Rehab Glassco

Dr. Magnus Amajirionwu
Office of Climate, Licensing Research & Resources
Environmental Protection Agency
Headquarters
PO Box 3000
Johnstown Castle Estate
Wexford

6th August 2015

Ref: W0279-02

RE: Notice in Accordance with Article 14(2) (b) (ii) of the Waste Management (Licensing) Regulations 2004, as amended

Dear Dr. Amajirionwu,

Further to your recent correspondence received on the 21/07/2015 in relation to the request for additional information regarding Article 13 Compliance Requirements, please see enclosed response prepared by Axis Environmental Services who were commissioned by Rehab Glassco to complete the air emissions monitoring at the facility.

Please be aware that the information supplied in compliance with this notice does not impinge upon the non-technical summary previously submitted therefore no amendments are required at this time.

If you have any questions or require any additional information please do not hesitate to contact me.

Yours sincerely,

Elaine Murray
Quality, Environmental, Health & Safety Manager

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National Waste Collection Permit No: NWCPO-08-01150-02 **Licence No:** W0279-01

Registered in Ireland No: 365472 **Registered Office:** Unit 4 Osberstown Industrial Park, Caragh Road, Naas, Co. Kildare, Ireland
Directors: K. Poole, Z. Mustafa (Managing), D. Cooper, P. Murphy

PART FUNDED BY
REPAK
Business *funding* recycling

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Environmental Protection Agency,
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06-08-2015 **Reg. No: W0279-02**

RE: Notice in accordance with Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations 2004, as amended

Dear Dr. Magnus Amajirionwu,

In response to your request for further information, AXIS environmental services were commissioned by Rehab Glassco to collate the following information:

The air emissions monitoring at emission point A1 carried out on the 12th March 2015 demonstrate that the carbon monoxide from the activity was in exceedance of the emission limit value.

1: Provide an explanation for this non-conformance and its impact on ground concentrations having regard to the air dispersion modelling carried out for the site.

There was an exceedance in carbon monoxide from A1 on the 12th March 2014. The following reason and impact has been identified:

a. The burner was incorrectly set up at the time on monitoring resulting in reduced burner performance leading to inefficient combustion of fuel and elevated carbon monoxide. The burner was subsequently serviced and the carbon monoxide exceedance was resolved.

   The impact of carbon monoxide at this mass emission would have resulted in worst case ground concentrations of less than that determined by the Air Dispersion Model submitted to the Agency (Report No. 2015034(1).

   The total mass emission used in the Air Dispersion Model was obtained from both A1 and A2 in operation at the same time at maximum emissions (combined output of 1.42 g/s carbon monoxide).

   A2 was not in operation at the time of the exceedance therefore the total mass emission from site on the 12th March 2014 was 0.94 g/s (obtained from report number GLASTL4120314). A2 was not commissioned until December 2014.

   This mass emission is less than that used in the Air Dispersion Model therefore it can be concluded that the ground level concentrations in the locality would also have been less that that determined by the model.

   The model predicted that 4.4% of the ground level concentration limit would be a worst case scenario from the installation with both A1 and A2 operating at maximum emissions.

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b. Table of Results for A1 and A2

Table 3.1 on page 10 of the Air Dispersion Model outlines the input parameters for each individual considerations. The Air Dispersion Model was run for worst case scenario with both stacks emitting at maximum output at the same time during worst case meteorological conditions over a five year period. The ground level concentrations are then described in Table 4.1 on page 15. Data from these tables have been used to complete the table requested by the Agency:

Parameter	Model input emission factor A1 (mg/m^3)	Model input emission factor A2 (mg/m^3)	Background ($\mu g/m^3$)	Process Contribution ($\mu g/m^3$)	Predicted ground level concentration (including background) ($\mu g/m^3$)	Limit as per S.I. 180 of 2011 ($\mu g/m^3$)	% of AQS S.I. 180 of 2011 (%)
Nitrogen Oxides (as NO_2) 1 hour (99.8%ile)	50	50	22	10	32	200	16
Nitrogen Oxides (as NO_2) Annual (99.8%ile)	50	50	11	3	14	40	35
Sulphur Dioxide 1 hour (99.7%ile)	50	50	6	28	34	350	9.7
Sulphur Dioxide 24 hour (99.1%ile)	50	50	3	15	18	125	14.4
Particulates (PM_{10}) 24 hour (90.4%ile)	50	50	15	9	24	50	48.0
Particulates (PM_{10}) Annual	50	50	15	5	20	40	50.0
Particulates ($PM_{2.5}$) Annual	50	50	8	5	13	25	52.0
Carbon Monoxide 8 hour	300	300	300	140	440	10,000	4.4
Total Organic Carbon (as benzene) Annual	80	80	-	7	-	-	-

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If you have any further queries relating to this please do not hesitate to contact me,

Yours Sincerely

Mark McGarry
Managing Director