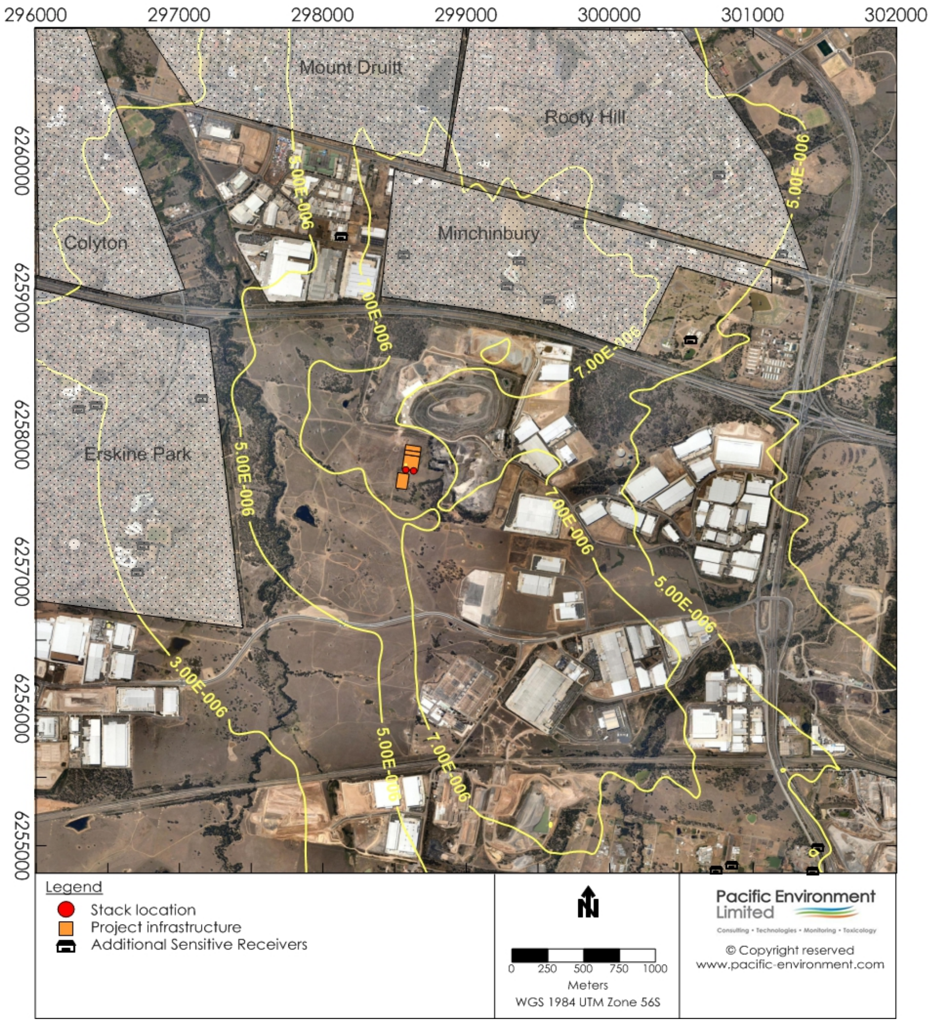
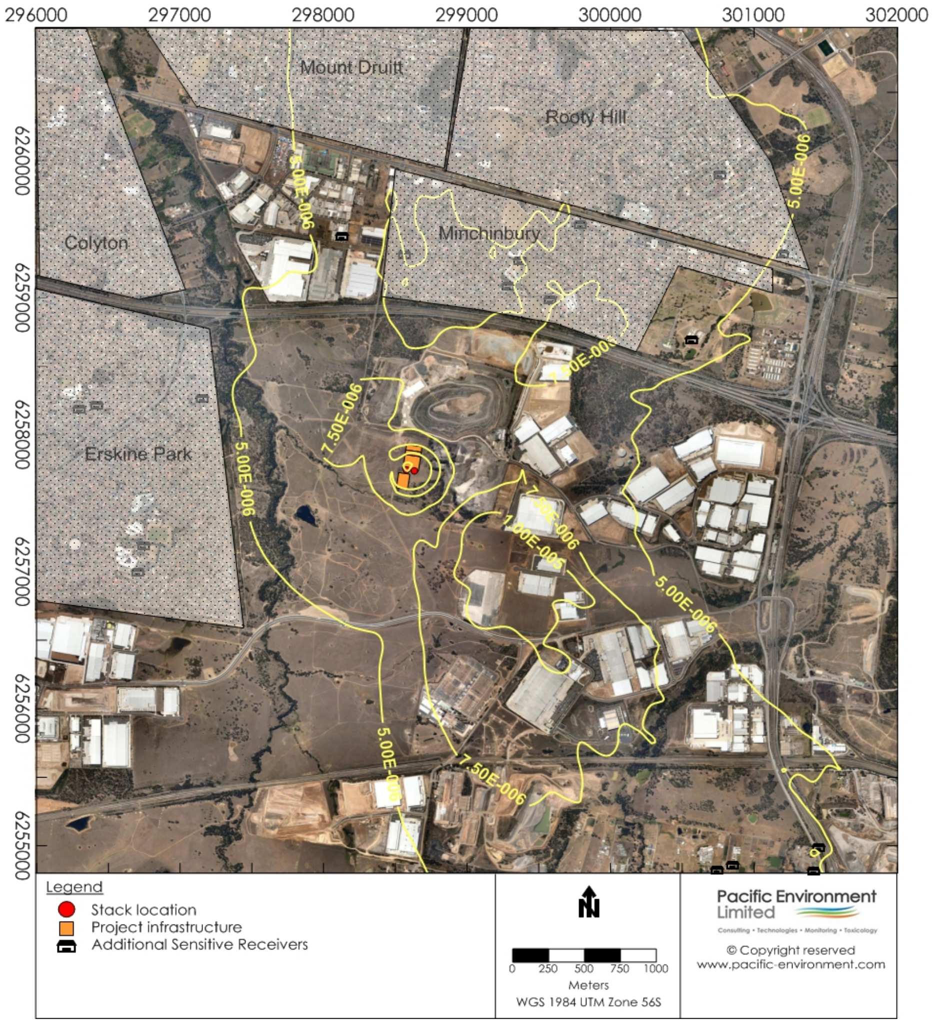


99.9th percentile 1-Hour Mercury (goal = 0.0018 mg/m³)



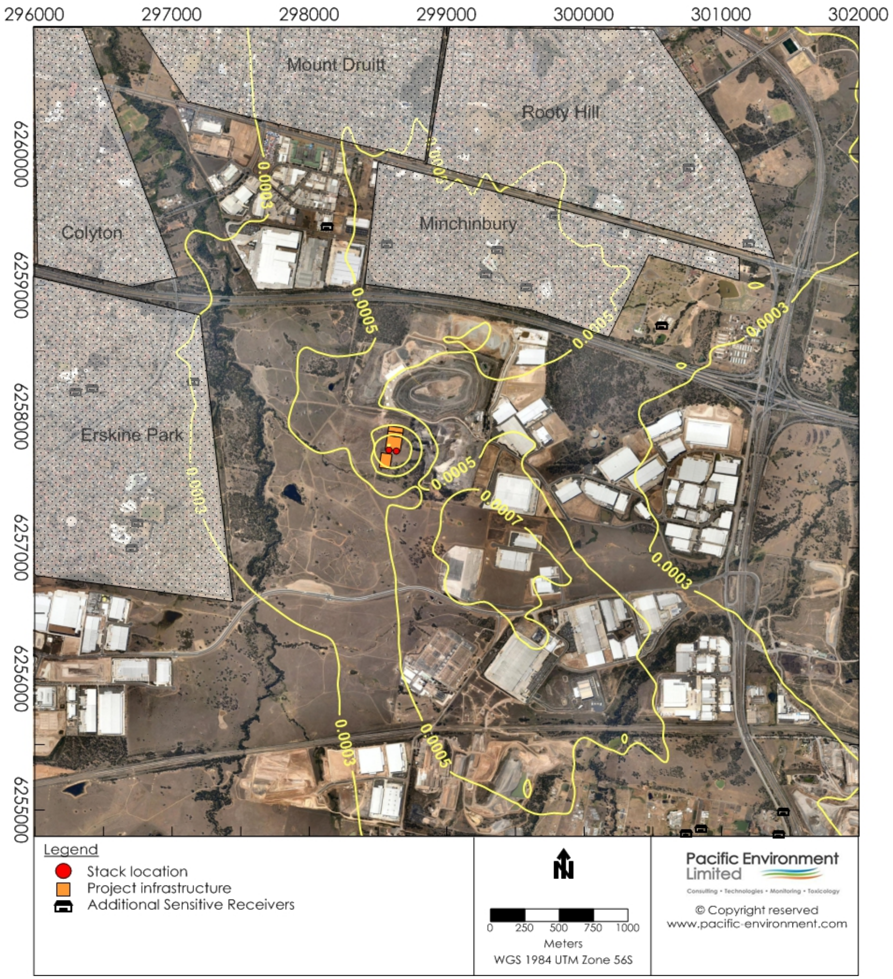
99.9th percentile 1-Hour Cadmium (goal = 0.000018 mg/m³)

Figure 9-10: 99.9th Percentile Predicted Ground Level Metals Concentration – mg/m³

99.9th percentile 1-Hour HCl (goal = 0.14 mg/m³)

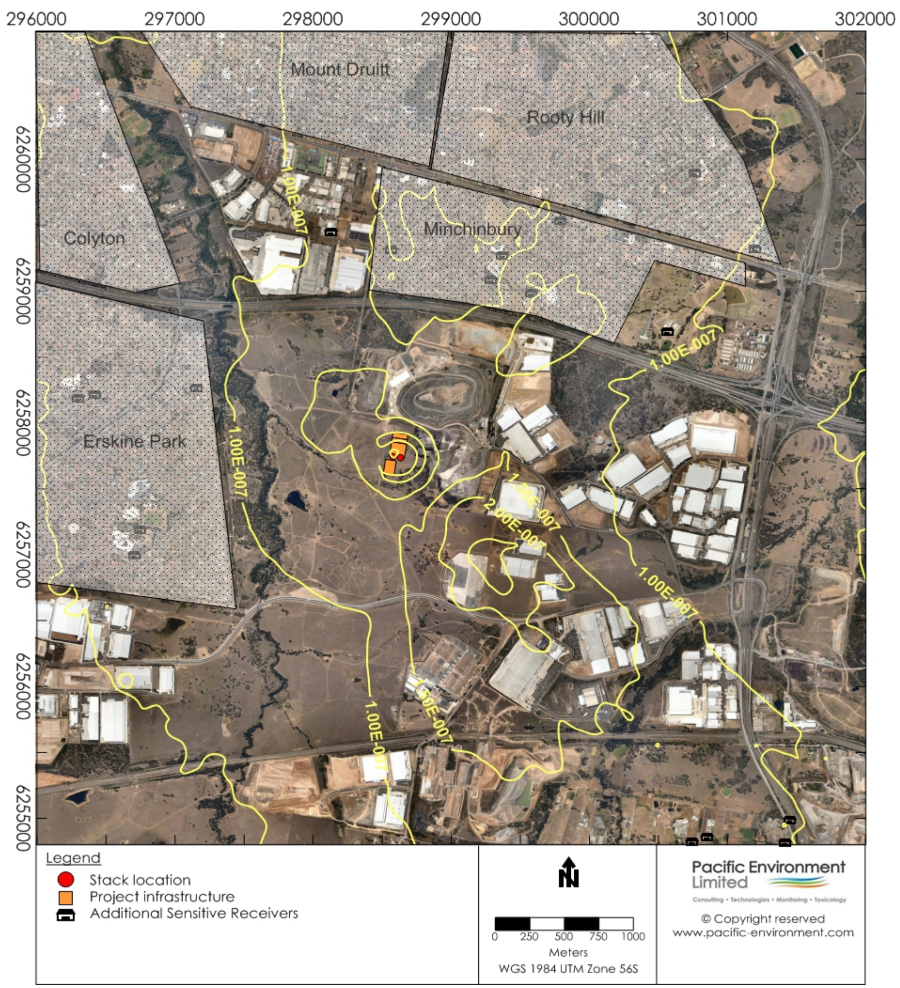
99.9th percentile 1-Hour Dioxins and Furans (goal = 2.0×10^{-9} mg/m³)

Figure 9-11: 99.9^{th} Percentile Predicted HCl and Dioxin/Furan Ground Level Concentration – mg/m³

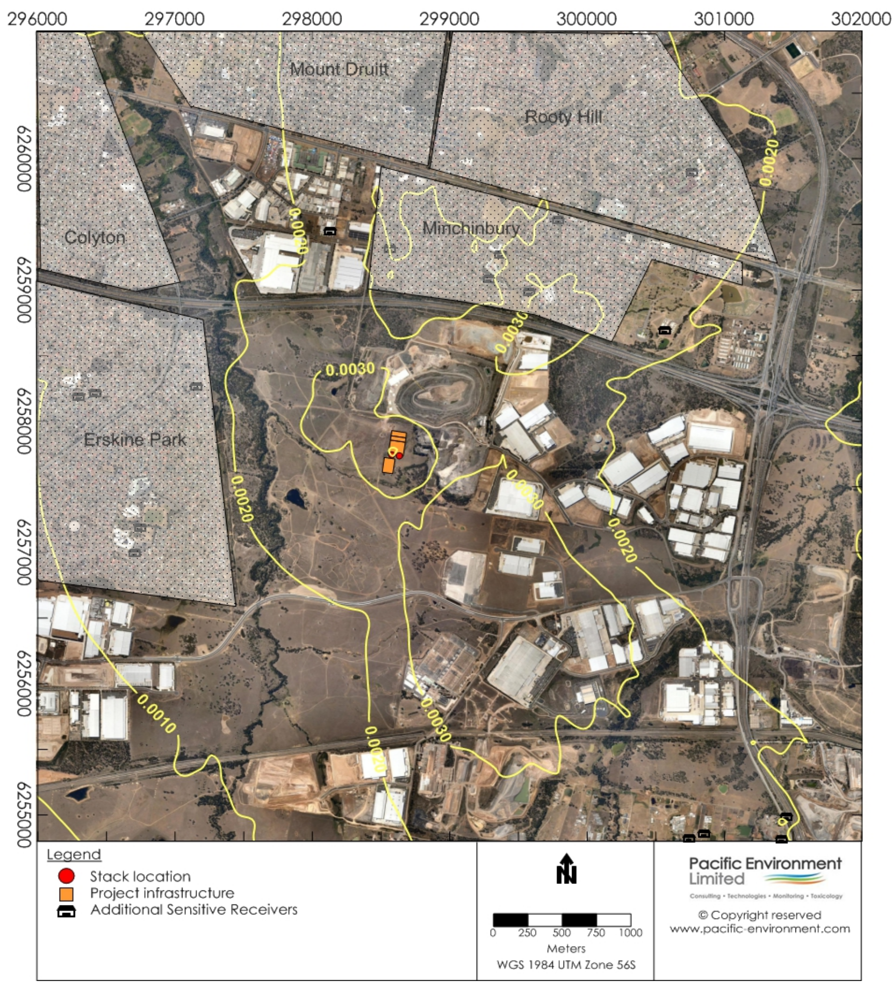


99.9th percentile 1-Hour NH_3 (goal = 0.33mg/m^3)

Figure 9-12: 99.9th Percentile Predicted Ammonia Ground Level Concentration

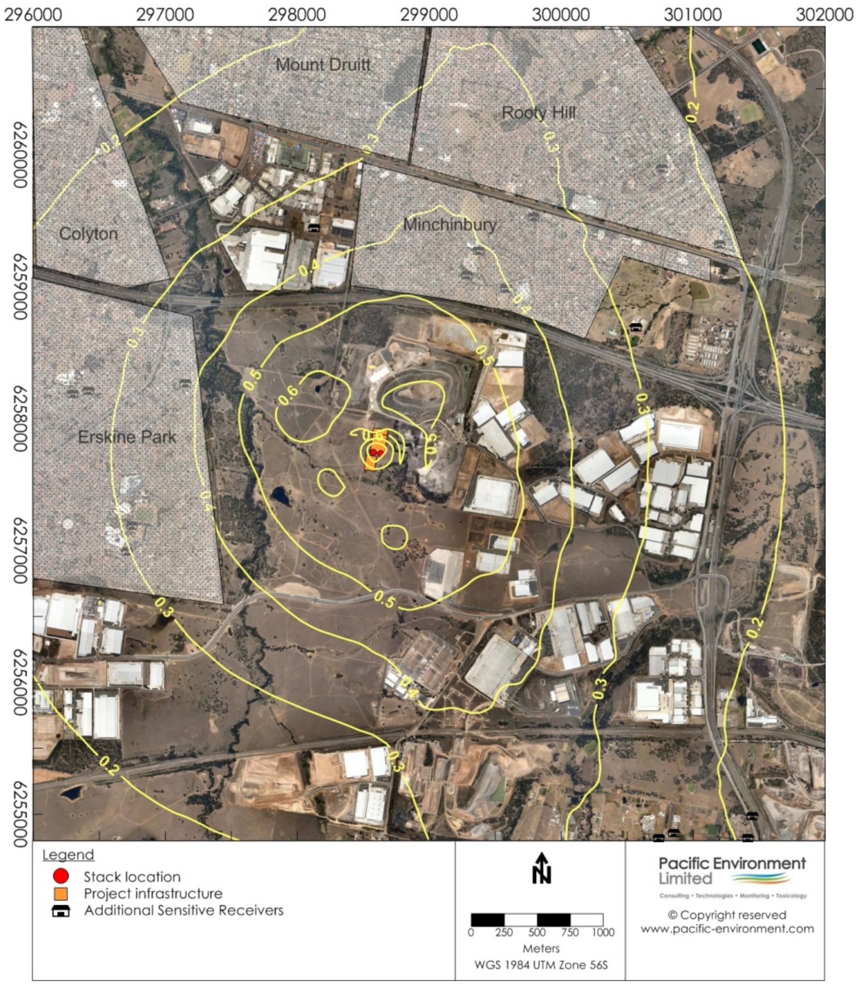


99.9th percentile 1-Hour PAH (as benzo(a)pyrene) (goal = 0.0004mg/m³)



99.9th percentile 1-Hour VOC (benzene goal = 0.029mg/m³)

Figure 9-13: 99.9th Percentile Predicted PAH and VOC Ground Level Concentration



99th percentile 1-Hour H_2S (goal = 1.38µg/m³)

Figure 9-14: 99th Percentile Predicted Hydrogen Sulfide Ground Level Concentration

9.1.2 Upset conditions

A summary of the predicted maximum ground level concentrations (GLCs) for each pollutant is presented in **Table 9-2**. GLCs are presented at and beyond the site boundary, as well as the maximum prediction at sensitive receptors. Predictions above the relevant NSW impact assessment criterion are shown in bold.

Long term averaging periods (annual, 90 day, 30 day, 7 day and 1 day) have not been included. This is because the any upset emission scenario is anticipated to last a maximum of a matter of hours (likely less). Therefore prediction over longer averaging periods is not relevant for this scenario.

Table 9-2: Summary of predicted ground level concentrations during upset conditions

Pollutant	Averaging period	Units	Criterion	Highest prediction at and beyond site boundary	Highest prediction at sensitive receptor
NO_2 (a)	1 hour	µg/m³	246	219	132
SO_2	10-minute	µg/ m³	712	336	202
	1 hour	µg/ m³	570	179	108
CO	15-minute	mg/ m³	100	0.06	0.04
	1 hour	mg/ m³	30	0.04	0.02
HCl	1 hour	mg/ m³	0.14	**0.25**	**0.20**
Cd (b)	1 hour	mg/ m³	0.000018	**0.00021**	**0.00017**
Hg (b)	1 hour	mg/ m³	0.00018	**0.00021**	**0.00017**
Dioxins and furans (b)	1 hour	mg/ m³	2.00E-09	**2.79E-09**	**2.27E-09**
TOC (as benzene) (b)	1 hour	mg/ m³	N/A	0.0056	0.0045
NH_3 (b)	1 hour	mg/ m³	0.33	0.0028	0.0023

Note: (a)based on the assumption of 100% conversion from NO_x to NO_2 [h]
(b) expressed as the 99.9th percentile of the dispersion modelling prediction

Modelling results for criteria pollutants are assessed against the maximum prediction at sensitive receptors. In summary, the modelling results show that during upset conditions:

- The maximum predicted 1-hour NO_2 is 54% of the impact assessment criterion, even assuming 100% conversion from NO_x to NO_2
- The maximum predicted 10-minute SO_2 is 28% of the impact assessment criterion, and for 1-hour 19%.
- The maximum predicted CO 15-minute, and 1-hour averaging periods are 0.1% or less than the relevant impact assessment criterion.

For the pollutants above it is also important to consider cumulative impacts due to existing “background” air quality, and other sources of pollution in the area. The cumulative predictions are presented in **Section 9.1.2**.

Modelling predictions for air toxics are assessed against the 99.9th percentile prediction, at and beyond the site boundary and indicate under upset conditions:

- The 99.9th percentile predicted HCl is 179% of the impact assessment criterion.

[h] As discussed in **Section 7.9**, for this report we have conservatively assumed 100% conversion of NO_x to NO_2.

- The 99.9th percentile predicted cadmium is approximately ten times the impact assessment criterion.
- The 99.9th percentile predicted mercury is 116% of the impact assessment criterion.
- The 99.9th percentile predicted dioxins and furans are 139% of the impact assessment criterion.
- The 99.9th percentile predicted TOC (as benzene) is 19% of the impact assessment criterion.
- The 99.9th percentile predicted NH_3 is 0.8% of the impact assessment criterion.

As shown in **Table 9-2** and noted above, there are several pollutants that are predicted to exceed the NSW impact assessment criteria and include HCl, Cd, Hg and dioxins / furans.

To assess these exceedances during upset conditions, a probabilistic approach has been adopted. As already discussed in **Section 2.4**, adopting a design to the requirements of the EU IED entails that such events shall under no circumstance occur for more than four hours uninterrupted where the emission values exceed the limits and no more than 60 hours per year.. The probability that upset conditions will actually result in adverse air quality impacts at ground level is therefore a function of the maximum allowable hours of upset per year (60/8,760) multiplied by the predicted frequency of exceedance per annum for each pollutant. The resultant probabilities are therefore:

- HCl – 0.001% probability
- Cd – 0.077% probability
- Hg– 0.0004% probability.
- Dioxins and furans – 0.001% probability.

Based on the above it can be inferred that in reality, the probability of the above pollutants resulting in adverse air quality impacts at ground level due to upset conditions would be extremely low.

9.2 Cumulative assessment

To assess impacts against the relevant air quality criteria, it is necessary consider the existing background concentrations of the air quality metrics in question. The existing background air quality environment is described in **Section 6**.

9.2.1 Normal operations

The maximum predicted GLCs for products of combustion from the EfW facility are combined with maximum background levels and presented in **Table 9-3**. This provides a very conservative estimate of cumulative impact as the probability of a maximum observed value occurring at the time of a maximum predicted value is very small.

There are no exceedances of the EPA criteria when the EfW facility contribution is added to maximum background, with the exception of PM, which results in a cumulative concentration marginally above the 24-hour PM_{10} criterion of 50 µg/m^3. However, this occurs on a day when the background PM concentration is already high (at 49.2µg/m^3) and the probability of the facility resulting in additional exceedances of the impact assessment criterion is considered to be low.

This is demonstrated in **Figure 9-15** which shows a time-series plot of the background 24-hour PM_{10} concentration recorded at Prospect with the EfW facility increment stacked on top. The EfW facility clearly adds a very small increment to the existing background and does not result in any additional exceedances of the air quality goal.

Table 9-3: Cumulative assessment for criteria pollutants during normal operations

Pollutant	Averaging period	Units	Criteria	Maximum GLC at sensitive receptor	Maximum background	Cumulative concentration
NO_2	1 hour	µg/m³	246	96	100	196
	Annual	µg/ m³	62	4	23	27
SO_2	10-minute	µg/ m³	712	90	107[(a)]	197
	1 hour	µg/ m³	570	48	57	105
	24 hours	µg/ m³	228	11	0.7	12
	Annual	µg/ m³	60	2	3[(a)]	5
CO	15-minute	mg/ m³	100	0.0	14	7
	1 hour	mg/ m³	30	0.02	7	4
	8 hours	mg/ m³	10	0.01	2	2
PM_{10}	24 hours	µg/ m³	50	1.7	49[(a)]	51
	Annual	µg/ m³	30	0.3	19	19
$PM_{2.5}$	24 hours	µg/ m³	25	1.7	17 [(c)]	19
	Annual	µg/ m³	8	0.3	7 [(b)]	7

Note: (a) Excludes days already over the 50 µg/m³

(b) Calculated background. See **Section 6.2**.

9.2.1 Upset conditions

The maximum predicted GLCs for products of combustion from the EfW facility during upset conditions are combined with maximum background levels and presented in **Table 9-4**. This provides a very conservative estimate of cumulative impact as the probability of a maximum observed value occurring at the time of a maximum predicted value (under upset conditions – maximum 60 hours per annum) is extremely small.

Table 9-4: Cumulative assessment for criteria pollutants

Pollutant	Averaging period	Units	Criteria	Maximum GLC at sensitive receptor	Maximum background	Cumulative concentration
NO_2	1 hour	µg/m³	246	132	100	232
SO_2	10-minute	µg/ m³	712	202	107	309
	1 hour	µg/ m³	570	108	57	165
CO	15-minute	mg/ m³	100	0.0	7	7
	1 hour	mg/ m³	30	0.02	4	4

Note: (a) Excludes days already over the 50 µg/m³

(b) Calculated background. See **Section 6.2**.

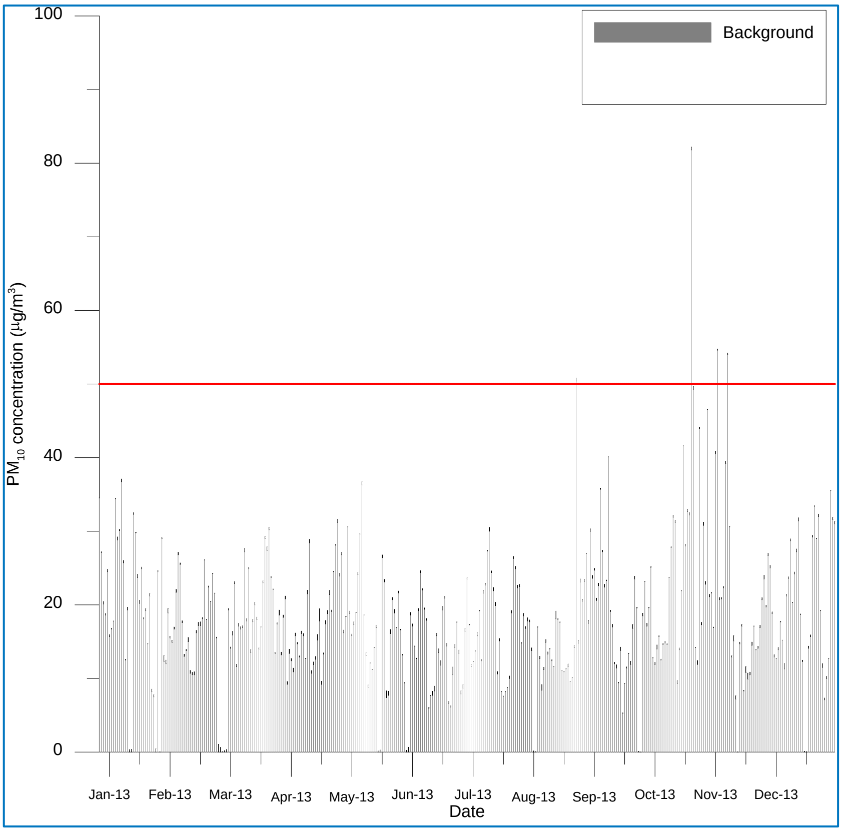


Figure 9-15: Predicted cumulative PM_{10} during normal operations

9.3 NO_x load to air shed

9.3.1 Impacts on regional air quality

NO_x is a precursor to the formation of ozone and ozone concentrations in the Sydney region have exceeded the Ambient Air-NEPM ozone standards every year since 1994 (**DECCW, 2010**). The Sydney region is therefore considered an ozone non-attainment area and if the NO_x emission from a new facility exceeds a threshold of 90 tonnes/year, an ozone impact assessment may be required under the NSW EPA proposed ozone impact assessment framework (not yet released at the time of writing).

Assuming the EfW facility emits NO_x at the EU IED limit for 8,000 hours of the year, the annual NO_x load to the Sydney air shed would be approximately 800 tonnes/year, thereby triggering further assessment. The potential for regional photochemical smog / ozone impacts are investigated in a standalone study, submitted as part of the Environmental Assessment (**Pacific Environment, 2015b**).

9.3.2 Load based licensing

As discussed in **Section 4.5** the NO_x load based licensing threshold is 2.5 tonnes/year. Based on the anticipated NO_x emissions of 800 tonnes/year the EfW exceeds this threshold and it is therefore anticipated that the EfW facility will be subject to a load based licence limit on total NO_x emissions, as well as summertime NO_x emissions, prescribed by EPA on issuance of the EfW facility's EPL.

10 GREENHOUSE GAS ASSESSMENT

10.1 Introduction

The World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol (the GHG Protocol) originally documented the different scopes for greenhouse gas (GHG) emission inventories. The GHG Protocol is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions. This corporate accounting and reporting standard is endorsed by the Australian Department of Climate Change and Energy Efficiency.

The GHG Protocol defines three scopes for developing inventories leading to reporting of emissions. These scopes help to delineate direct and indirect emission sources, improve transparency, and provide a degree of flexibility for individual organisations to report based on their organisational structure, business activities and business goals.

Three scopes of emissions (also shown in **Figure 10-1**) are defined in the GHG Protocol:

- 'Scope 1' emissions: direct GHG emissions occurring from sources owned or controlled by the company – for example vehicle fleet and direct fuel combustion. Any negative emissions (sequestration), for example from a plantation owned by the entity, would also be included in Scope 1.
- 'Scope 2' emissions: indirect GHG emissions from purchasing electricity or heat from other parties; and
- 'Scope 3' emissions: indirect emissions which occur due to the company's business activities, but from sources not owned or controlled by the company - for example emissions from employee business-related air travel.

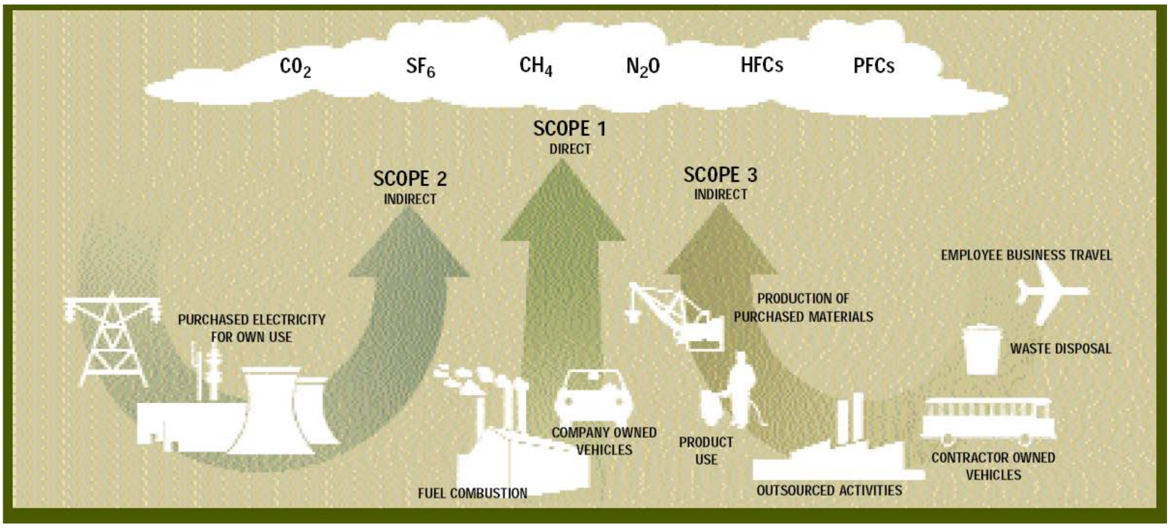


Figure 10-1: Overview of Scopes and Emissions across a Value Chain

10.2 Reporting guidelines

The GHG assessment is guided by, and makes reference to the National Greenhouse and Energy Reporting (Measurement) Determination 2008 (the "NGER Measurement Determination") incorporating the National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2012 (No. 1).

The National Greenhouse and Energy Reporting Regulations 2008 (the NGER Regulations) describe the detailed requirements for reporting under the NGER Act 2007. The National Greenhouse and Energy Reporting (Measurement) Technical Guidelines (the NGER Technical Guidelines) have been intended to support reporting under the NGER Act 2007. They have been designed to assist corporations in understanding and applying the NGER Measurement Determination.

The NGER Technical Guidelines outline calculation methods and criteria for determining GHG emissions, energy production, energy consumption and potential GHG emissions embodied in natural gas.

Under the NGER Act, Scope 1 and 2 emissions must be accounted for by the organisation. Reporting of Scope 3 is optional and has been addressed in this assessment qualitatively as the Scope 3 emissions would be minor. The EfW facility will have negligible Scope 2 emissions (of the site will be a net exporter of electricity) and the focus of this assessment is therefore on Scope 1 emissions.

10.3 Emission estimates

10.3.1 Scope 1 GHG emissions from waste incineration

The calculation of GHG emissions for waste incineration is based on the maximum volume of material that will be combusted during any one year (see **Section 2.1**).

Combusted ash residue that is to be landfilled will not result in GHG emissions and therefore has not been considered. This is because the ash does not release methane as the available carbon has already been consumed during combustion (**US EPA, 2014**).

Part 5.5, Section 5.3 of the NGER Technical Guidelines outlines Method 1 for the calculation of carbon dioxide emissions from waste incineration, as follows:

$$E_i = Q_i \times CC_i \times FCC_i \times OF_i \times 3.664$$

where:
E_i is the emissions of CO_2 released from the incineration of waste type (*i*) measured in CO_2-e tonnes.
Q_i is the quantity of waste type (*i*) incinerated by the plant during the year, measured in tonnes.
CC_i is the carbon content of waste type (*i*).
FCC_i *is the proportion of carbon in* waste type (*i*) that is fossil origin (i.e. not biomass).
OF_i is the oxidation factor of waste type (*i*)

The estimated GHG emissions from waste incineration are presented in **Table 10-1**.

Table 10-1: Method 1 estimation of GHG emissions from waste incineration

Waste (tpa)	Carbon Content (%)	% carbon that is fossil origin[1]	Oxidation Factor	CO_2-e (tpa)
1,350,000	32.48%	40%	0.98*	629,784

Note: [1] it is assumed that biomass based carbon is renewable or climate neutral.
* Not known, default of 1 applied.

10.3.2 Scope 1 GHG emissions (substitution of grid electricity)

The estimated electrical output from the EfW facility is 148 MW, with the facility itself using 7.5 MW. The facility would therefore export to the main electricity grid, thus substituting a requirement for approximately 140 MW of more GHG emission intensive electricity generation.

An estimated of the GHG emissions that would be substituted from the grid is presented, based on an assumption that the facility would operate for 8,000 hours per annum.

The GHG emissions from grid have been estimated as follows:

$$Y = Q \times \frac{EF}{1000}$$

where:
Y is the Scope 2 emissions measured in CO_2-e tonnes.
Q is the quantity of electricity diverted (kilowatt hours).
EF is the scope 2 emission factor for NSW (*i*).

GHG emissions which would be diverted from the main grid are presented in **Table 10-2**.

Table 10-2: Estimation of GHG emissions (substitution of grid electricity)

Net Output (MW)	Operational hours (per year)	Electricity diverted from grid (kWh per year)	Emission factor for grid electricity in NSW (kg CO_2-e/kWh)	CO_2-e diverted from main electricity grid (tpa)
140	8,000	1,124,000,000	0.88	989,120

10.3.3 Scope 1 GHG emissions diverted from landfilling

By removing biomass waste from the landfill, emissions of methane[i] from the decomposition of waste are eliminated. It is acknowledged that some landfills combust the methane via a flare or gas engine. However, this is not currently the case at the Genesis facility and would not form part of the future operations for the site (and has therefore not been considered).

Emissions of methane from disposal of waste to landfill are estimated based on the NGER Scheme Method 1 for emissions of methane from landfills. A simplified estimation is made based on the assumption that all methane is released in the same year that the solid waste is disposed and the accumulated or opening stock of degradable organic carbon is not considered.

The carbon content of the residual waste fuel is based on the information provided for the design fuel mix (**Fichtner, 2014**). For reference, the fuel composition data is provided in **Appendix G**.

Emissions are estimated as follows:

$$CO_2 - e\ (tonnes) = DOC\ \times MCF\ \times F\ \times 1.336 \times 21$$

where:
DOC is the quantity of degradable organic carbon, estimated from % of carbon in the waste and a DOC fraction of 0.2 has been assumed for conservatism[j].
MCF is the methane correction factor (1)
F is the fraction of CH_4 in landfill gas (0.5)
1.336 convert C mass to CH_4 mass.
21 converts CH_4 to CO_2-e

The estimated GHG emissions that would be diverted from landfilling activities (assuming 1,350,000 tonnes landfilled per annum under the Business As Usual scenario) are presented in **Table 10-1**.

Table 10-3: Method 1 estimation of methane emissions from landfill

Waste diverted from landfill (tpa)	Carbon Content (%)	DOC	CH_4 (tpa)	CO_2-e (tpa)
1,350,000	32.5%	87,696	58,581	1,230,199

Note: * Not known, default of 1 applied.

[i] Biomass emissions of CO_2 are considered to be climate neutral, and therefore not reported from either landfill or waste incineration. Emissions of methane are reported for landfilling and emissions of CO_2 for non-biomass (fossil origin) are reported for incineration.

[j] By using a DOC fraction for ‘garden and green’ (which is lower than other organic wastes) we have potentially underestimated GHG emissions from landfilling. This results in a conservatively low estimate of GHG emission diverted from landfill.

10.3.1 Scope 3 GHG emissions

The Greenhouse Gas Protocol allows optional reporting of scope 3 emissions. If an organisation believes that scope 3 emissions are a significant component of the total emissions inventory, these can be reported along with scope 1 and scope 2 emissions. However, the Greenhouse Gas Protocol notes that reporting scope 3 emissions can result in double counting of emissions and can also make comparisons between organisations and/or products difficult (because reporting is voluntary). Double counting needs to be avoided when compiling national (country) inventories under the Kyoto Protocol. The Greenhouse Gas Protocol also recognises that compliance regimes are more likely to focus on the "point of release" of emissions (i.e., direct emissions) and/or indirect emissions from the purchase of electricity. As already noted in **Section 10.2**, scope 3 emissions are anticipated to be minor. Nevertheless, we have identified the following scope 3 emissions that would likely be released as a result of the EfW facility's operations:

- Employees commuting to and from work.
- Employee business travel.
- Extraction, production and transport of purchased diesel fuel consumed.
- Fuel consumption transporting waste to the site.

10.3.2 Net GHG emissions for EfW facility

The emission intensity for electricity generated from waste incineration is lower than that derived from the NSW electricity grid (refer **Section10.4**) and therefore a net reduction in GHG emissions is achieved when electricity from this source is exported to the NSW grid.

Similarly, by removing biodegradable wastes from the landfill, significant emissions of methane from the decomposition of that waste are also avoided.

A summary of the estimated net GHG emissions resulting from the facility are shown in **Table 10-4**. The operation of the facility would have a net positive GHG impact, potentially avoiding 1.5 million tonnes of CO_2-e per annum.

Table 10-4: Estimation of net GHG emissions

Tpa CO_2-e from waste incineration	Tpa CO_2-e alternative to grid	Tpa CO_2-e diverted from landfill	Net GHG emissions (tpa CO_2-e)
629,784	-1,230,199	-989,120	-1,589,536

10.4 Benchmarking GHG intensity

Emissions intensity of electricity generation is expressed as the rate of emissions (tonnes or kg of CO_2-e) per net unit of electricity produced (MWh or kWh).

The estimated emissions intensity for the proposed EfW facility is 0.53 tonnes CO_2-e/MWh generated. For 2014, the emissions intensity for the NSW grid was 0.93 tonnes CO_2-e/MWh generated (**AEMO, 2015**). Over time it is anticipated that the emission intensity for NSW would decrease through the introduction of less carbon intensive sources of energy.

The projected electricity consumption over the next 10 years for NSW is shown in **Figure 10-2**, along with the portion of total consumption that would be generated by the EfW facility. This contribution of the EfW facility to NSW electricity supply is approximately 2% for each financial year.

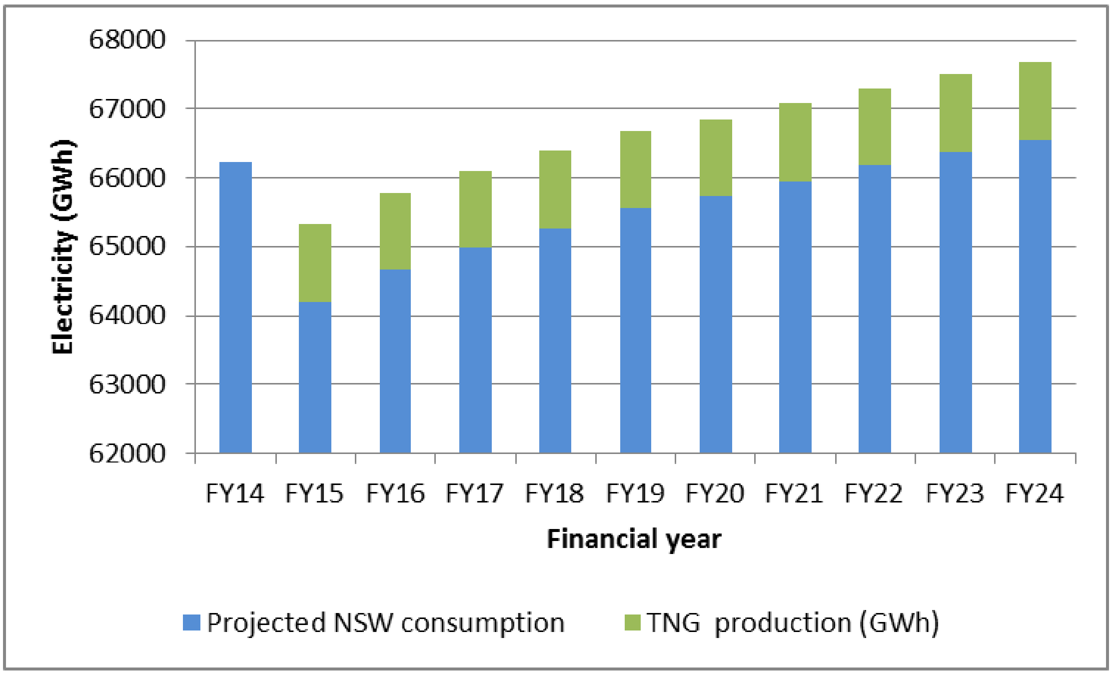
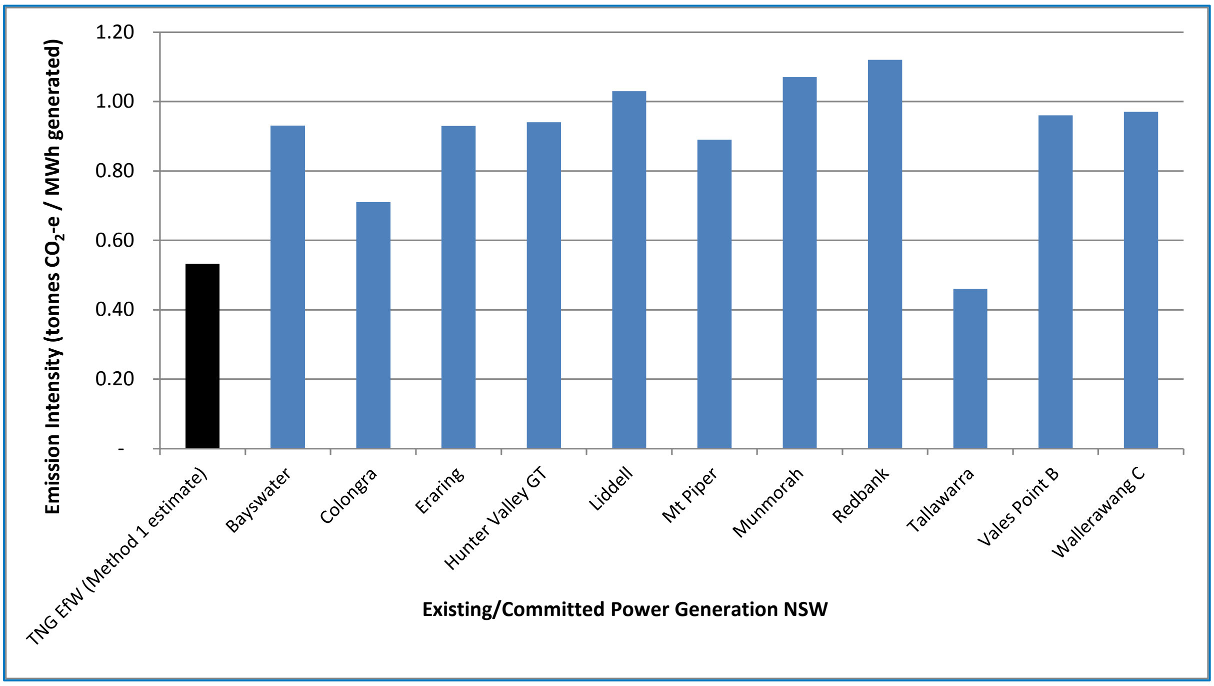


Figure 10-2: Projected NSW electricity consumption (AEMO, 2014)

A comparison has also been made with the emissions intensity measure of kg CO_2-e/MWh$_{\text{sent out}}$ based on data presented for major NSW generators in the ACIL Tasman report on *Fuel resources, new entry and generation costs in the NEM* (**Acil Tasman, 2009**). The data presented in **Figure 10-3** are based on Scope 1 emissions for fuel usage.



Data Source: **ACIL Tasman, 2009**

Figure 10-3: Emission intensity comparison for existing / committed NSW generators

Peak landfill methane production rates typically occur between five and seven years after waste has been landfilled (**US EPA, 2000**), with almost all gas is produced within 20 years after waste being placed in situ (**ATSDR, 2001**).

In view of the above, it can be inferred that the emission reduction associated with diverted landfill emissions would be realised gradually until they are fully realised by year sixk.

Figure 10-4 provides a representation of the net greenhouse gas emission (reduction) on an annual basis, assuming a 25 year facility life. The cumulative emission reduction over a 25 year period would thus be 38.2 Mt CO_2-e.

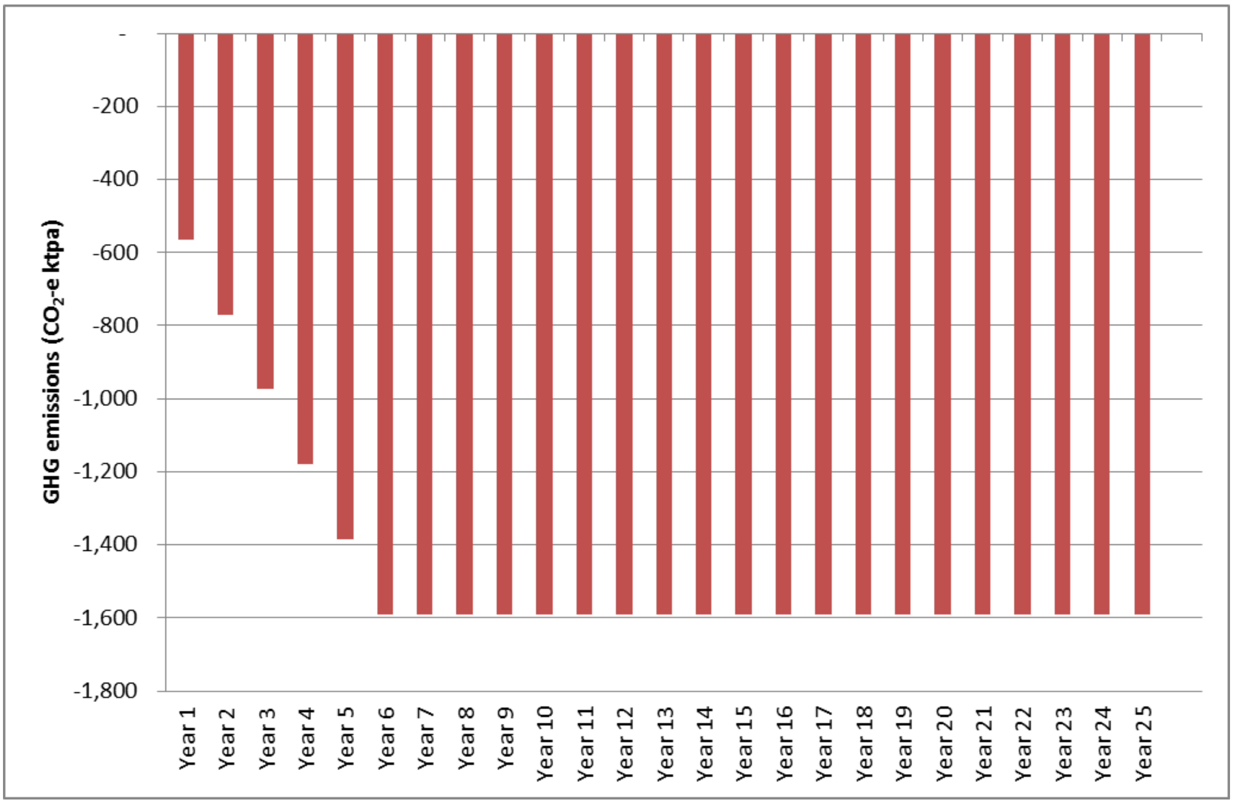


Figure 10-4: Net greenhouse gas emission estimates for the EfW facility on an annual basis

[k] It has been assumed that the ramp up to peak production is linear and occurs by Year 6.

11 CONCLUSION

Pacific Environment has been engaged by TNG NSW to prepare an Air Quality and Greenhouse Gas Assessment for the construction and operation of an Energy from Waste (EfW) facility. The proposed technology for the EfW facility is based on existing facilities in the UK and rest of Europe and will incorporate best available technology (BAT) for flue gas treatment, designed to meet the stringent in-stack concentrations limits for waste incineration set by the IEU Industrial Emissions Directive (IED). It is recommended that the EfW facility operate within the EU IED limits and those limits described in this report.

Dispersion modelling predictions have been based on the above assumptions, and the results for normal operations show:

- The maximum predicted 1-hour NO_2 is 39% of the impact assessment criterion, even assuming 100% conversion from NO_x to NO_2
- The maximum predicted annual NO_2 is 7% of the impact assessment criterion.
- The maximum predicted 10-minute SO_2 is 13% of the impact assessment criterion, for 1-hour 8%, for 24-hour SO_2, 5% and for annual, 3%.
- The maximum predicted 24-hour PM is 3% of the impact assessment criterion for PM_{10} and 7% of the advisory reporting standard for $PM_{2.5}$.
- The maximum predicted annual PM is less than 1% of the impact assessment criterion for PM_{10} and 3.8% of the advisory reporting standard for $PM_{2.5}$.
- The maximum predicted CO 15-minute, 1-hour and 8-hour averaging periods are 0.1% or less than the relevant impact assessment criterion.
- The maximum predicted 24-hour HF is 8% of the impact assessment criterion, for 7-day 4%, for 30-day SO_2, 7% and for 90-day, 11%.

Modelling predictions for air toxics are assessed against the 99.9th percentile prediction, at and beyond the site boundary. The individual odour compound H_2S is assessed against the 99th percentile prediction.

In summary, the modelling results for these additional parameters show:

- The 99.9th percentile predicted HCl is 12% of the impact assessment criterion.
- The 99.9th percentile predicted cadmium is 77% of the impact assessment criterion.
- The 99.9th percentile predicted mercury is 8% of the impact assessment criterion.
- The 99.9th percentile predicted dioxins and furans are 1% of the impact assessment criterion.
- The 99.9th percentile predicted TOC (as benzene) is 19% of the impact assessment criterion.
- The 99.9th percentile predicted NH_3 is 0.3% of the impact assessment criterion.
- The 99.9th percentile predicted PAH (as benzo(a)pyrene) is 0.1% of the impact assessment criterion.
- The 99th percentile predicted H_2S is 49% of the impact assessment criterion.

Modelling is based on the EfW facility emitting at the IED limits and based on this, the prediction for cadmium is 77% of the impact assessment criterion. However, during normal operations emissions are anticipated to be significantly lower than this limit, as demonstrated by monitoring data from existing facilities.

Cumulative predictions are also presented for normal operations. There are no exceedances of the EPA ambient air quality criteria when the EfW facility contribution is added to maximum background. The exception to this is PM, which results in a cumulative concentration marginally over the 24-hour PM_{10} criterion of 50 µg/m^3. However, this predicted exceedance occurs on a day when the background is already high (at 49.2 µg/m^3) and the probability of the facility resulting in additional exceedances of the impact assessment criterion in reality is considered to be low.

The results of the modelling during upset conditions indicate that several pollutants are predicted to exceed the relevant short-term impact assessment criteria, including HCl, Cd, Hg and dioxins / furans. A probabilistic approach has been adopted to evaluate the probability of occurrence. Results indicate that the probability of the above pollutants resulting in adverse impacts at nearest sensitive receptors would be less than than 0.1%.

Odour emissions from the EfW facility have been addressed in a stand-alone quantitative assessment **(Pacific Environment, 2015a)**. The results of this assessment show that the odour concentrations would be below the impact assessment criterion of 2 ou.

A semi-quantitative screening assessment of construction phase impacts identified no human receptors within 350 m of the boundary of the site. The screening assessment concluded no detailed assessment of construction phase impacts is required and routinely employed 'good practice' mitigation measures for construction sites would be sufficient to control dust impacts to acceptable levels.

The operation of the facility would have a net positive GHG impact, potentially eliminating 1.5 million tonnes of CO_2-e per annum. The emission intensity for electricity generated from waste incineration is significantly lower than that derived from the current NSW electricity grid.

12 REFERENCES

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Appendix A GENERAL ARRANGEMENT OF EFW FACILITY