

Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2007

Whitchurch Salt Slags

Befesa Salt Slags Ltd
Fenns Bank
Shropshire
SY13 3PA

Variation notice number
EA/EPR/VP3030BX/V002

Permit number
VP3030BX

Whitchurch Salt Slags

Permit Number VP3030BX

Introductory note

This introductory note does not form a part of the permit

The following notice, which is issued pursuant to regulation 20 and Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations S.I.2007 No. 3538 (the Regulations), gives notice of the variation of an environmental permit to operate a regulated facility.

This variation allows the use of Spent Pot Liner Cut 2 as a raw material in the process; and the milling of Spent Pot Liner Cut 1 (Subject to compliance with pre-operational conditions) and Foundry Sand. Spent Pot Liner is a waste from the aluminium smelting industry consisting of the refractory lining and remains of the cathode from electrolysis cells, or "pots". The "Cut 2" portion contains quantities of sodium and aluminium salts that can be recovered in the process at Whitchurch Salt Slags. The only changes to the process are the introduction of Sodium Hypochlorite as a raw material to treat the Cut 2 SPL to prevent the release of free cyanide, and the introduction of a new flocculant.

Foundry sand is milled through Crushing Line A and will be included in the activity Section 3.5 Part B (a) – "The crushing and grinding or other size reduction of any designated mineral or mineral product" where "designated mineral product" includes sand.

The milling of SPL Cut 1 will be added as an additional activity – under Section 5.4 Part A(1), recovery of waste along with milling of SPL Cut 2 prior to chemical processing.

There are no new emission points and there will be no increase in total production capacity.

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions and Schedule 3 lists any conditions that have been added.

Status Log of the permit

Detail	Date	Response Date
Application VP3030BX	Duly made 05/07/05	
Response to request for information	Request dated 02/02/06	Response dated 24/02/06
Additional information received in relation to the ammonium sulphate storage lagoon	19/08/05	
Request to extend determination	Request dated 17/01/06	Request accepted 23/01/06
Request to extend determination	Request dated 26/04/06	Request accepted 27/04/06
Permit determined	28/07/06	
Variation EA/EPR/VP3030BX/V002	Duly made 19/05/08	
Schedule 5 Notice issued	23/05/08	Request accepted 23/07/08
Additional information received in relation to BAT for proposed activities	21/07/08	
Additional information received in relation to environmental impact of proposed activities	26/08/08	
Additional information received in relation to ferrocyanide emissions	18/08/08	
Additional information received in relation to fluoride emissions	19/08/08	
Additional information received in relation to fluoride impacts during SPL Cut 1 processing	26/08/08	
Email received in relation to foundry sand EWC codes	09/10/08	
Additional information received in relation to fluoride emissions and scrubber operation	13/10/08	
Request to extend determination	Request dated 22/10/08	Request accepted 27/10/08
Additional information – air quality impact assessment report by REC ref. 70988p3d0 dated 31/10/08	Received 10/11/08	
Email received in relation to Spent Pot Liner EWC codes	09/10/08	
Request received to amend proposed operating conditions	14/11/08	
Request to extend determination	Request dated 10/12/08	Request accepted
Request to extend determination	Request dated 11/02/09	Request accepted
Variation issued	14 April 2009	

End of Introductory Note

Notice of variation

Environmental Permitting
(England and Wales) Regulations 2007

Permit number
VP3030BX

Variation Notice Number
EA/EPR/VP3030BX/V002

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2007 (SI 2000 No 3538) varies the permit as set out below.

Befesa Salt Slags Limited ("the operator"),
whose registered office is
Fenns Bank
Whitchurch
Shropshire
SY13 3PA

company registration number **4070154**

holds a permit to operate a regulated facility at

Fenns Bank
Whitchurch
Shropshire
SY13 3PA

and that permit is varied to the extent set out in Schedules 1 to 3 of this notice.

The notice shall take effect from 15 April 2009

Name

Date

Jane Adamson



14th April 2009

Authorised on behalf of the Agency

Schedule 1 – conditions to be deleted

None.

Schedule 2 – conditions to be amended

The following conditions are amended as follows

- 1 Condition 1.1.1 shall be amended to:

The Operator is authorised to carry out the activities and the associated activities specified in Table 1.1.1.

Table 1.1.1		
Activity listed in Schedule 1 of the Environmental Permitting Regulations / Associated activity	Description of specified activity	Limits of specified activity
Section 4.2 Part A1 (a)(v) – Producing inorganic chemicals such as non-metals, metal oxides, metal carbonyls or other inorganic compounds such as calcium carbide, silicon, silicon carbide, titanium oxide	Producing aluminium solids, ammonium sulphate, sodium and potassium chlorides and aluminium oxides recovered from aluminium salt slag and SPL Cut 2 from the aluminium smelting industry. Chemical Plants 1 and 2	Receipt of raw materials to dispatch of finished product. Chemical Plant 1: Reaction and dissolution of salt slag or salt slag and SPL 2 with water to produce aluminium oxide and brine. Chemical Plant 2: Crystallisation Plant – Removing sodium chloride and potassium chloride from solution.
Section 3.5 Part B (a) – The crushing and grinding or other size reduction of any designated mineral or mineral product, including metallurgical slag	Separation of aluminium from dross by milling; milling of foundry sand Crushing Line A	Milling and grading of drosses to remove aluminium solids, Milling of foundry sand
Section 3.5 Part B (a) – The crushing and grinding or other size reduction of any designated mineral or mineral product, including metallurgical slag	Separation of aluminium from slag by milling. Crushing Line B	Milling of salt slag to produce raw material input to the chemical plant.
Section 5.4 Part A1(c)(iii) recovering hazardous waste in a plant with a capacity of more than 10 tonnes per day by means of the following operations –	Recovery of SPL Cut 1 by milling prior to shipping off site; and SPL Cut 2 by milling prior to treatment in the chemical plant.	Receipt of raw materials, Milling

recycling/reclamation of inorganic materials other than metals and metal components			
Directly associated activity	Storage and handling of raw materials	From receipt of raw materials to despatch as product or disposal	
Directly associated activity	Boiler Plant – provision of steam for crystallisation plant	Kerosene fuelled 6.5MW thermal input.	
Directly associated activity	Recovery of non hazardous SPL Cut 1 (EWC code 16 11 04) by milling prior to shipping off site	Receipt of raw materials, Milling	

2. Condition 1.4.1 shall be amended to add the following conditions to table 1.4.1:

Table 1.4.1: Improvement Programme			
Reference	Requirement		Date
IC7	The operator shall provide suitable banded facilities for the storage of sodium hypochlorite solution. Confirmation that this has been completed shall be reported in writing to the Environment Agency.		30 th August 2009
IC8	The operator shall carry out a programme of monitoring from point A1 whilst milling of foundry sand is being carried out. Duplicate monitoring shall be carried out on two occasions in the 12 months following the issue of this variation notice for total VOCs, using standards agreed with the Environment Agency. The results of each monitoring round shall be reported to the Environment Agency upon receipt.		30 th June 2010
IC9	The operator shall carry out a programme of emissions monitoring from point A1 whilst milling of SPL Cut 1 is being carried out. Duplicate monitoring shall be carried out on two occasions in the 12 months following issue of this variation notice for particulate and solid fluoride, using standards agreed with the Environment Agency. The results of each monitoring round shall be reported to the Environment Agency upon receipt.		30 th June 2010
IC10	The operator shall carry out a programme of emissions monitoring from point A1 whilst milling of SPL Cut 2 is being carried out and A2 and A5 whilst chemical		30 th June 2010

	processing of SPL Cut 2 is being carried out. Duplicate monitoring shall be carried out on two occasions in the 12 months following issue of this variation notice for A1: particulate and solid fluoride, A2 and A5: hydrogen fluoride, using standards agreed with the Environment Agency. The results of each monitoring round shall be reported to the Environment Agency upon receipt.	
IC11	The operator shall provide a report to the Environment Agency following commissioning of the new activities to demonstrate the effectiveness of measures put in place to control emissions, including those of odour and dust. The report shall include an assessment of the impact of emissions on the local environment and nearby SAC.	30 th October 2009
IC12	The operator shall carry out a review of techniques to minimise fugitive dust emissions from materials handling and processing. The review shall take account of the potential for increased risk of flooding from increased hardstanding areas. A report of the findings containing a timetable for implementing any improvements identified shall be submitted to the Environment Agency.	30 th December 2009
IC13	The operator shall carry out a review of the assessment carried out for Improvement Condition IC3 for ammonia only against the new critical levels that are applicable to the nearby SAC. A report of the findings of the review shall be submitted to the Environment Agency.	30 th June 2009
IC14	The Operator shall provide a design and specification to the Environment Agency for the wet acid scrubber proposed in the PPC Application to be installed for the absorption of ammonia emissions from the intermediate Befesa Fine Aggregate store. (Emission point A6 to air).	30 th September 2009.
IC15	Following agreement of the design and specification in IC14 with the Environment Agency, the Operator shall install the wet acid scrubber (emission point A6 to air).	31 st March 2010
IC16	The Operator shall forward a report of the commissioning of the wet acid scrubber (emission point A6 to air) to the Environment Agency..	15 th May 2010.

- 3 Condition 2.1.1, table 2.1.1 shall be amended to:

Table 2.1.1 Operating Techniques			
Description	Parts		Date received
Application	The response to questions 2.1 and 2.2 found on pages 11 to 35 of the Application		05/07/05
Additional information received on relation to the ammonium sulphate storage lagoon	All Parts		19/08/05
Response to request for additional information	Response relating to monitoring methods in use		24/02/06
Application for variation	Section C2		14/04/08
Response to Schedule 5 request issued 23/05/08	All		23/07/08
Request received to amend proposed operating conditions	All		14/11/08

- 4 Condition 4.1.3 shall be amended in so far as Table S4.1 of Schedule 4 shall be amended to:

Table S4.1: Annual Production/Treatment			
Production of Aluminium Oxide			(tonnes)
Amount of Salt Slag processed			(tonnes)
Amount of Spent Pot Liner processed	Cut 1		(tonnes)
	Cut 2		(tonnes)

- 5 Condition 6.1.1 shall be amended to add the following definition:
 “duplicate monitoring” means taking and analysis of two samples, instrumental measurements (periodic and continual), calibrations, examinations, tests or surveys.
6. Condition 1.6.1 shall be amended to:
 The milling of Spent Potliner Cut 1 shall not be brought into operation until the measures specified in Table 1.6.1 have been completed.

Table 1.6.1 Pre-operational measures

Pre-operational measures	
Reference	
1	Spent Pot Liner Cut 1 shall not be milled until monitoring results from the recent trial (150t. 16 Feb 09– 13 Mar 09) have been assessed and the impacts outlined in the variation application confirmed.

7 Condition 2.2.6.2 shall be amended to:

The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to annoyance outside the site due to odour, submit to the Agency for approval within the period specified, an odour management plan;
- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Agency.

Schedule 3 – conditions to be added

The following conditions are added to the permit:

8 Condition 2.5.2 to be added:

2.5.2 Waste shall only be accepted if:

- (a) it is of a type and quantity listed in table(s) 2.5.2.1 and 2.5.2.2 and
- (b) it conforms to the description in the documentation supplied by the producer and holder.

Table 2.5.2.1 Permitted waste types and quantities for milling of Foundry Sand

Maximum quantity	250 tonnes per day
Waste code	Description
10 09 06	Foundry Sand
10 10 06	Foundry sand
10 10 08	Foundry sand
10 12 06	Foundry sand

Table 2.5.2.2 Permitted waste types and quantities milling of Spent Pot Liner

Maximum quantity	450 tonnes per day. No more than 5000 tonnes to be stored at any one time.
Waste code	Description
16 11 01*	Carbon-based linings and refractories from metallurgical processes containing dangerous substances - Spent Pot Liner (hazardous)
16 11 03*	Other linings and refractories from metallurgical processes containing dangerous substances.
16 11 04	Other linings and refractories from metallurgical processes other than those mentioned in 16 11 03*