

# Annual performance report for: The Coventry and Solihull Waste Disposal Company

**Permit Number:** EPR/NP3739PD/V005

**Year:** 2018

This report is required under the Industrial Emissions Directive's Article 55(2) requirements on reporting and public information on waste incineration plants and co-incineration plants, which require the operator to produce an annual report on the functioning and monitoring of the plant and make it available to the public.

## 1. Introduction

Name and address of plant	The Coventry and Solihull Waste Disposal Company Limited (CSWDC) Bar Road Coventry CV3 4AN	
Description of waste input	Residual domestic and commercial & industrial waste	
Operator contact details if members of the public have any questions	R. Scawin Manager Telephone Number M. Schilling Advisor Telephone Number	Compliance and Performance 024 7650 7400 Environment, Health and Safety 024 7650 7400

## 2. Plant description

The main activity at the installation is thermal treatment of municipal waste and recovery of energy, in the form of heat which is converted to electricity for export to the grid. The installation also has the capability to export heat in the form of either High or Low Pressure steam to a district heating scheme operated by Engie UK. A limited amount of hazardous waste, containing less than 1% halogenated organic substances (as chlorine), is also burned with the municipal waste.

The installation includes waste receipt and storage, steam generation boilers, abatement of the exhaust gas, on-site storage of residues and all systems for controlling and monitoring combustion operation. The steam produced is used to drive 2 steam turbine driven generators.

The plant design is capable of processing approximately 315,000 tonnes of waste per annum/36 tonnes per hour in three combustion units (12 tonne per unit). The heat produced is used to generate 17.7MW of electricity and up to 16MW heat energy.

### 3. Summary of Plant Operation

Municipal waste received	288537.7 tonnes
Commercial and industrial waste received	0.0 tonnes
Hazardous waste received	438.3 tonnes
Other waste received	0.0 tonnes
Total waste received	288976 tonnes
Total plant operational hours	23636.5 hours
Total hours of “abnormal operation” (see permit for definition)	15 hours 13 minutes
Total quantity of incinerator bottom ash (IBA) produced	44216 tonnes
Disposal or recovery route for IBA	Transported to KSD, Dunton, for reprocessing and recovery
Did any batches of IBA test as hazardous? If yes, state quantity	None
Total quantity of air pollution control (APC) residues produced	10450 tonnes
Disposal or recovery route for APC residues	Transported to Augean for disposal
Total electricity generated for export to the National Grid	109581 MWh
Total heat produced for export (e.g. to hospital or district heating scheme)	11250 MWh T

## 4. Summary of Plant Emissions

### 4.1 Summary of continuous emissions monitoring results for emissions to air

The following charts show the performance of the plant against its emission limit values (ELVs) for substances that are continuously monitored.



2018 reports



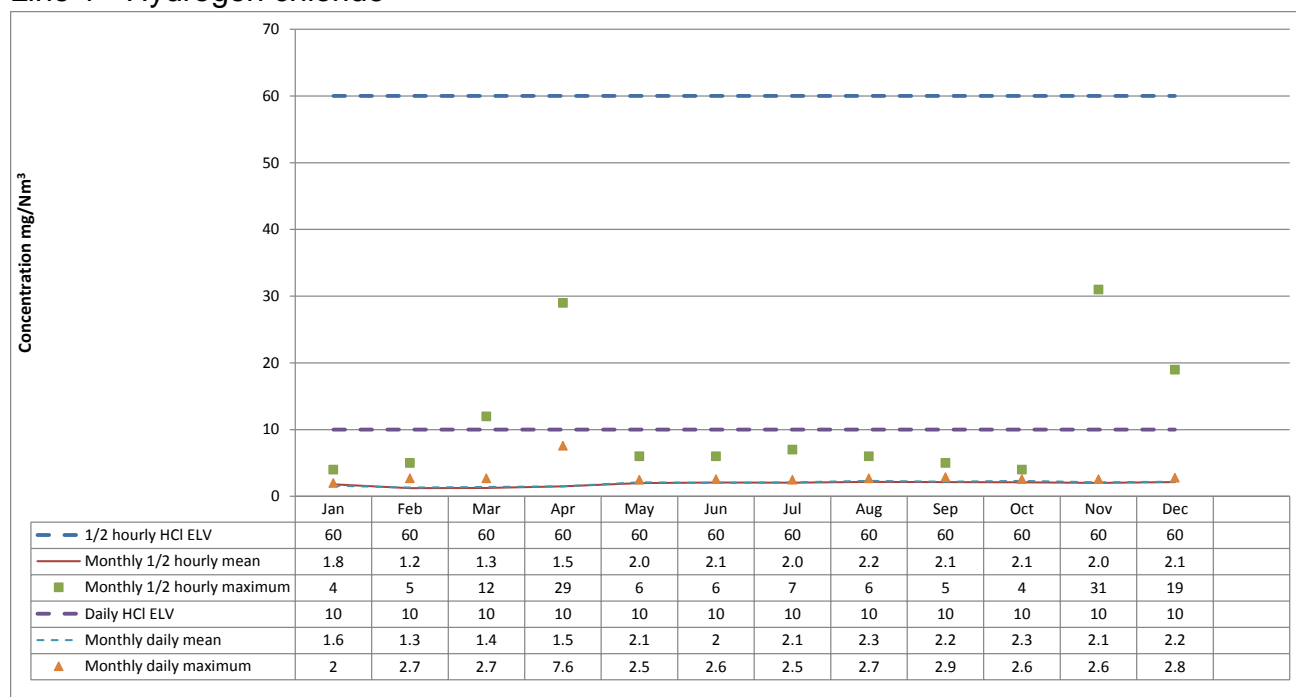
2018 reports



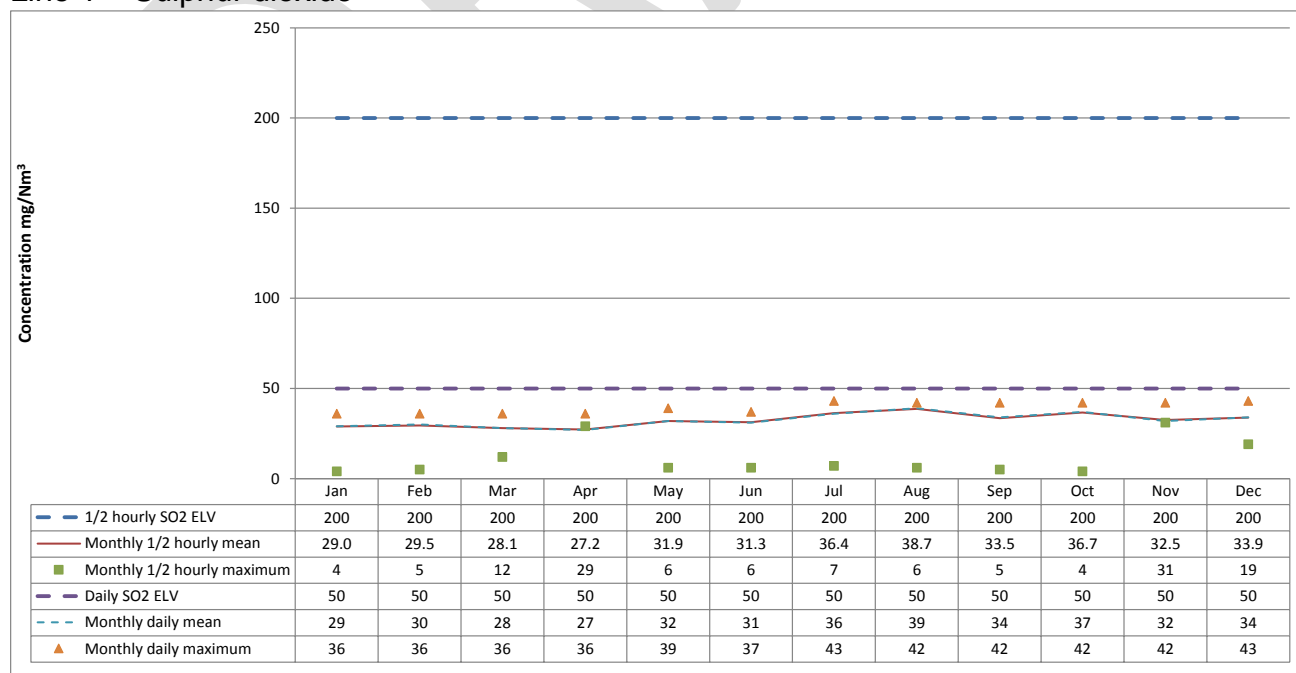
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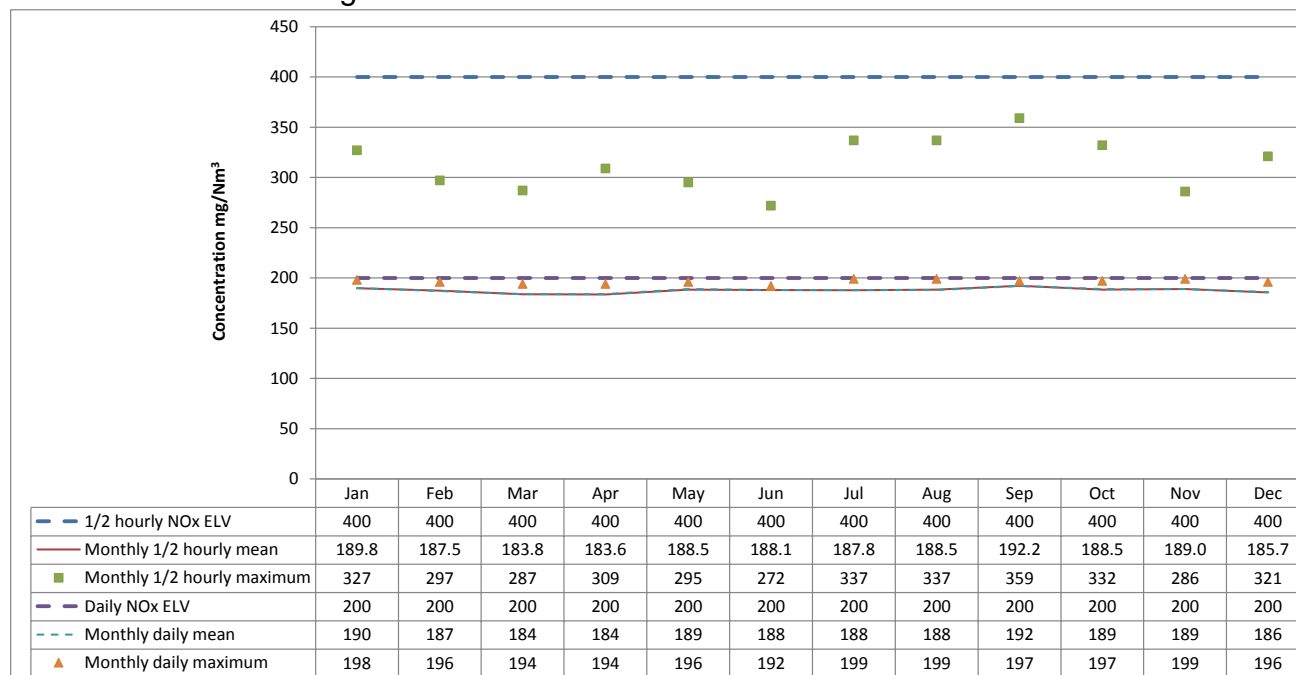
#### Line 1 - Hydrogen chloride



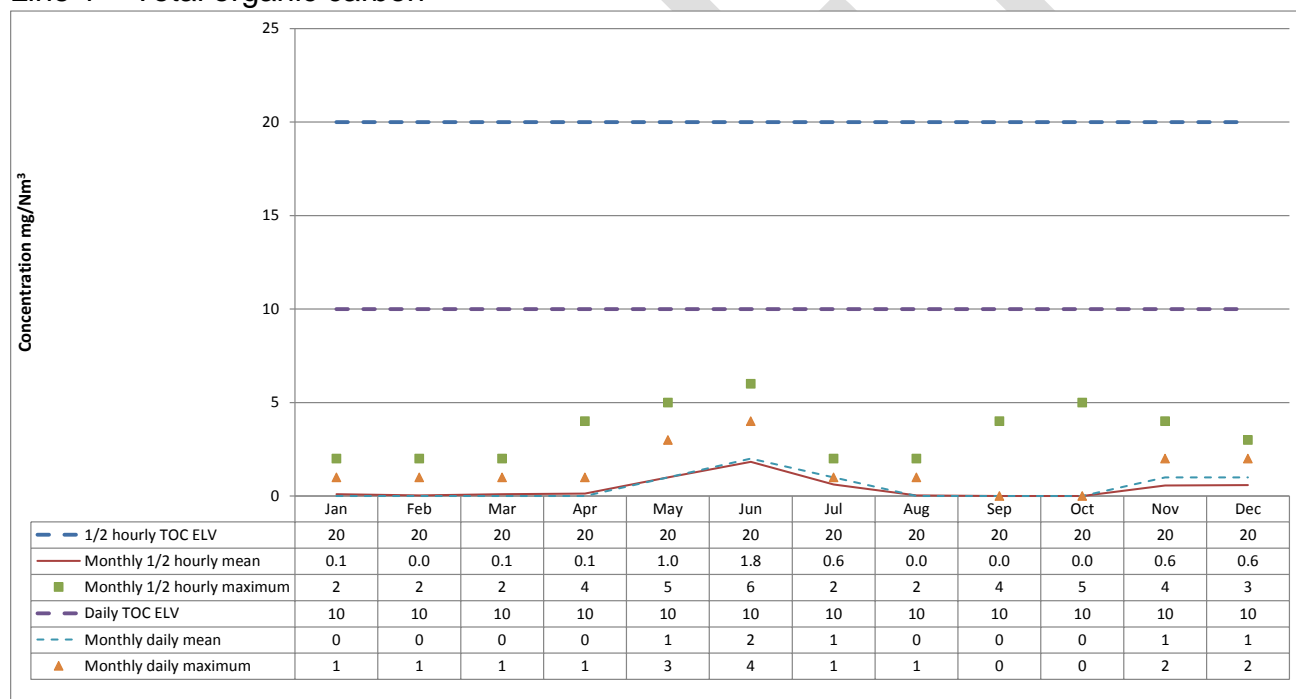
#### Line 1 – Sulphur dioxide



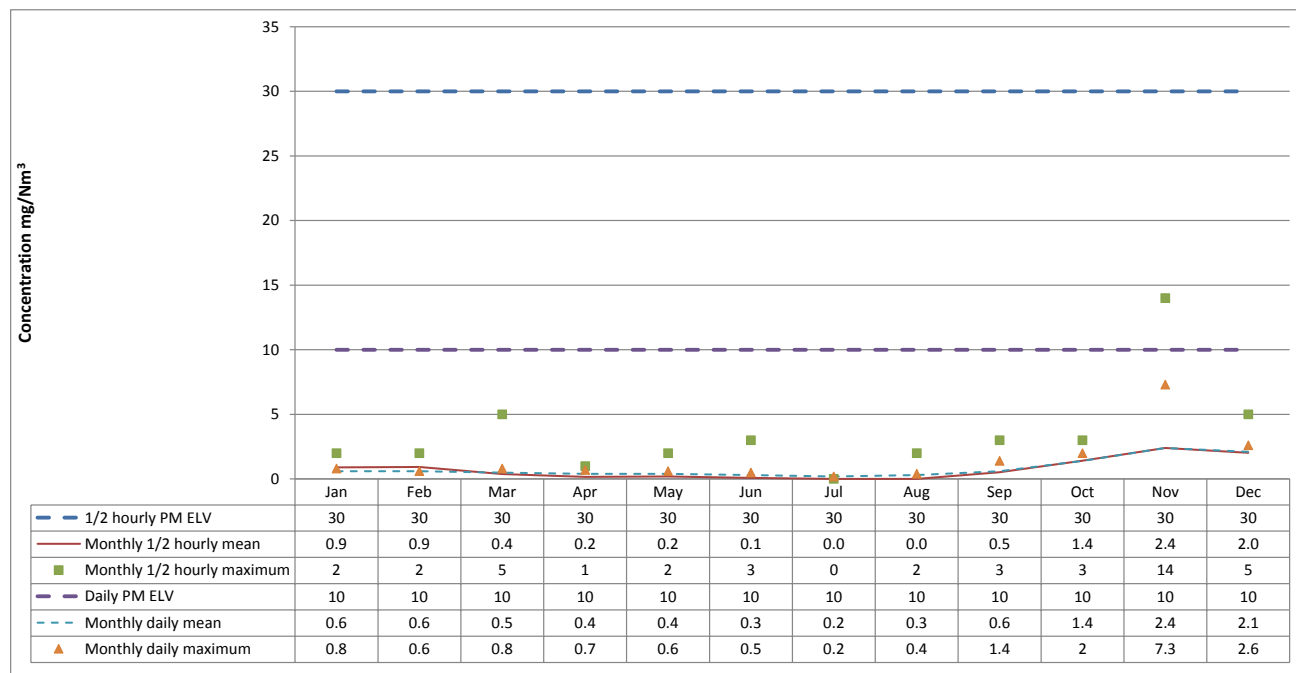
## Line 1 – Oxides of nitrogen



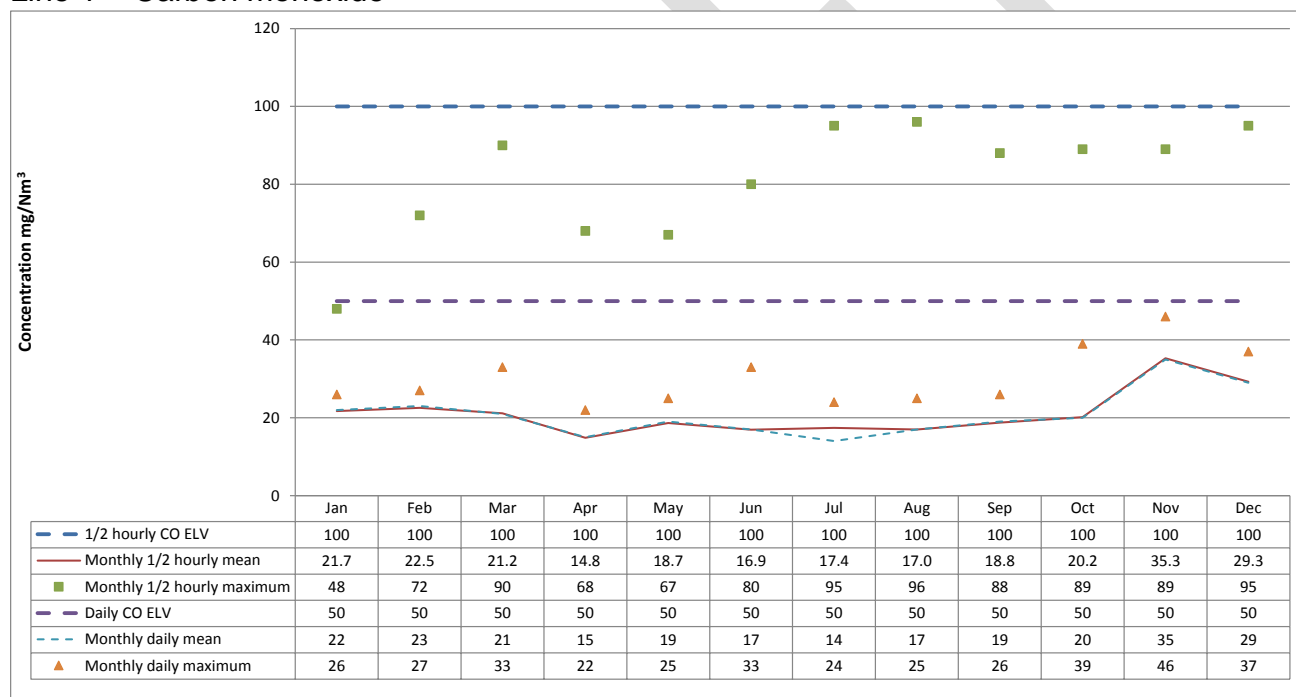
## Line 1 – Total organic carbon



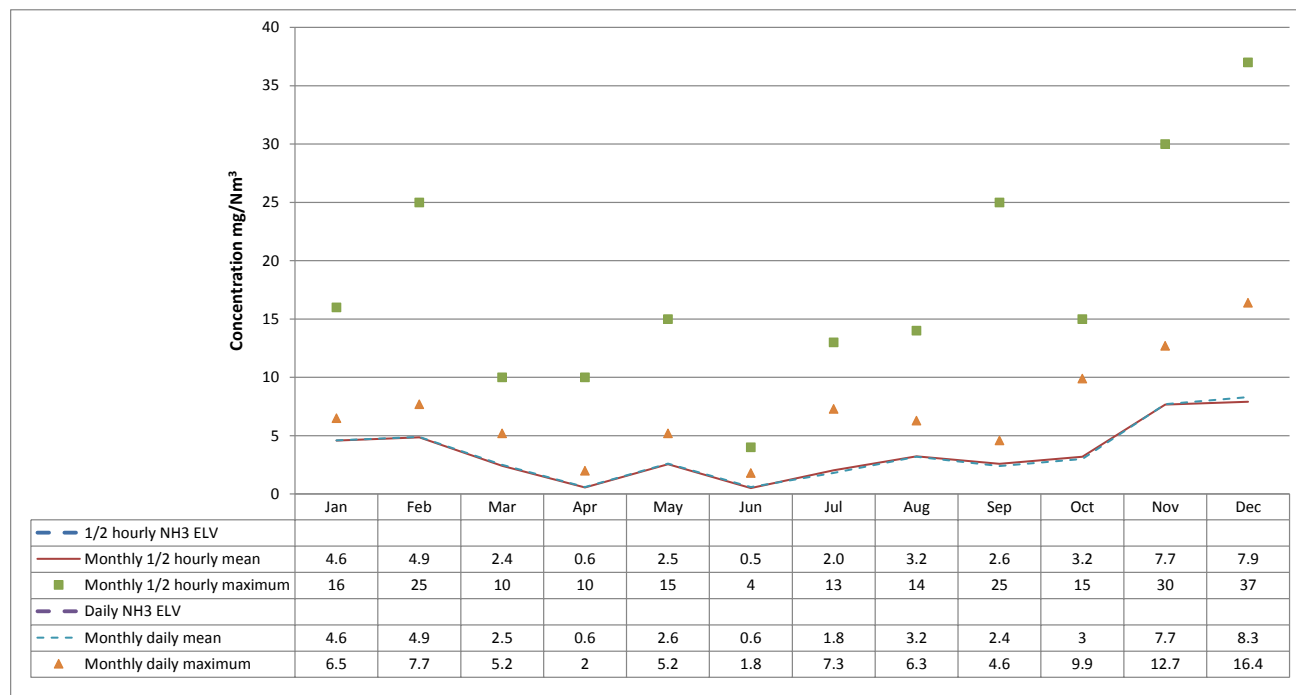
## Line 1 – Particulates



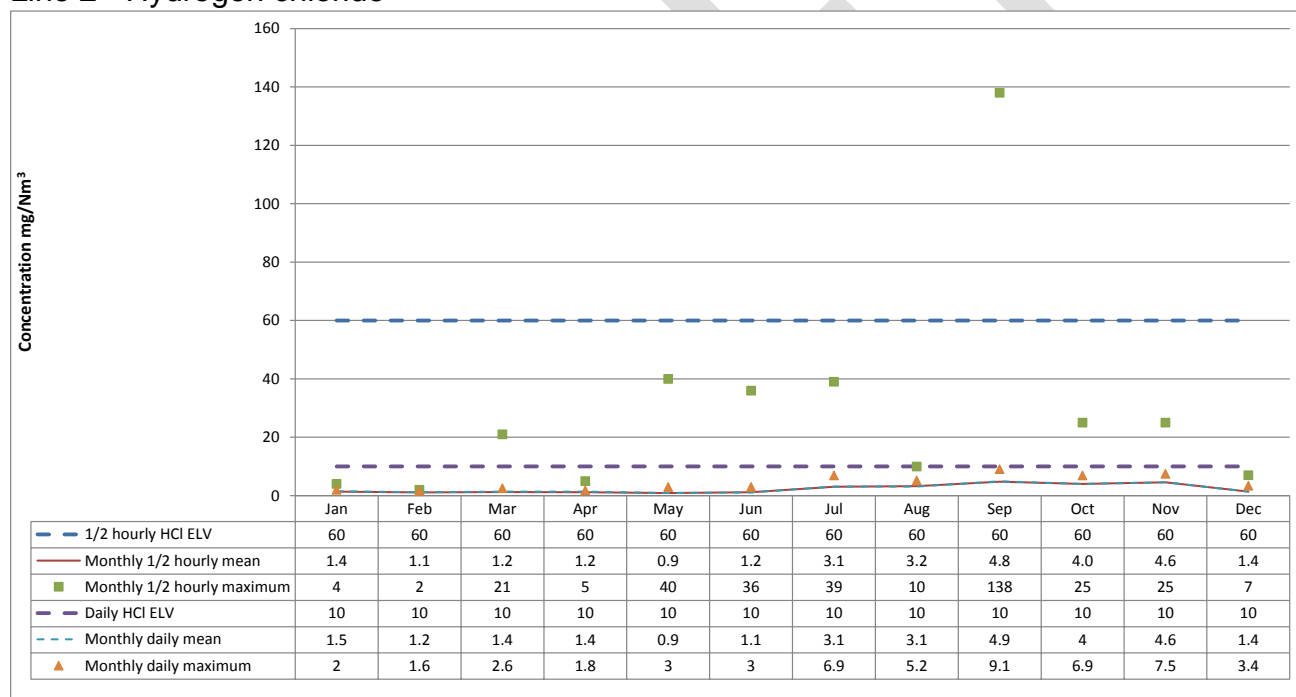
## Line 1 – Carbon monoxide



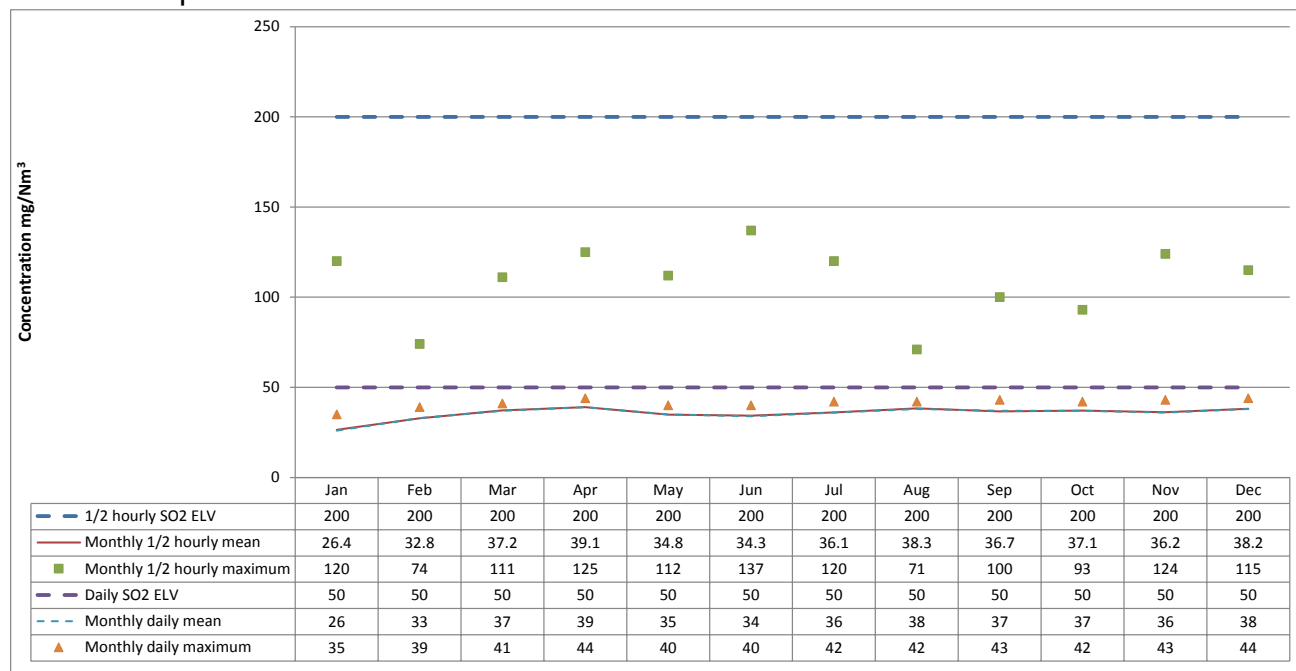
## Line 1 – Ammonia



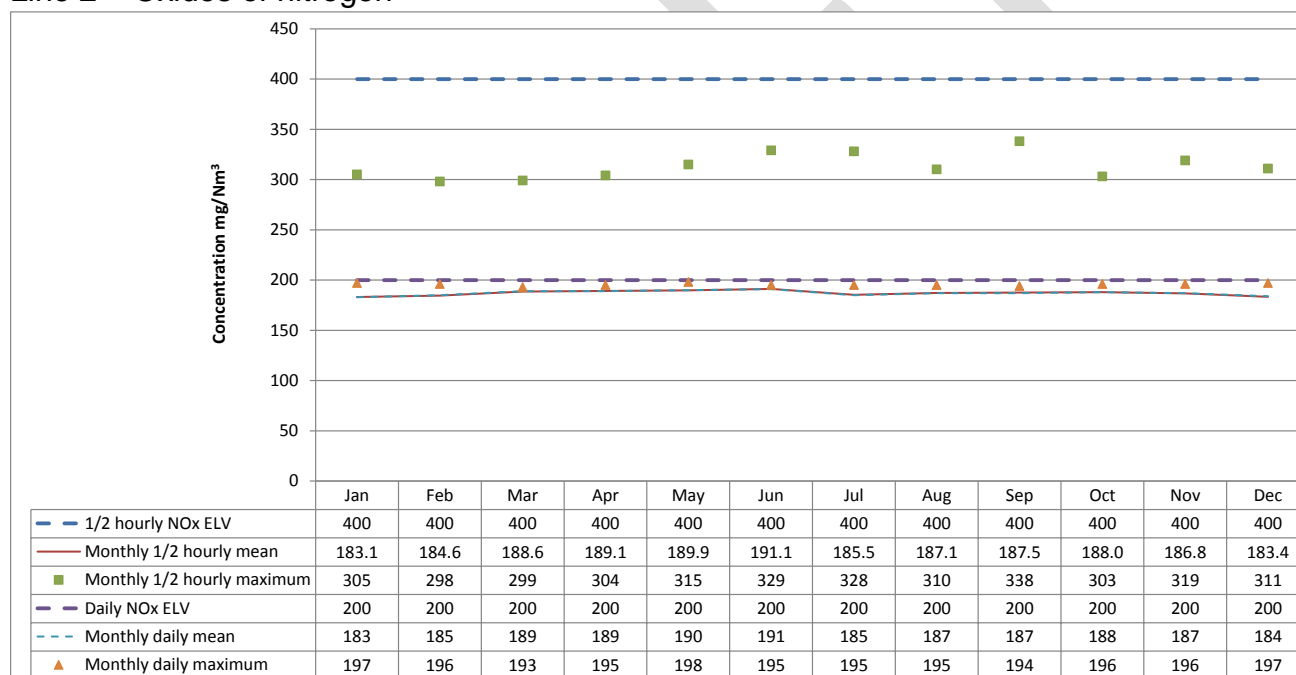
## Line 2 - Hydrogen chloride



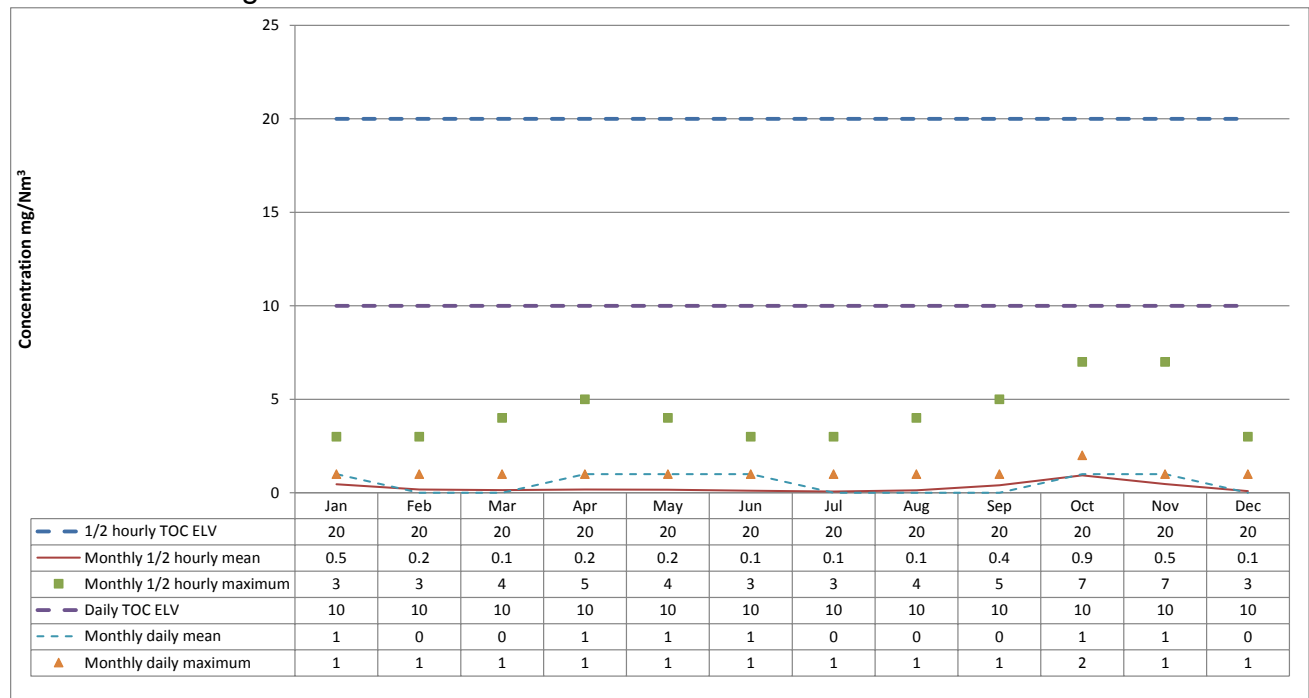
## Line 2 – Sulphur dioxide



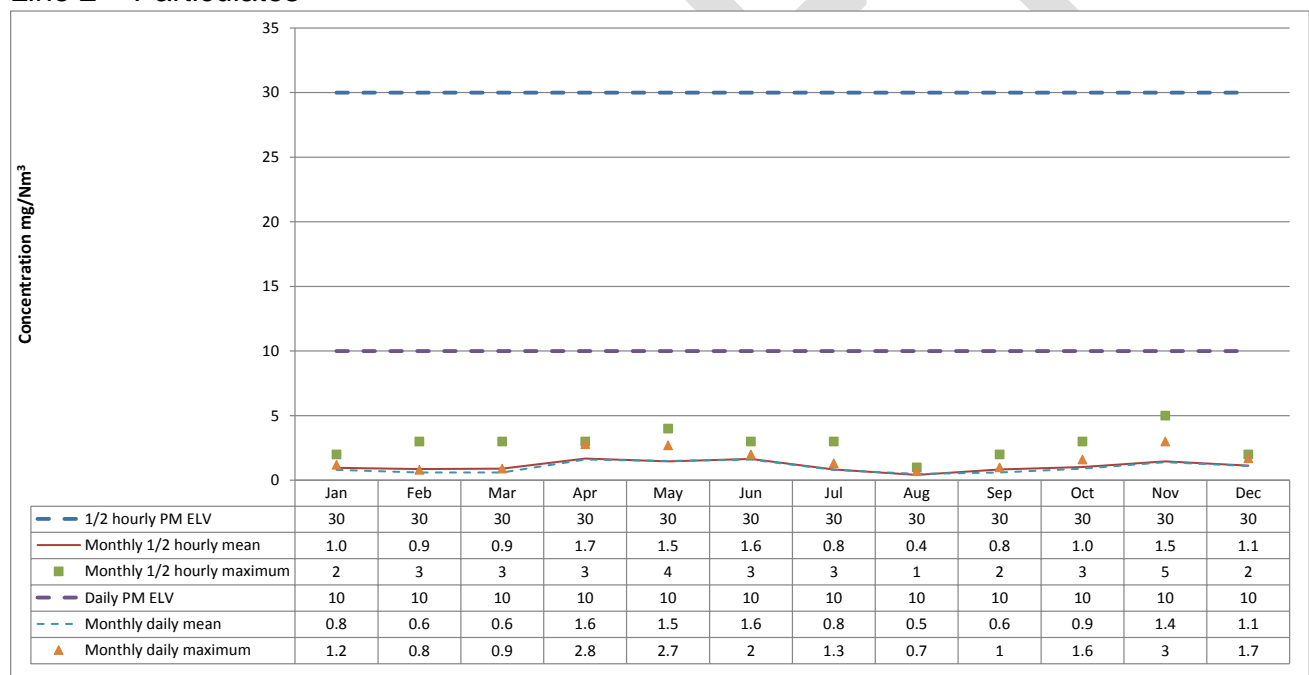
## Line 2 – Oxides of nitrogen



## Line 2 – Total organic carbon

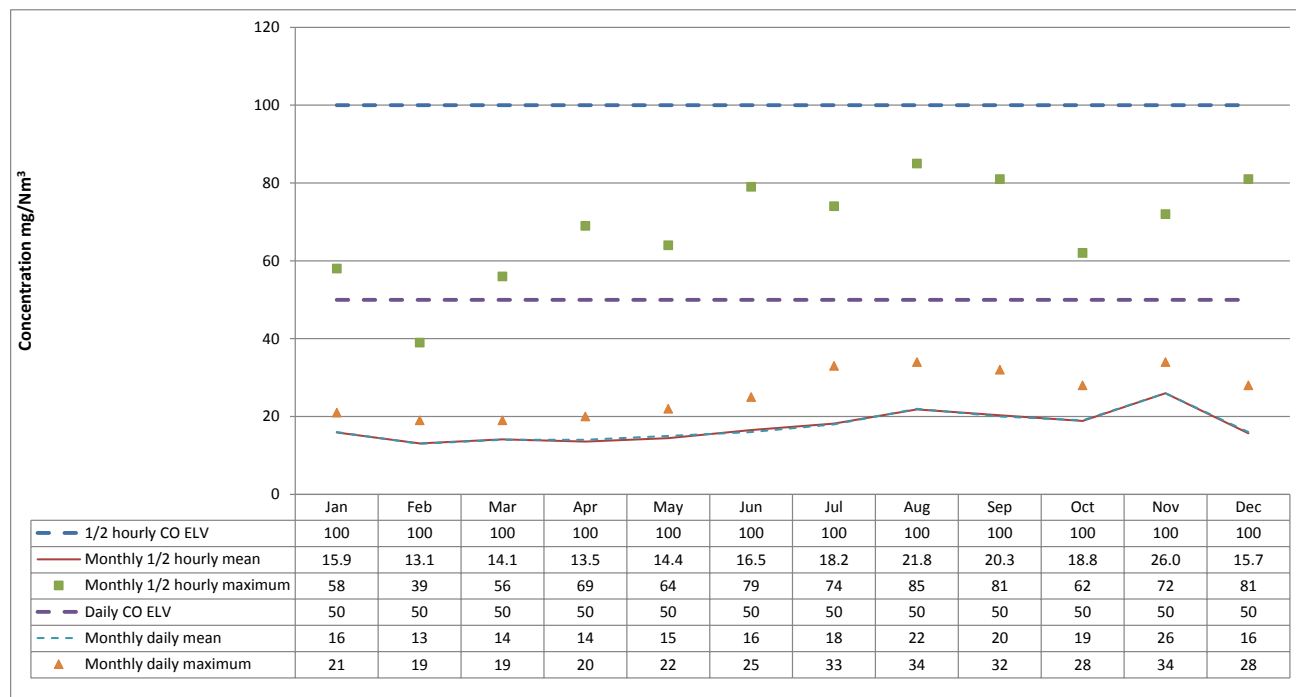


## Line 2 – Particulates

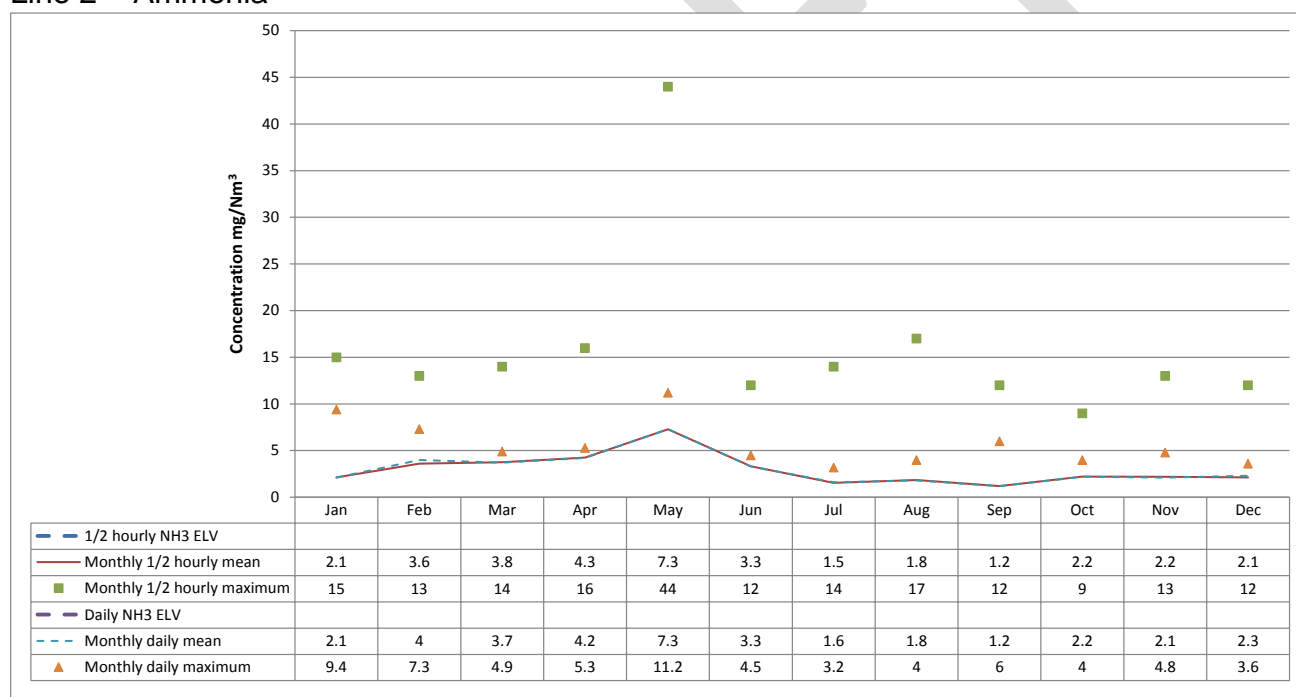




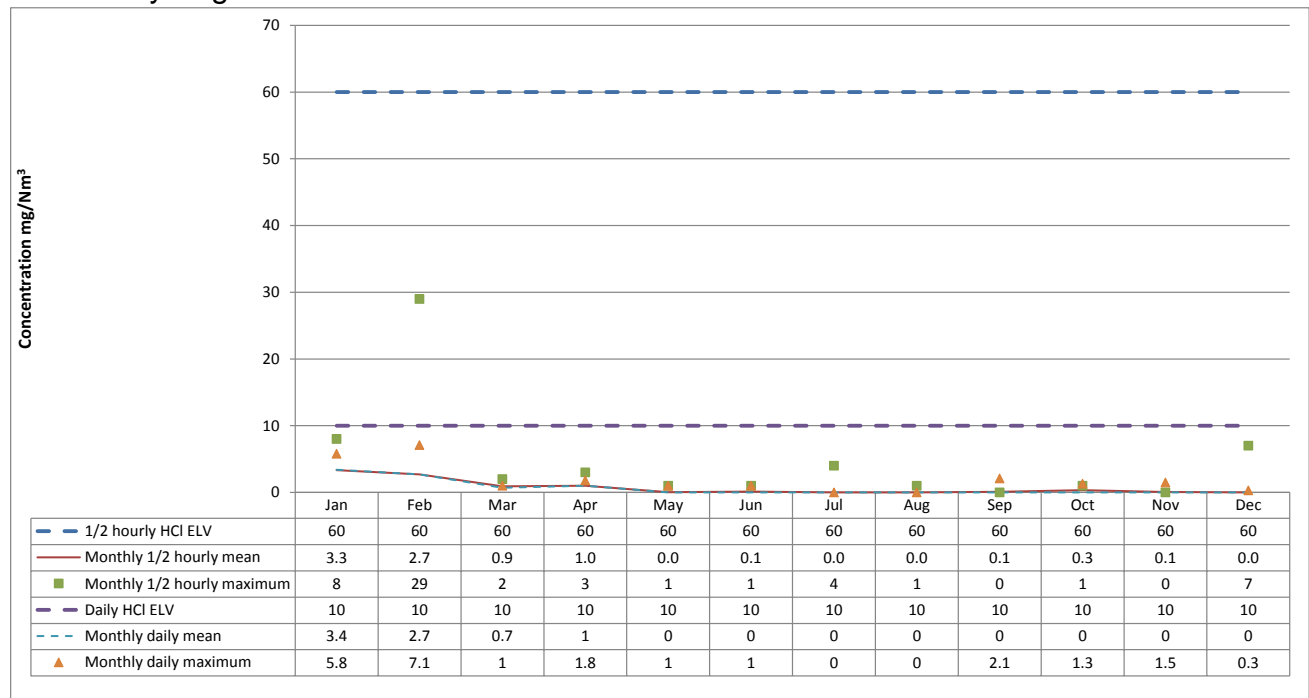
## Line 2 – Carbon monoxide



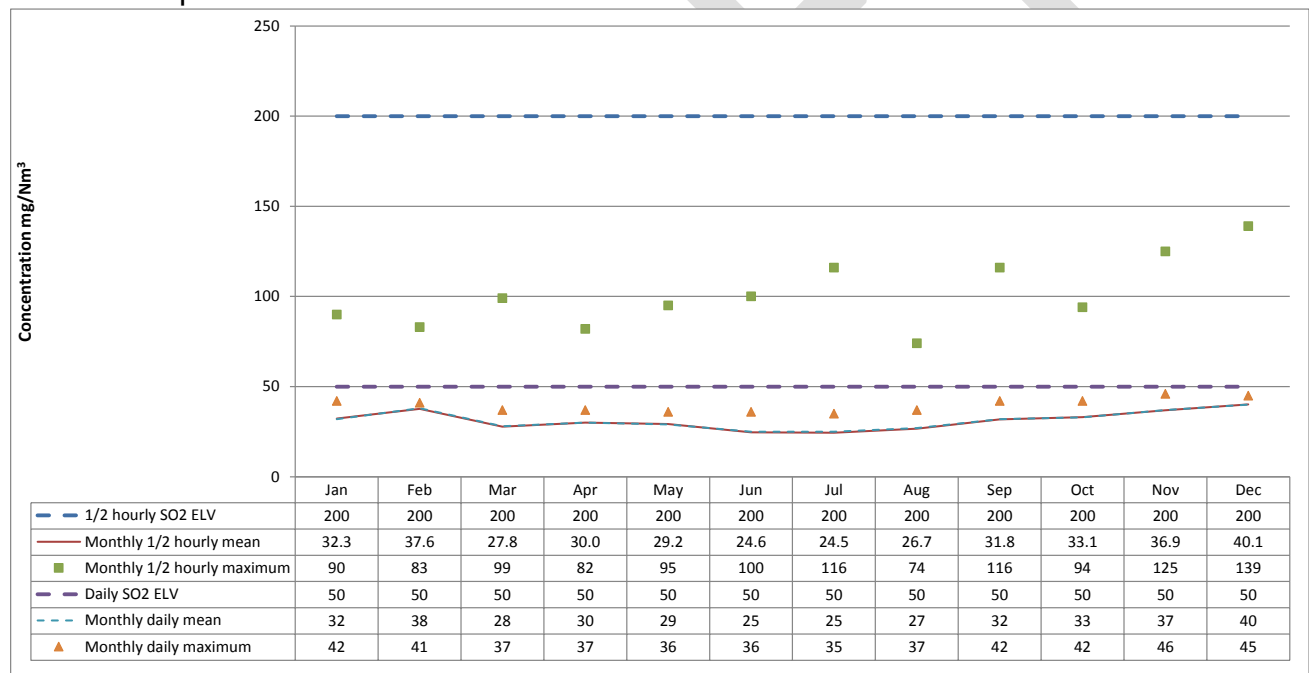
## Line 2 – Ammonia



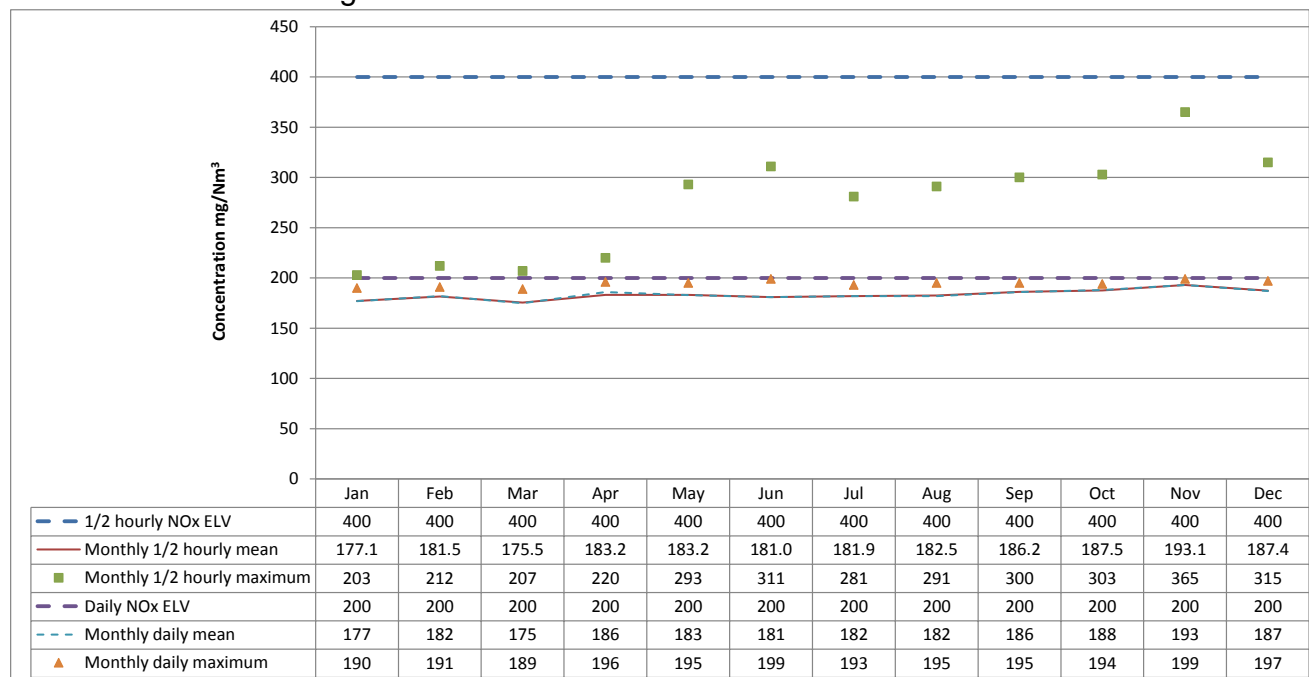
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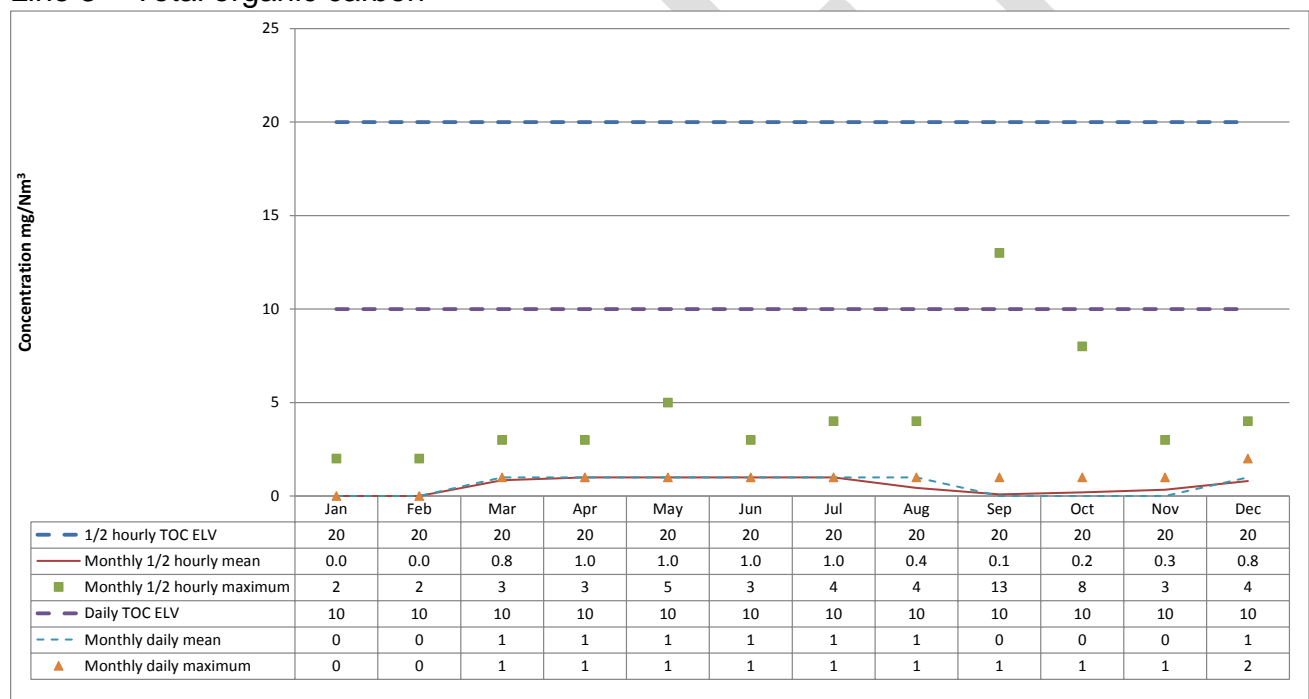
### Line 3 – Sulphur dioxide



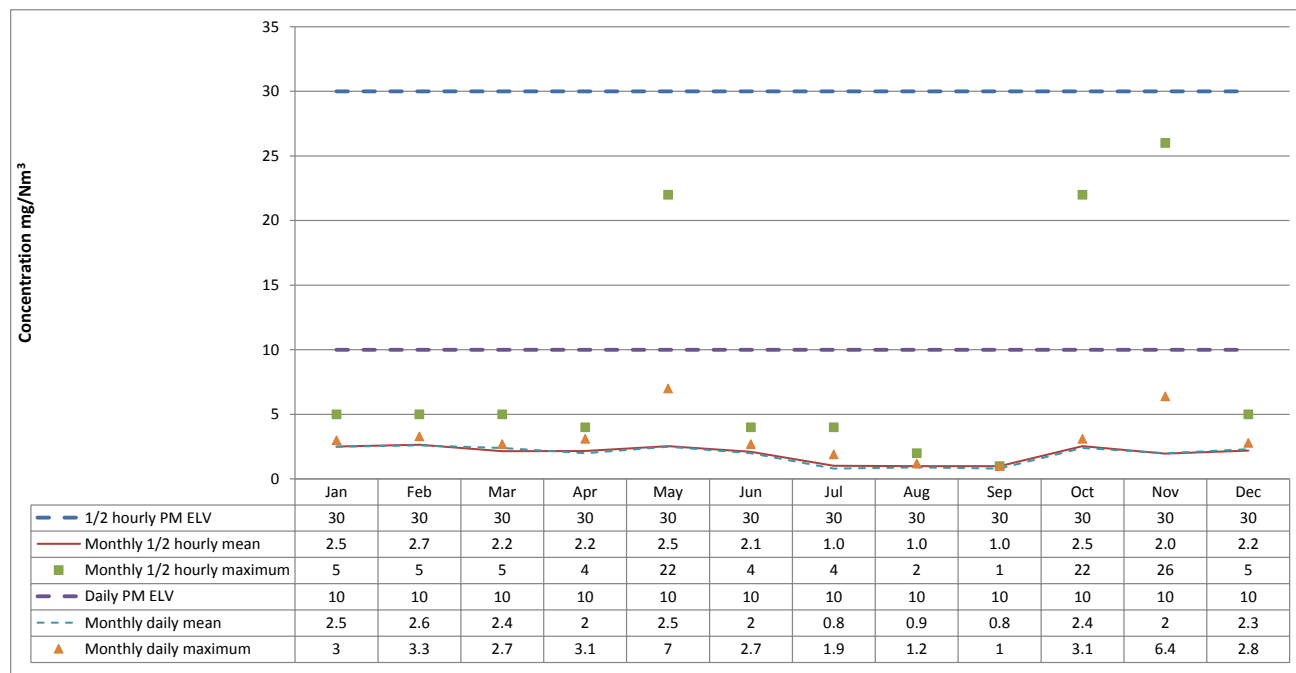
### Line 3 – Oxides of nitrogen



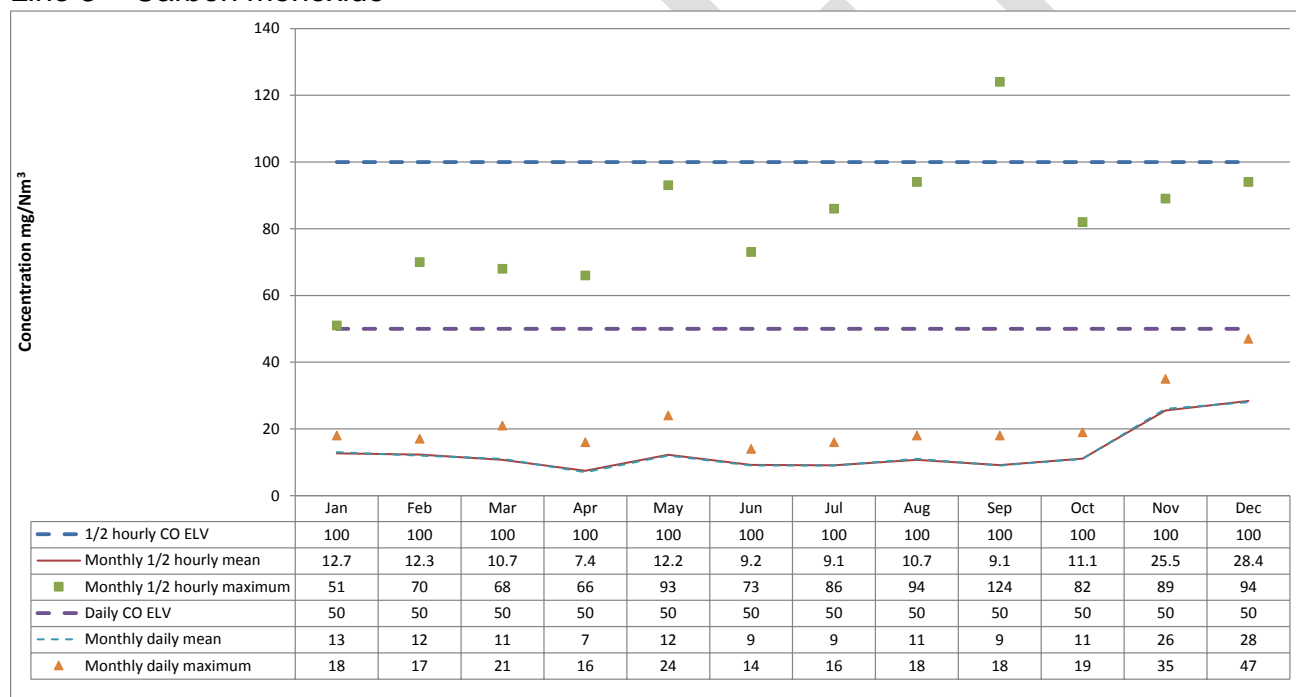
### Line 3 – Total organic carbon



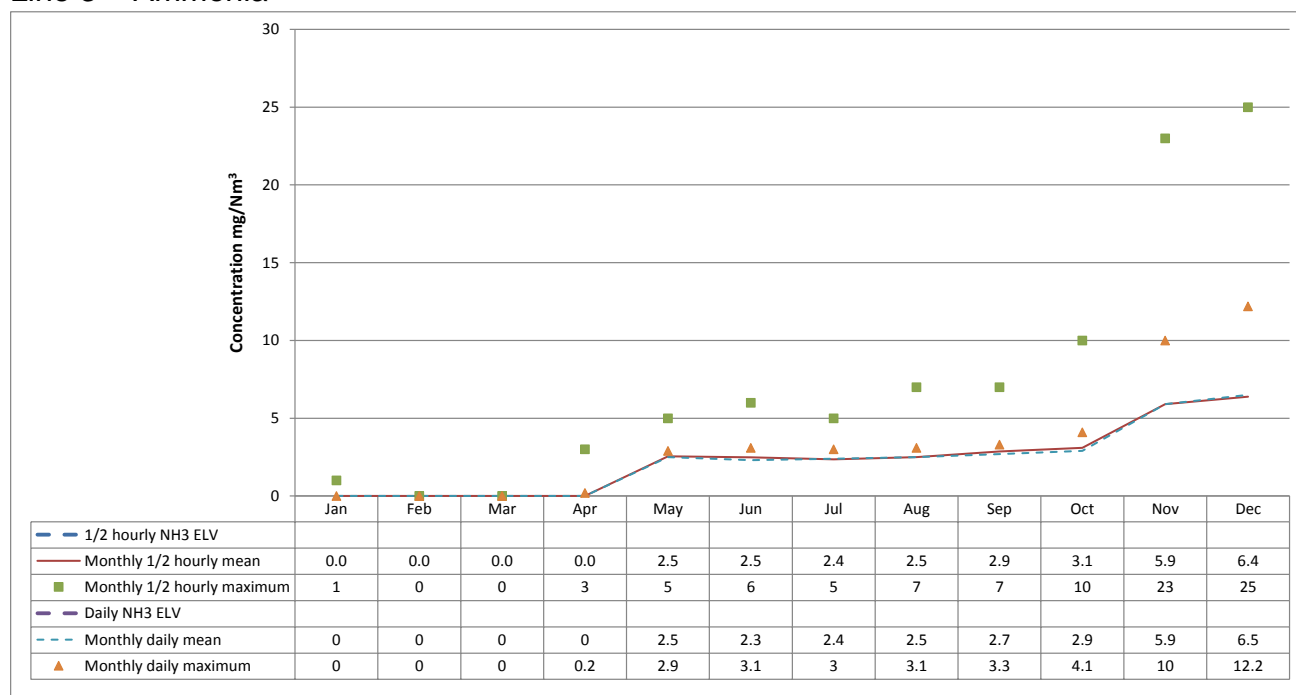
## Line 3 – Particulates



## Line 3 – Carbon monoxide



## Line 3 – Ammonia



## 4.2 Summary of periodic monitoring results for emissions to air

The table below shows the results of periodically monitored substances.

### Stream 1

Substance	Emission limit value	April 2018	Nov 2018
Mercury and its compounds	0.05 mg/m <sup>3</sup>	0.0005 mg/m <sup>3</sup>	0.0004 mg/m <sup>3</sup>
Cadmium & thallium and their compounds (total)	0.05 mg/m <sup>3</sup>	0.001 mg/m <sup>3</sup>	0.001 mg/m <sup>3</sup>
Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5 mg/m <sup>3</sup>	0.15 mg/m <sup>3</sup>	0.07 mg/m <sup>3</sup>
Dioxins and furans (I-TEQ)	0.1 ng/m <sup>3</sup>	0.0012 ng/m <sup>3</sup>	0.0031 ng/m <sup>3</sup>
Hydrogen Fluoride	2 mg/m <sup>3</sup>	0.33 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>

**Stream 2**

Substance	Emission limit value	April 2018	Nov 2018
Mercury and its compounds	0.05 mg/m <sup>3</sup>	0.0005 mg/m <sup>3</sup>	0.001 mg/m <sup>3</sup>
Cadmium & thallium and their compounds (total)	0.05 mg/m <sup>3</sup>	0.001 mg/m <sup>3</sup>	0.001 mg/m <sup>3</sup>
Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>	0.04 mg/m <sup>3</sup>
Dioxins and furans (I-TEQ)	0.1 ng/m <sup>3</sup>	0.0019 ng/m <sup>3</sup>	0.0031 ng/m <sup>3</sup>
Hydrogen Fluoride	2 mg/m <sup>3</sup>	0.04 mg/m <sup>3</sup>	0.06 mg/m <sup>3</sup>

**Stream 3**

Substance	Emission limit value	April 2018	Nov 2018
Mercury and its compounds	0.05 mg/m <sup>3</sup>	0.0004 mg/m <sup>3</sup>	0.002 mg/m <sup>3</sup>
Cadmium & thallium and their compounds (total)	0.05 mg/m <sup>3</sup>	0.0004 mg/m <sup>3</sup>	0.001 mg/m <sup>3</sup>
Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5 mg/m <sup>3</sup>	0.07 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>
Dioxins and furans (I-TEQ)	0.1 ng/m <sup>3</sup>	0.0006 ng/m <sup>3</sup>	0.0086 ng/m <sup>3</sup>
Hydrogen Fluoride	2 mg/m <sup>3</sup>	0.04 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>

### 4.3 Summary of monitoring results for emissions to water (sewer)

Emission Point	Substance / Parameter	Emission Limit Value	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>											
				01/18	02/18	03/18	04/18	05/18	06/18	07/18	08/18	09/18	10/18	11/18	12/18
S1	pH	No limit applies	BS 6068-2.89	11.1	8.6	8.2	8.9	8.7	9.0	8.7	8.6	8.5	8.5	8.5	8.6

## 5. Summary of Permit Compliance

### 5.1 Summary of any notifications or non-compliances under the permit

Date	Summary of notification or non-compliance	Reason	Measures taken to prevent reoccurrence
13/09/2018	Half hourly exceedance CO	Ash discharger blockage due to prolonged on-line repair	Routine check during all planned outages
14/09/2018	Half hourly exceedance CO	Chamber pressure interlock operated shutting off OFA and UFA fans, staving unit of oxygen	Interlock setting changed to prevent recurrence
20/09/2018	Half hourly exceedance HCl	Cause uncertain, presumed to be waste feedstock related. Dosing system working as expected but HCl not reduced sufficiently	Increase waste inspections and monitoring from the crane chairs to ensure non-conforming waste is identified before being fed

### 5.2 Summary of any complaints received and actions to taken to resolve them.

Date of complaint	Summary of complaint	Reason for complaint including whether substantiated by the operator or the EA	If substantiated, measures to prevent reoccurrence
30/06/2018	Odour reported by two separate local residents whilst in their gardens over the weekend enjoying the football with BBQs in the hot weather	Odour was found to be present due to very high ambient temperatures and high stock level. Odour suppressant working well but	Additional odour control added by manual application of deodorising product. Longer term action to install additional suppressant system at

		unable to cope with unusually hot weather	the tipping hall vehicle access doors to prevent odour escape in operational hours
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## 6. Summary of plant improvements

**Summary of any permit improvement conditions that have been completed within the year and the resulting environmental benefits.**

None

**Summary of any changes to the plant or operating techniques which required a variation to the permit and a summary of the resulting environmental impact.**

None

**Summary of any other improvements made to the plant or planned to be made and a summary of the resulting environmental benefits.**



## 7. Details of any public liaison planned for 2019:

Date and time	Description	Location

There are no formally scheduled public liaison activities planned although CSWDC welcomes site visits by interested parties and holds approximately 15 such visits each year for schools, colleges, universities and other organisations such as U3A and Rotary Clubs.

If you wish to be involved in the public liaison programme, please contact:

M Schilling

024 76 507400

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