Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Singleton Birch Limited

Melton Ross Lime Works
Melton Ross Quarries
Barnetby
North Lincolnshire
DN38 6AE

Variation application number

EPR/BL8805IZ/V008

Permit number

EPR/BL8805IZ

Melton Ross Lime Works
Permit number EPR/BL8805IZ

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.

The changes introduced by this variation are:

- The addition of two further gas engines (increasing the total number of operational CHP Units from six to eight).
- The installation of a third digester tank with a capacity of 6,000m^3.
- The upgrade of the existing digestate drier to employ the additional thermal energy from the two additional CHP Units, therefore increasing throughput and production of dry digestate fertilizer for land spreading.

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.

Status log of the permit		
Description	**Date**	**Comments**
Application received EPR/BL8805IZ/A001	Duly made 31/08/2001	
Permit determined EPR/BL8805IZ	22/08/2002	Permit issued to Singleton Birch Limited
Variation Application EPR/BL8805IZ/V002	Duly made 22/05/2003	
Variation determined EPR/BL8805IZ	05/08/2003	
Variation Application EPR/BL8805IZ/V003	Duly made 17/12/2009	
Variation determined EPR/BL8805IZ	21/01/2010	
Cement and Lime sector Review Variation determined EPR/BL8805IZ/V004	18/08/2010	Variation and consolidation.
Variation Application EPR/BL8805IZ/V005	Duly made 04/10/2011	
Variation determined EPR/BL8805IZ	31/10/2011	
Variation Application EPR/BL8805IZ/V006	Duly made 21/03/2014	Addition of an anaerobic digestion facility and five combined heat band power (CHP) combustion units for the use of resultant biogas.
Variation determined EPR/BL8805IZ	12/05/2014	

Status log of the permit		
Description	**Date**	**Comments**
Variation Application EPR/BL8805IZ/V007	Duly made 18/08/2014	Addition of sixth CHP unit, digestate drier, slurry tank. Glycol tank and purpose grown crops as a new raw material.
Response to request for further information	09/10/2014	Revised H1 emissions to air risk assessment. Updated odour management plan, email detailing responses to questions and updated emissions to air plan “EA Layout”
Variation determined EPR/BL8805IZ PAS/Billing Ref: LP3039WF	31/10/2014	Varied permit issued.
Variation Application EPR/BL8805IZ/V008	Duly made 01/05/2015	Addition of third digestate tank, upgrade of digestate drier and addition of CHP Units Numbers 7 & 8.
Request for further information	03/07/2015	Revised plant layout drawing showing corrected emission points to air for upgraded AD plant and equipment.
Variation determined EPR/BL8805IZ	23/07/2015	Varied permit issued.

End of introductory note

Notice of variation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

Permit number

EPR/BL8805IZ

Issued to

Singleton Birch Limited ("the operator")

whose registered office is

Melton Ross Quarries
Barnetby
North Lincolnshire
DN38 6AE

company registration number 00009433

to operate a regulated facility at

Melton Ross Lime Works
Melton Ross Quarries
Barnetby
North Lincolnshire
DN38 6AE

to the extent set out in the schedules.

The notice shall take effect from 23rd July 2015

Name	Date
J Linton	**23/07/2015**

Authorised on behalf of the Environment Agency

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

Table S1.1 as referred to in conditions 2.1.1 and 4.2.2 of the Permit is amended as follows.

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity**	**Limits of specified activity**
A1	S3.1 A1 (b) (i)	The operation of four parallel flow regenerative lime kilns with a production capacity of more than 50 tonnes per day.	The receipt of raw materials at the kilns to the transfer of lime to the crushing plant.
	Directly Associated Activity		
A2	Raw materials preparation conveying and storage	Crushing and screening of chalk and its storage in hoppers and in emergency stockpile.	Crushing and screening of chalk and its storage in hoppers and in emergency stockpile.
A3	Production of slaked lime	The hydration of lime	The hydration of lime in two hydrators
A4	Production of microlime	The milling of lime and dolomet	The operation of two roller pendulum milling systems
A5	Production of graded lime	The milling, screening and blending of lime (including blending with paper sludge ash)	The operation of a hammer mill, rolls crusher and multi-deck screens
A6	Production of aqualime	Mixing of hydrated lime with water. Mixing of hydrated lime with landfill leachate	Mixing of hydrated lime with water. Mixing of hydrated lime with landfill leachate
A7	Product handling	Hydrate bagging and burnt lime bagging	Hydrate bagging and burnt lime bagging
A8	Product storage and despatch	Storage of product in silos and subsequent loading into mobile tankers	Storage of product in silos and subsequent loading into mobile tankers
	Description of activities for waste operations	**Limits of activities**	
A9	A mining waste operation for non-hazardous non-inert wastes	Permitted waste types shall conform to the description in the approved waste management plan.	
A10	Anaerobic digestion including the use of resultant biogas R13: Storage of wastes pending the operations	Digestion of purpose grown crops Digestion of wastes including pasteurisation and chemical addition. Gas cleaning and upgrading to bio-methane. Gas storage and drying.	

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity**	**Limits of specified activity**
	numbered R1, R3 and D10 R3: Recycling or reclamation of organic substances that are not used as solvents R1: Use principally as a fuel or other means to generate energy.	Combustion of biogas produced in eight Combined Heat and Power Gas Engine Units developing a total of 2MWe and 2.2MWth. Treatment of digestate including screening to remove plastic residues, centrifuge or pressing, addition of thickening agents (polymers) and drying. Composting and maturation of digestate. The maximum throughput of animal wastes shall be no more than 10 tonnes per day [excluding manures and slurries]. The total quantity of waste or a combination of waste and non-waste including solids and liquids accepted at the site shall not exceed 100 tonnes in any one day. Burning of biogas in gas engines, gas turbines, boilers and use in fuel cells. Use of an auxiliary flare required only for short periods of breakdown or maintenance of facility. Use of pressure release valves to protect the integrity of the plant. Such systems should not be used routinely to vent unburned biogas.	

Table S1.2 as referred to in condition 2.3.1 of the Permit is amended as follows.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The response to questions B2.3 given in section B2.3 of the application document	31/08/2001
Letter dated 22/08/2002	The addition of milling dolomet (magnesium oxide) in the Microlime plant	22/08/2002
Application for a Standard variation	Document Reference Number LFP 1 of the Application.	22/05/2003
Application for Variation EPR/BL8805IZ/V003	All sections relating to operating techniques for the alcinations of dolomitic limestone	17/12/2009
Application for Variation EPR/BL8805IZ/V005	The response to question 3a of application form C3; Non technical summary; Document detailing the process using paper sludge ash; Waste Management Plan; Response to questions 4c and 4d of application form part C5.	04/10/2011
Application for Variation EPR/BL8805IZ/V006	Parts C2 and C3 of the application forms and all associated documents. Response to not duly made letter: Thermal capacity for the CHP units, revised H1 assessment, site drain plan, technical information on the anaerobic digestion facility.	21/03/2014
Application for Variation EPR/BL8805IZ/V006	Email from operator responding to request for further information regarding the odour management plan and technical information on the AD process.	09/04/2014

Application for Variation EPR/BL8805IZ/V006	Email received from operator confirming compliance with requirements of standard rules SR2012 No12 other than the storage of the waste.	11/04/2014
Application for Variation EPR/BL8805IZ/V006	Revised plan showing air emission points reference 'EA 01'	14/04/2014
Application for Variation EPR/BL8805IZ/V007	Parts C2 and C3 of the application documents and all associated documents.	18/08/2014
Application for Variation Response to request for information EPR/BL8805IZ/V007	Revised H1 emissions to air risk assessment, updated odour management plan, email detailing responses to questions, updated emissions to air plan 'EA Layout'.	09/10/2014
Application for Variation EPR/BL8805IZ/V008	Parts C2 and C3 of the application documents and all associated documents.	01/05/2015

Table S3.2 as referred to in conditions 3.1.1, 3.5.1 and 3.5.4 of the Permit is amended as follows.

Table S3.2 Non-kiln point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
A1 Kiln 1 A2 Kiln 2 A3 Kiln 3 on site plan in Schedule 7]	Particulate matter	Kiln Stack	100 mg/m3	Averaged over the sampling period of at least half an hour.	6 monthly	BS EN 13284-1
A4 Kiln 4 on site plan in Schedule 7]	Particulate matter	Kiln Stack	50 mg/m3	Averaged over the sampling period of at least half an hour.	6 monthly	BS EN 13284-1
A1, A2, A3 and A4	Sulphur dioxide	Kiln Stack	50 mg/m3	Averaged over the sampling period of at least half an hour.	6 monthly	BS EN 15267-3
A1, A2, A3 and A4	Carbon monoxide	Kiln Stack	50 mg/m3	Averaged over the sampling period of at least half an hour.	6 monthly	BS EN 15267-3
A1, A2, A3 and A4	Oxides of Nitrogen (NO and NO2 expressed as NO2)	Kiln Stack	200 mg/m3	Averaged over the sampling period of at least half an hour.	6 monthly	BS EN 14792
A5 Hydrator 2, Hydrated lime plant on site	Particulate matter	Hydrated lime plant	30mg/m3	Averaged over the sampling	6 monthly	BS EN 13284-1

Table S3.2 Non-kiln point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
plan in schedule 7				period of at least half an hour.		
A6 Hydrator 3, Hydrated lime plant on site plan in schedule 7	Particulate matter	Hydrated lime plant	30 mg/m3	Averaged over the sampling period of at least half an hour.	6 monthly	BS EN 13284-1
A7 & A8 Microlime Plant on site plan in schedule 7	Particulate matter	Microlime plant	50 mg/m3	Averaged over the sampling period of at least half an hour.	6 monthly	BS EN 13284-1
A9, A10, A11, A12, A13, A14, A31 and A32. Stacks on CHP engines No.1 - 8 on site plan 'Phase 3 EA Layout' Issue 2 submitted 09/07/15	Oxides of Nitrogen	Stacks on CHP biogas combustion engines	500 mg/m3	Averaged over the sampling period of at least half an hour.	Annual	MCERTS
	Carbon monoxide		1,400 mg/m3	Averaged over the sampling period of at least half an hour.	Annual	MCERTS
	Sulphur dioxide		350 mg/m3	Averaged over the sampling period of at least half an hour.	Annual	MCERTS
	Total volatile organic compounds including methane		1,000 mg/m3	Averaged over the sampling period of at least half an hour.	Annual	MCERTS
A15 Auxiliary Flare on site plan 'Phase 3 EA Layout' Issue 2 submitted 09/07/15	Oxides of Nitrogen	Auxiliary flare	No limit set	--	--	Record of operating hours.
A16, A17, A18, A19, A29 and A30 Gas store on site plan 'Phase 3 EA Layout' Issue 2	Biogas	Pressure relief valves	No limit set	--	--	Weekly visual or remote monitoring to ensure valves are

Table S3.2 Non-kiln point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
submitted 09/07/15						correctly seated.
A20, A21, A22, A23, A24, A25 and A26 Digestate Drier on site plan 'Phase 3 EA Layout' Issue 2 submitted 09/07/15	Particulate Matter	Digestate Drier	No limit set	--	--	--
A20, A21, A22, A23, A24, A25 and A26 Digestate Drier on site plan 'Phase 3 EA Layout' Issue 2 submitted 09/07/15	Ammonia	Digestate Drier	No limit set	--	--	--
A33 Glycerine Tank on site plan 'Phase 3 EA Layout' Issue 2 submitted 09/07/15	No parameters	Glycerine Tank Vent	No limit set	--	--	--
A34 Slurry Tank on site plan 'Phase 3 EA Layout' Issue 2 submitted 09/07/15	No parameters	Slurry Tank Vent	No limit set	--	--	--

Table S4.1 as referred to in condition 4.2.3 of the Permit is amended as follows.

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air Parameters as required by condition 3.5.1.	A1, A2, A3, A4, A5, A6, A7 and A8	Every 6 months	1 January 1 July

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air Parameters as required by condition 3.5.1.	A9, A10, A11, A12, A13, A14, A31 and A32	Annually	1 January

Table S4.2 as referred to in condition 4.2.3 of the Permit is amended as follows.

Table S4.2 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form Air 1 or other form as agreed in writing by the Environment Agency	07/07/2015

Schedule 3 – conditions to be added

None