

APPENDIX F - AMENDMENT TO THE UK PHASE II NATIONAL ALLOCATION PLAN TO UNILATERALLY OPT IN NITROUS OXIDE EMISSIONS FROM NITRIC ACID PRODUCTION

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A. INTRODUCTION

1. The UK has decided to opt-in nitrous oxide (N₂O) emissions from nitric acid production in the European Union Emissions Trading System (EU ETS) for the period from 1st April 2011 to 31st December 2012¹. Article 24 of directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission trading within the Community (the 'EU ETS directive') provides that Member States from 2008 can make an application to the European Commission to unilaterally include additional activities and gases into EU ETS. The UK applied to the European Commission to unilaterally opt-in N₂O emissions from nitric acid production into Phase II of the EU ETS. This appendix sets out the total quantity of allowances distributed to installations as a result of the N₂O opt-in; the sources of these allowances; rules for any new entrants in the nitric acid producing sector; and general conditions on nitric acid producing installations.
2. There is an extremely high N₂O emissions reduction potential in the nitric acid production sector which means that operators can bring their emissions down significantly once a carbon price signal is brought to bear on their emissions. In addition, N₂O is a highly potent greenhouse gas with a global warming potential of 310 times that of Carbon Dioxide (CO₂). For the UK's two nitric acid producing installations, the average per annum emissions of N₂O from nitric acid production from 2002-2008 were 3,492 tonnes of N₂O, or 1,082,545 tonnes of CO₂ equivalent

¹ Carbon Dioxide (CO₂) emissions from nitric acid production are not covered by the opt in.

(tCO₂e). In addition, the average emissions intensity over these installations for the same period was 3.0 kg N₂O/ tonne of 100% nitric acid. It is anticipated that an opt in will reduce the UK's annual emissions of N₂O to approximately 160,000 t CO₂e and the average emissions intensity to 0.42 kg N₂O /tonne of 100% nitric acid by the end of Phase II. Therefore, the opt-in will assist the UK in reducing emissions under the Kyoto Protocol 1st commitment period, and against our national carbon budgets. It will also help our transition to a low carbon economy.

B. DETERMINATION OF ALLOCATION OF ALLOWANCES FOR N₂O EMISSIONS FROM NITRIC ACID PRODUCTION

B.1 Allocation Methodology

3. UK installations included in the EU ETS as a result of the unilateral N₂O opt-in will be allocated free allowances according to a benchmark as set out in the below formula:

Annual allocation methodology for nitric acid producing sector 'incumbents':				
Annual incumbent installation allocation	=	(Benchmark level (kg N ₂ O/tonne of 100% nitric acid)	X
				X
			Relevant production (tonnes of 100% nitric acid)	
				310
				(Global Warming Potential for nitrous oxide)
) / 1000

4. The N₂O opt-in benchmark level will be as follows: 1.5 kg N₂O / tonne of 100% nitric acid in 2011, and 1.3 kg N₂O / tonne of 100% nitric acid in 2012. To calculate the level of allocations installations will be required to submit independently verified production data in tonnes of 100% nitric acid produced for the baseline period 2002 to 2008 inclusive. For the allocation methodology "relevant production" is an average of production from the years 2003, 2005 and 2008. These are the highest overall production years for the opted in installations.
5. The European Commission Decision on the UK N₂O opt-in is effective from 1st April 2011. As the required domestic legislation cannot come into force before this date there will be a voluntary requirement for installations to monitor and report their emissions from 1 April 2011 until the date upon which the domestic legislation comes into force. . Consequently, the annual installation level allocation for 2011 can be pro-rated to reflect the start date on which installations begun monitoring and reporting their emissions in accordance with the required domestic legislation. Allowances are normally issued to EU ETS installations by 28th February each year. Allowances for opted-in installations for 2011 will be issued after the 1st May 2011, and by 28th February 2012 for 2012. The Registry administrator must, in relation to the opted-in activities, withhold the issue of allowances for 2011 until after 1st May 2011.

B2 Installation level allocation

6. In the UK, there are two installations which produce nitric acid, both are operated by GrowHow UK Ltd. These installations are at Ince and Billingham.
7. Based on the allocation formula and benchmark levels set out in section B1, for the period of 2011 – 2012 inclusive a total of 922,353 EU allowances will be allocated to the nitric acid sector for N₂O emissions based on the opt-in date and the commencement of monitoring and reporting of emissions on 1st April 2011. These allowances will be allocated in the following manner:

TABLE 1 – Installation level allocation as a result of the N₂O opt in				
Operator	Installation name	2011	2012	Total
GrowHow Ltd	Kemira GrowHow UK Ltd. (Ince)	203,038	234,621	437,659
GrowHow Ltd	Billingham Fertilizer Works Auxiliary Boilers (Billingham)	224,858	259,836	484,694
		427,896	494,457	922,353

8. The two incumbent nitric acid producing installations effected by the UK opt-in are already included in Phase II EU ETS under the combustion activity with a rated thermal input exceeding 20 MW listed in Annex I of the EU ETS Directive². Therefore the opt in of N₂O emissions for nitric acid production will represent an amendment to these installations' Phase II National Allocation Plan allocations. Table 2 below sets out these changes.

²“ Incumbent” refers to installations which are in operation on 30th June 2010 (i.e. the date of the UK Article 24 opt in application to the European Commission).

TABLE 2 - Amendment to UK National Allocation Plan table to unilaterally opt-in N₂O emissions from nitric acid production

Approved UK Phase II National Allocation Plan

NAP ID	Permit ID	Installation ID	Operator	Installation name	Allocations					Allocation total
					2008	2009	2010	2011	2012	
2567	EA-ETCO2-0165	GB 148	GrowHow UK Ltd	Kemira GrowHow UK Ltd.	37,293	37,293	37,293	37,293	37,293	186,465
2109	EA-ETCO2-0282	GB 194	GrowHow UK Ltd	Billingham Fertilizer Works Auxiliary Boilers	13,889	13,889	13,889	13,889	13,889	69,445

Amendments to Approved UK Phase II National Allocation Plan to unilaterally opt in N₂O emissions from nitric acid production.

NAP ID	Permit ID	Installation ID	Operator	Installation name	Allocations					Allocation total
					2008	2009	2010	2011	2012	
2567	EA-ETCO2-0165	GB 148	GrowHow UK Ltd	Kemira GrowHow UK Ltd.	37,293	37,293	37,293	240,331	271,914	624,124
2109	EA-ETCO2-0282	GB 194	GrowHow UK Ltd	Billingham Fertilizer Works Auxiliary Boilers	13,889	13,889	13,889	238,747	273,725	554,139

B3 Source of allowances for the N₂O opt-in

9. Allowances for incumbent nitric acid producing installations will be obtained from the allowances that have returned to the UK Government from the main EU ETS due to the closure of installations in the UK . These allowances would have otherwise been auctioned by the UK Government under section H, appendix D. No new allowances will be created to facilitate the opt-in. This is in order to further improve the environmental integrity of the EU ETS and to ensure that the UK's cap remains tight for the remainder of Phase II.
10. The Government still intends to auction or sell any additional surplus allowances from closures beyond the level required for the opt in, up to the 10% (of the UK cap) auctioning limit set out the EU ETS directive.

C. ACCESS TO PROJECT CREDITS

11. Installations which enter into the EU ETS through the N₂O opt in will not be eligible to make use of international project credits (i.e. those from Joint Implementation or the Clean Development Mechanism) in Phase II.

D. NEW ENTRANTS

12. New installations that commence the operation of nitric acid production activity after 30th June 2010 and before the 31st December 2012 ('new entrants') will be entitled to an allocation of free allowances. This does not include extensions to existing nitric acid producing installations.
13. Where the provisions of paragraph 12 above apply to an operator, to the extent those provisions are contrary to the provisions of Section D (paragraphs 26 to 28) and Section F (paragraphs 29 to 57, and paragraphs 61 to 70) of Appendix D, paragraph 12 of the Appendix shall take precedence.
14. New Entrants will be allocated using a benchmark of 0.12kg N₂O /tonne of 100% nitric acid. This is consistent with the most challenging end of the European Commission's Integrated Pollution Prevention Control Reference Document on the Best Available Technologies for the manufacture of large volume inorganic chemicals, including nitric acid production. This benchmark level will be applied to a "relevant production" proxy. This proxy will be calculated by the verified installed capacity of the new installation multiplied by standard factors for the number of operational

days (330) and load (90%). The formula for allocating to nitric acid producing new entrants is set out below:

Annual allocation methodology for nitric acid producing sector ‘new entrants’:								
Annual new entrant installation allocation	=	(New entrant benchmark level (0.12kg N ₂ O/tonne of 100% nitric acid)	×	Relevant production proxy (tonnes of 100% nitric acid per year)	×	310 Global warming potential for nitrous oxide) / 1000

Where:						
Relevant production proxy (tonnes of 100% nitric acid per year)	=	Installed capacity (tonnes of 100% nitric acid per day)	×	330 days	×	Load factor (90%)

15. In line with other EU ETS new entrants, the Government will take a standardised approach to commissioning that assumes a commissioning period of 50 days, during which new entrants will receive only 50% of their allocation rather than receiving an allocation based on the full, commercial rate of operation from the start date of the installation.
16. New entrants in the nitric acid sector will be required to apply for allowances from the main New Entrants’ Reserve (NER). They will also follow the same allocation process as other EU ETS new entrant. Details of the NER allocation process are set out in section G, appendix D (paras 88 – 128). New entrants in the nitric acid sector will not be required to comply with paragraph 105b of section G and paragraph 4 of section A in appendix D. Such new entrants will not be able to use the new entrant spreadsheet to calculate indicative allocations. Instead, they should use the new entrant formula set out in this appendix F.

E. CLOSURES

E1 Complete closures

17. Complete, temporary and partial closures in the nitric acid producing sector will be dealt with in the same way as other EU ETS installations as set out in section F, appendix D (para 71- 78).

18. The Government intends to auction or sell any surplus allowances from installations from the nitric acid producing sector which have closed operations.

F. RATIONALISATIONS

19. Rationalisation occurs when Annex I activities at one EU ETS installation are closed and moved to another EU ETS installation(s) owned by the same operator. Nitric acid producers that rationalise their production are not entitled to retain the free allocation relating to the activities that have ceased operating.

20. Where the provisions of paragraph 22 above apply to an operator, to the extent those provisions are contrary to the provisions of Section F1 (paragraphs 79 to 87) of Appendix D, paragraph 19 of this Appendix shall take precedence.