p>



**Table S1.3 Improvement programme requirements**

Reference	Requirement	Date
IC8	The Operator shall develop an integrated Environmental Management System for the site that will incorporate the existing systems that control operations and maintenance and fuel supply activities undertaken by the permanent contractors. The documented Management System shall be submitted to the Agency for approval with a proposal for subsequent external certification.	31/03/10  Complete
IC9	The Operator shall submit a written report to Natural Resources Wales for approval describing the commissioning, optimisation and performance of the Selective Non Catalytic Reduction (SNCR) system and combustion settings to minimise oxides of nitrogen (NO <sub>x</sub> ), while limiting emissions of N <sub>2</sub> O and NH <sub>3</sub> . The report shall summarise the environmental performance of the SNCR system as installed against the design parameters set out in the Variation Application. The report shall include an assessment of the measured level of NO <sub>x</sub> , N <sub>2</sub> O and NH <sub>3</sub> emissions that can be achieved under optimum operating conditions, and refer to Emission limit values specified in the Permit and performance levels indicated in the variation application. The report shall also include details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions and confirm that the Environmental Management System (EMS) has been updated accordingly.	Within 6 months of the completion of commissioning of the SNCR system
IC10	<p>The Operator shall submit a Fire Prevention and Mitigation Plan (FPMP) to Natural Resources Wales for approval. The FPMP shall meet the requirements of Natural Resources Wales Guidance Note 16 and shall cover all wastes used on site, and shall also include a proposed timetable for implementation of any improvement actions identified as necessary.</p> <p>If required by Natural Resources Wales, the operator shall submit further revisions to the FPMP, and/or responses to specific questions, for approval, within a time required by Natural Resources Wales.</p> <p>The operator shall implement any improvement actions identified as necessary according to a timetable set or approved by Natural Resources Wales, and in any case within 12 months of approval of the FPMP. If necessary, the Operator shall submit an updated Fire Prevention and Mitigation Plan (FPMP) to Natural Resources Wales for approval on completion of these works</p> <p>The improvement condition will be considered complete when any required improvements are completed, and a final FPMP approved by Natural Resources Wales</p> <p><a href="https://naturalresources.wales/permits-and-permissions/environmental-permits/guidance-to-help-you-comply-with-your-environmental-permit/?lang=en">https://naturalresources.wales/permits-and-permissions/environmental-permits/guidance-to-help-you-comply-with-your-environmental-permit/?lang=en</a></p>	<p>FPMP to be submitted within 6 months of permit variation V005</p> <p>Improvements (if required) to be completed to approved timetable and at least within 12 months of approval of the FPMP.</p> <p>Revised FPMP (if required) to be completed within 3 months of completion of improvements</p>

Table S3.2 is amended and replaced with the following:

<b>Table S3.2 Permitted waste types and quantities for use in combustion appliance</b>	
Maximum quantity	160,000 Tonnes per annum
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 03	Plant-tissue waste
02 01 07	Wastes from forestry
<b>02 03</b>	<b>Wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation</b>
02 03 04	Materials unsuitable for consumption or processing that are exempt from the requirements of Chapter IV of the Industrial Emissions Directive 2010/75/EU.
<b>03</b>	<b>WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD</b>
<b>03 01</b>	<b>Wastes from wood processing and the production of panels and furniture</b>
03 01 01	Waste bark and cork
03 01 05	Sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04. (Virgin and untreated non-virgin timber offcuts, shavings, chippings and sawdust from the processing of virgin and non-virgin timber that are exempt from the requirements of the Waste Incineration Directive 2000/76/EC – but excluding particle board waste).
03 01 99	Wastes not otherwise specified that are exempt from the requirements of Chapter IV of the Industrial Emissions Directive 2010/75/EU. (Non-hazardous waste wood fibre and pellets only.)
<b>03 03</b>	<b>Wastes from pulp, paper and cardboard production and processing</b>
03 03 01	Waste bark and wood
<b>15</b>	<b>WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>Packaging (including separately collected municipal packaging waste)</b>
15 01 03	Wooden packaging. (Clean waste wood from non-returnable pallets that is exempt from the requirements of the Waste Incineration Directive 2000/76/EC)
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>
<b>19 05</b>	<b>Wastes from aerobic treatment of solid wastes</b>
19 05 01	Non-composted fraction of municipal and similar wastes that are exempt from the requirements of Chapter IV of the Industrial Emissions Directive 2010/75/EU. (Oversize arboricultural cuttings removed from pre-composting collections, consisting of non-hazardous virgin wood only).
<b>19 12</b>	<b>Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 07	Wood other than that mentioned in 19 12 06.
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>Separately collected fractions (except 15 01)</b>
20 01 38	Wood other than that mentioned in 20 01 37 that is exempt from the requirements of Chapter IV of the Industrial Emissions Directive 2010/75/EU.

Table S4.1 is amended and replaced with the following (including footnotes):

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit) <sup>(1)</sup>	Reference period	Monitoring frequency	Monitoring standard or method <sup>(2)</sup>
A1 [Point A1 on site plan in schedule 2]	Boiler plant fired on biomass	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	250 mg/m <sup>3</sup>	Daily average <sup>(3)</sup>	Continuous	MCERTS <sup>(4)</sup>
		Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	250 mg/m <sup>3</sup>	95% of validated hourly averages within a calendar year do not exceed 200% of daily ELV <sup>(3)</sup>	Continuous	MCERTS <sup>(4)</sup>
		Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	300 mg/m <sup>3</sup>	Periodic sample over a minimum 1 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN 14792
		Particulate matter	10 mg/m <sup>3</sup>	Daily average <sup>(3)</sup>	Continuous	MCERTS <sup>(4)</sup>
		Particulate matter	10 mg/m <sup>3</sup>	95% of validated hourly averages within a calendar year do not exceed 200% of daily ELV <sup>(3)</sup>	Continuous	MCERTS <sup>(4)</sup>
		Particulate matter	15 mg/m <sup>3</sup>	Periodic sample over a minimum 1 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN 13284-1 & and MID for EN 13284-1
		Carbon monoxide (CO)	250 mg/m <sup>3</sup>	Daily average <sup>(3)</sup>	Continuous	MCERTS <sup>(4)</sup>
		Carbon monoxide (CO)	250 mg/m <sup>3</sup>	95% of validated hourly averages within a calendar year do not exceed 200% of daily ELV <sup>(3)</sup>	Continuous	MCERTS <sup>(4)</sup>
		Carbon monoxide (CO)	250 mg/m <sup>3</sup>	Periodic sample over a minimum 1 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN 15058
		Ammonia (NH <sub>3</sub> )	10 mg/m <sup>3</sup>	Periodic sample over a minimum 1 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN ISO 21877
		Nitrous oxide (N <sub>2</sub> O)	No limit set	Periodic sample over a minimum 1 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN ISO 21258
		Sulphur dioxide (SO <sub>2</sub> )	No limit set	Periodic sample over a minimum 4 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN 14791
		Hydrogen Chloride (HCl)	No limit set	Periodic sample over a minimum 1 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN 1911

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit) <sup>(1)</sup>	Reference period	Monitoring frequency	Monitoring standard or method <sup>(2)</sup>
		Cadmium & thallium and their compounds (total)	No limit set	Periodic sample over a minimum 30 minute, maximum 8 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN 14385 and MID for EN 14385
		Mercury and its compounds	No limit set	Periodic sample over a minimum 30 minute, maximum 8 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN 13211
		Metals (Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total))	No limit set	Periodic sample over a minimum 30 minute, maximum 8 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN 14385 and MID for EN 14385
		Dioxins / furans (I-TEQ)	No limit set	Periodic sample over a minimum 6 hour, maximum 8 hour period <sup>(5)</sup>	Bi-annual <sup>(6)</sup>	EN 1948: Parts 1, 2 and 3 & MID for EN 1948
A2 [at the northwest corner of the wood chip storage building]	Exhaust from diesel engine of log chipper	No parameters set	No limit set	-	-	-

Notes:

(1) Limits do not apply to periods of plant Start up and Shutdown. The number of plant Start up and Shutdown periods to be recorded and included in Written Reporting to Natural Resources Wales.

(2) Monitoring facilities shall meet the requirements of Environment Agency Guidance document M1.

(3) The following shall apply to the continuously monitored determinands in this table:

- For the continuous measurement systems fitted to the combustion plant release points defined in Table S4.1 the validated hourly, 48 hourly, monthly and daily averages shall be determined from the measured valid hourly average values after having subtracted the value of the 95% confidence interval.
- The 95% confidence interval for nitrogen oxides and sulphur dioxide of a single measured result shall be taken to be 20%.

- The 95% confidence interval for particulate matter releases of a single measured result shall be taken to be 30%
- An invalid hourly average means an hourly average period invalidated due to malfunction of, or maintenance work being carried out on, the continuous measurement system. However, to allow some discretion for zero and span gas checking, or cleaning (by flushing), an hourly average period will count as valid as long as data has been accumulated for at least two thirds of the period (40 minutes). Such discretionary periods are not to exceed more than 5 in any one 24-hour period unless agreed in writing. Where plant may be operating for less than the 24-hour period, such discretionary periods are not to exceed more than one quarter of the overall valid hourly average periods unless agreed in writing.
- Any day, in which more than three hourly average values are invalid shall be invalidated.

(4) Continuous monitoring equipment shall be calibrated either to EN 14181 or as follows:

- Zero and Span checks shall be carried out on the CEMs at the manufacturers recommended frequency, but at intervals no longer than seven days.
- The results of these checks shall be recorded and the trends produced shall be used to monitor instrument drift.
- The results of periodic monitoring following the reference methods specified in Table S4.1 shall be compared with CEM data for the same period to check CEM calibration.
- Calibration of the CEMs shall be carried out if there is significant discrepancy between the periodic monitoring and the CEMs data.

(5) Periodic monitoring shall be performed when the boiler is operating at a minimum MCR of 60% and when a typical combination of virgin and non-virgin biomass fuel is being combusted in the unit.

(6) "bi-annual" means twice per year with at least five months between tests.

Table S4.4 is amended and replaced with the following (including footnotes):

<b>Table S4.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Combustion chamber of combustor unit	Furnace chamber temperature	Continuous	Traceable to national standards	Or as Otherwise agreed in writing with Natural Resources Wales
A1 [Point A1 on site plan in schedule 2]	Exhaust gas temperature	Continuous	Traceable to national standards	Or as Otherwise agreed in writing with Natural Resources Wales
A1 [Point A1 on site plan in schedule 2]	Exhaust gas water content <sup>(2)</sup>	Continuous	BS EN 15267-3	Or as Otherwise agreed in writing with Natural Resources Wales
A1 [Point A1 on site plan in schedule 2]	Exhaust gas oxygen content	Continuous	BS EN 15267-3	Or as Otherwise agreed in writing with Natural Resources Wales
A1 [Point A1 on site plan in schedule 2]	Exhaust gas flow rate	Continuous	BS EN 15267-3	Or as Otherwise agreed in writing with Natural Resources Wales
Bottom Ash	Total Organic Carbon (TOC)	Quarterly <sup>(3)</sup>	BS EN 14899 and either BS EN 13137 or BS EN 15936	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'. Or as Otherwise agreed in writing with Natural Resources Wales
Bottom Ash	Metals <sup>(1)</sup>	Quarterly <sup>(3)</sup>	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	Or as Otherwise agreed in writing with Natural Resources Wales
Bottom Ash	Dioxins, Furans and dioxin-like PCBs	Quarterly <sup>(3)</sup>	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	Or as Otherwise agreed in writing with Natural Resources Wales

**Table S4.4 Process monitoring requirements**

<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Flue Gas Residues from abatement plant	Metals <sup>(1)</sup>	Quarterly <sup>(3)</sup>	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	Or as Otherwise agreed in writing with Natural Resources Wales
Flue Gas Residues from abatement plant	Dioxins, Furans and dioxin-like PCBs	Quarterly <sup>(3)</sup>	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	Or as Otherwise agreed in writing with Natural Resources Wales

(1) The following metals (including their compounds) shall be monitored: Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, and Zinc.

(2) It has previously been agreed that water vapour content may be determined by calculation from wet and dry exhaust gas oxygen monitoring values.

(3) Quarterly during first year of operation. Subsequent ongoing periodic monitoring frequency to be agreed in writing by the Environment Agency after completion of IC4. Additional samples shall be taken and tested and appropriate action taken, whenever: (a) disposal or recovery routes change; or (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

Table S5.3 is amended and replaced with the following:

<b>Table S5.3 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Supplementary Fuel Oil usage	Annually	Litres
Water usage	Annually	M <sup>3</sup>
Total Bottom Ash generated	Annually	Tonnes
Flue gas residues generated	Annually	Tonnes
Average calorific value of biomass fuel consumed (wet basis)	Annually	MJ/Kg
Number of Start up and Shut down Periods	Annually	Number of events
Bag filter bypass events and accumulated time	Annually	Number of events and total accumulated time (minutes)
Number of loads incoming biomass that are rejected as being outside of greed specification	Annually	Number of individual delivery loads
Urea consumption	Annually	Kg

Permit Schedule 6 (Notification) is amended and replaced with amended Permit Schedule 6 included at the end of this notice, for the purposes of notification.

### **Schedule 3 – conditions to be added**

The following conditions are added as a result of the application made by the operator:

3.2.4 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

## **3.6 Fire prevention**

3.6.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.

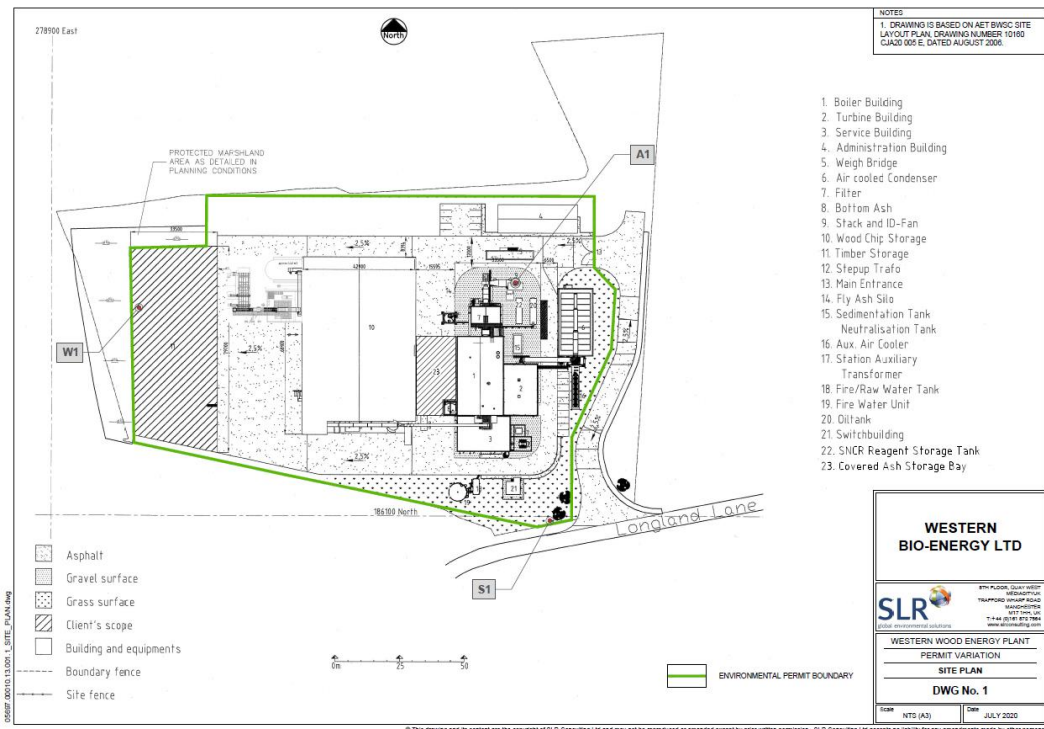
3.6.2 The operator shall:

- (a) if notified by Natural Resources Wales that the activities are giving rise to a risk of fire, submit to Natural Resources Wales for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
- (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.



## Schedule 4 – amended plan

Amended plan attached.



*Note permit boundary is unchanged – general internal layout only is updated.*

## Schedule 6 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

### Part A

Permit Number	<b>ZP3939GL</b>
Name of operator	<b>Western Bio-Energy Limited</b>
Location of Facility	<b>Western Wood Energy Plant - Margam, Longlands Lane, Margam, Port Talbot, SA13 2NR</b>
Time and date of the detection	

#### **(a) Notification requirements for any activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment**

<b>To be notified Immediately</b>	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

#### **(b) Notification requirements for the breach of a permit condition**

<b>To be notified immediately</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

<b>(c) In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment:</b>	
<b>To be notified immediately</b>	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

## Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

<b>Name*</b>	
<b>Post</b>	
<b>Signature</b>	
<b>Date</b>	

\* authorised to sign on behalf of the operator, **Western Bio-Energy Limited**

END OF NOTICE