

Report

Air Quality Assessment – Poultry Farm - Warrah Ridge Road Warrah Ridge

Agright Griffith Pty Ltd

Job: 25-228

Date: 31 March 2026

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1 INTRODUCTION

Astute Environmental Consulting Pty Ltd (Astute) was engaged by the Agright Griffith Ltd to perform an air quality study relating to the proposed poultry farm located at 755 Warrah Ridge Road Warrah Ridge on land described as Lot 42 on DP37629 (the site). The property is situated approximately 18km southwest of Quirindi, NSW.

1.1 SEARs and NSW EPA Requirements

This report has been prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARS) for SEAR 2036, which outlines the key issues to be addressed with the site.

The SEARS relating to air quality are presented in Table 1-1 along with where they are addressed in this report. In their advice letter of 31 October 2025, NSW EPA have requested to assess potential impacts on air quality, including dust and odour generated during construction and operation. And to consider effects on the surrounding landscape. These are summarised in Table 1-2 below along with where they are addressed in this report.

Table 1-1: SEARS Requirements Relating to Air Quality and Odour

SEARS Air Quality Requirements	Response and Section
a quantitative assessment of the potential cumulative air quality, dust and odour impacts of the development, during both construction and operation, in accordance with relevant Environment Protection Authority guidelines	Section 6
a description and appraisal of air quality and odour impact mitigation and monitoring measures, in line with International Best Practice.	Section 8

Table 1-2: NSW EPA Requirements Relating to Air Quality and Odour

EPA Requirements	Response and Section
The EIS must demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the POEO Act and the <i>Protection of the Environment Operations (Clean Air) Regulation 2022</i> . This consideration should include section 129 of the POEO Act concerning control of "offensive odour."	This report
The EIS must include an air quality impact assessment (AQIA). The AQIA must be carried out in accordance with the document, <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2022)</i> . These are available at: https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/approved-methods-for-the-modelling-and-assessment-of-air-pollutants	Sections 4 and 6
The EIS must detail emission control techniques/practices that will be employed at the site and identify how the proposed control techniques/practices will meet the requirements of the POEO Act, POEO (Clean Air) Regulation (2022) and criteria within <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2022)</i> .	Section 8
An investigation and assessment of odour impacts likely to be associated with cold air drainage effects on all identified and potential receivers.	Section 9
A requirement to install a meteorological station as soon as possible on or near the site to obtain site-specific meteorological data for a minimum of 3 months and ideally 6 to 12 months to aid in refining odour assessment and modelling.	Section 9
Collection of wind speed data using an ultrasonic wind speed sensor to ensure accurate representation of low wind speed frequencies to allow more accurate prediction of likely katabatic impacts on receivers.	Section 9
Include a consideration of 'worst case' emission scenarios, and sensitivity analysis around the timing of peak emissions.	Sections 4 and 9.3
Air dispersion modelling must be conducted in accordance with: <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2022)</i> https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/approved-methods-for-the-modelling-and-assessment-of-air-pollutants ; and <i>Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion in the Approved Methods for the Modelling and Assessments of Air Pollutants in NSW Australia (TRC Environmental Corporation, 2011)</i> : https://www.epa.nsw.gov.au/-/media/epa/corporatesite/resources/air/calpuffmodelguidance.pdf	Sections 4 and 5
Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the <i>Protection of the Environment Operations (POEO) Act 1997</i> and the <i>POEO (Clean Air) Regulation 2022</i> . Particular consideration should be given to section 129 of the POEO Act concerning control of "offensive odour".	This report
Odour emissions must be assessed in accordance with the <i>Technical Framework – Assessment and Management of Odour from Stationary Sources in NSW</i> and/or the <i>Technical Notes – Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)</i> available at: https://www.epa.nsw.gov.au/yourenvironment/air/industrial-emissions/managing-odour/technical-framework-odour .	Sections 4 to 6
Detail emission control techniques/practices that will be employed by the proposal.	Section 8

1.2 Scope of Work

The objective of this assessment is to determine the potential particulate matter impacts in line with methodology in the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (NSW EPA, 2022a).

The scope of work included:

- Selecting a representative meteorological year using local weather station data;

- Estimating odour and PM₁₀ emissions for the poultry sheds;
- Modelling meteorology at the site using TAPM and CALMET;
- Performing dispersion modelling using CALPUFF;
- Processing model output data;
- Analysing model results and comparing them with relevant assessment criteria; and
- Reporting on the results and providing recommendations if required.

2 PROJECT DESCRIPTION

2.1 Site Location

It is proposed to construct and operate fourteen (14) poultry sheds where meat chicken birds (broilers) will be grown for human consumption. Each shed will accommodate a maximum of 57,900 birds giving the farm a maximum capacity of 810,000 birds. The proposed layout of the shed is shown in Figure 2-1 below where the sheds are shown as green polygons.



The location of the sheds in Figure 2-2 where the site boundary is shown as a dark blue polygon, and the shed outlines are shown as white polygons. The yellow markers in the figure show nearby sensitive locations.

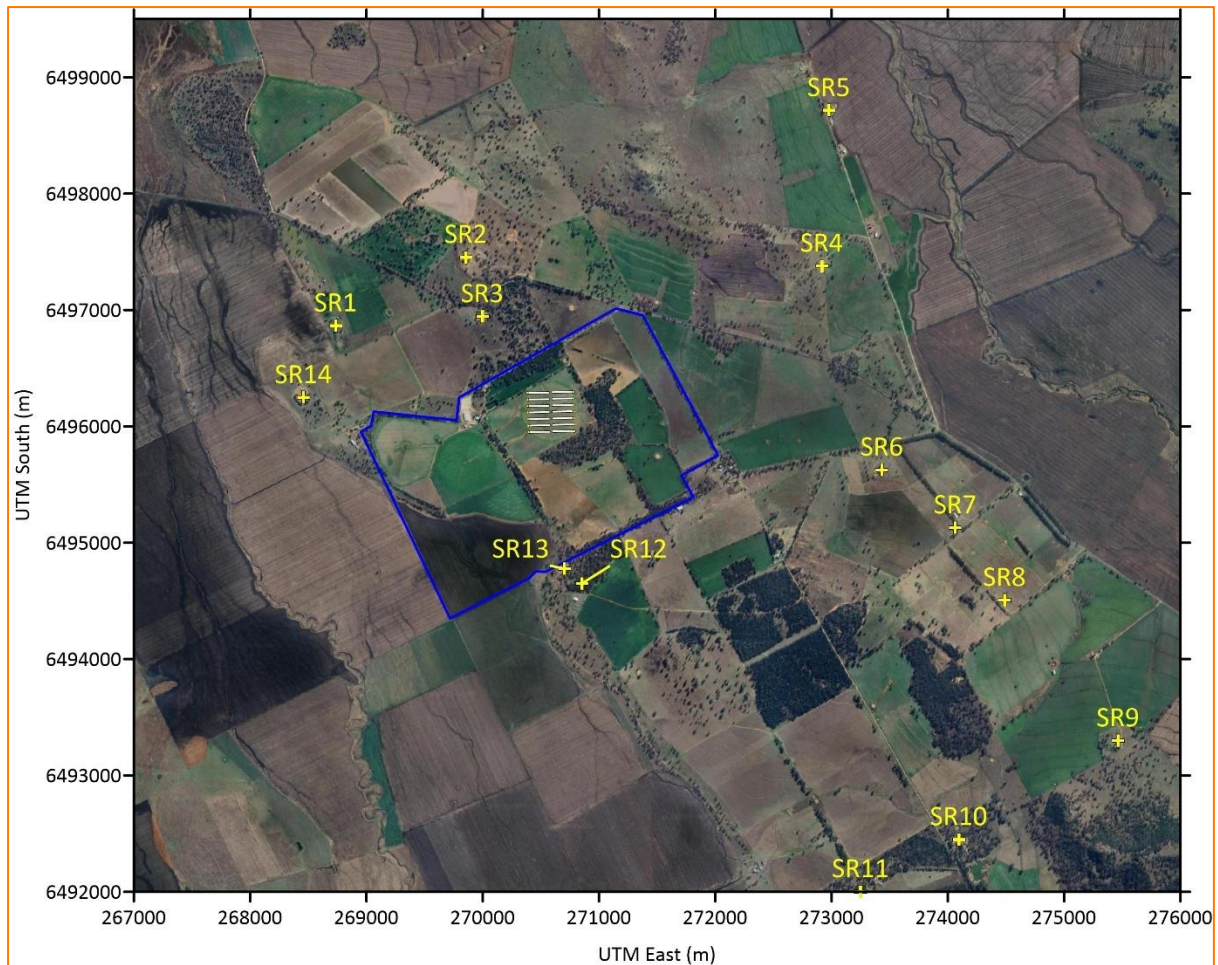


Figure 2-2: The Site

2.2 Potential Emissions to Air

2.2.1 Construction

During construction the primary emissions will be dust from site construction activities. The following potential sources have been identified as potential sources of dust matter during construction:

- wheel generated from vehicles moving on unsealed roads;
- earthmoving equipment used to dig, load, haul and/or store excavated material;
- materials handling and transfer (dust from loading and unloading trucks); and
- windblown dust from open areas and stockpiles.

The term “dust” is a general descriptor for larger, coarse airborne particles that are often visible to the naked eye. For sites such as this, these particles typically consist of soil, sand, or other mechanically generated materials and tend to settle rapidly due to their size and mass. In contrast, the term “particulate matter” (PM) is used to describe a broader category of airborne solid and liquid particles.

Assessing the impacts of fugitive dust emissions on sensitive receptors from construction projects using dispersion modelling has inherent uncertainty and is rarely completed. The uncertainty relates to the assumptions used to calculate emissions (for e.g. silt content), equipment type and number and

the exact location of activities, as well as the fact that it can be readily managed and is short term in nature.

Using the management measures detailed in Section 6.1 below, as well as making use of good practice construction dust management principles, the potential impacts of the construction is considered to be low. We are of the opinion that the risk of adverse dust impact 'during construction is low when managed correctly, and therefore a refined qualitative assessment is not required.

2.2.2 Operation

The primary emissions from the farm during operation will be odour and dust from the sheds, as well as dust from the roads.

Dust from the roads can be managed via the material used in the roads, the maintenance of the roads, limiting vehicle speeds and also using water as a suppressant if required.

and dust from the sheds will occur on a cyclical basis, with emissions increasing during a batch, and then dropping away as birds are removed and the sheds are cleaned, before the process starts again. Emissions from the sheds are detailed in Section 4.3.

Backup generator emissions can occur from the use of emergency generators on site. As these are not expected to run more than 200 hours a year, they have not been assessed.

3 ASSESSMENT CRITERIA

Emissions to air from activities in NSW are regulated under the *NSW Protection of the Environment Operations*¹ (*Clean Air*) *Regulation 2022 (POEO Clean Air Regulation)*, and *Protection of the Environment Operations (General) Regulation 2022*, and *Protection of the Environment Operations Act 1997 (POEO Act)*, Part 5.4 *Air pollution*.

The *Approved Methods for Modelling and Assessment of Air Pollutants in NSW* (NSW EPA, 2022a) (the *Approved Methods*) outlines the approach to be applied for the modelling and assessment of air pollutants in NSW in order to demonstrate compliance with the aforementioned regulations and act.

3.1 Dust

The criteria relevant to this project are summarised in Table 3-1 below.

Table 3-1: Air Quality Objectives relevant to the site

Indicator	Air Quality Objectives	Averaging Period ($\mu\text{g}/\text{m}^3$)
Particulate matter less than 10 μm (PM_{10})	50	24 hours
	25	1 year

3.2 Odour

The odour criterion used in New South Wales is detailed in the *Approved Methods*. For a complex mixture of odorants (i.e., odour measured as odour units), the criterion is selected based on the population density in an area. This is based on the concept that as population density increases, the number of people who may be sensitive to an odour increases. The criteria and equivalent population from the *Approved Methods* are summarised in Table 3-2.

Table 3-2: Impact Assessment Criteria from NSW EPA (2022a)

Population of affected Community	Impact assessment criterion for complex mixtures of odorous air pollutants (ou)
Urban ($\geq \sim 2000$) and/or schools and hospitals	2.0
~500	3.0
~125	4.0
~30	5.0
~10	6.0
Single rural residence ($\leq \sim 2$)	7.0

Whilst no specific guidance is provided in the *Approved Methods*, the approach often required by the New South Wales Environment Protection Authority (NSW EPA) for setting the odour criterion for a site is as follows:

- model the site using standard methods (i.e. the site as proposed);
- prepare a contour plot showing the $C_{99\ 1\text{sec}} = 2$ ou contour;

¹ POEO

- count the existing houses/dwellings within the 2 ou contour (and also consider any proposed dwellings within the 2 ou contour);
- determine the average population per dwelling based on the average data from the most recent Census data; and
- determine the total population and then determine the criterion to be used based on Equation 7.2 in the Approved Methods.

As shown in Figure 6-1 to Figure 6-3 below, based on the 2021 Census showing 2.4 people per dwelling, the criterion would be 6 ou.

For the purposes of this report, we have adopted 5 ou as the criterion as this is more conservative than 6 ou.

4 MODELLING METHODOLOGY

4.1 Representative year

Typically, only a single year of a data is included in an assessment, therefore, the selection of a representative meteorological year for dispersion modelling is critical.

To select a representative year, data from 2019 to 2023 data from the Tamworth EPA station was first analysed using box and whisker plots for average wind speed by season. A typical boxplot structure is shown in Figure 4-1 below.

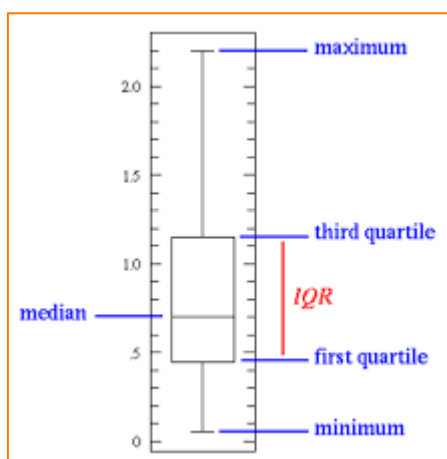


Figure 4-1: Boxplot Structure

The results are shown in below with the horizontal lines in the figures represent the median (inside box), 25th (bottom of box) and 75th (top of box) quartile values.

Rainfall data from the Bureau of Meteorology station at Tamworth was then analysed by total rainfall by year for the period 2014 to 2023. This longer period to avoid biasing the selection of a representative year if a series of high rainfall years had recently occurred within a shorter five year period. The average rainfall for the period was 678 ± 227 mm.

Often a year with a total rainfall above the 90th percentile is considered wet, and below the 10th percentile is dry. An analysis of total rainfall by year, showing the 10th percentile (grey) and 90th percentile (orange) values is shown in Figure 4-4. Figure 4-2 shows that the wind speed values for the years are generally similar as the median values are similar, and the boxes overlap. The yearly figures show that the expected inter annual variability is present. The humidity data in Figure 4-3 also shows that the years are similar except for 2019, which had low humidity.

The rainfall data is summarised in Figure 4-4 and shows that 2019 was a very dry year, which assists in explaining the low humidity for that year. It also shows that 2021 and 2022 were wet years (at or above 90th percentile of the period). The year 2020 was also wet, but not above the 90th percentile. As a secondary check, 1 standard deviation of the average was calculated (68% of values would fall within this range). Using this method, the years 2018 and 2019 were dry, and the years 2021 and 2022 were wet.

Based on the analysis above and as shown below, the year 2023 was selected for further modelling.

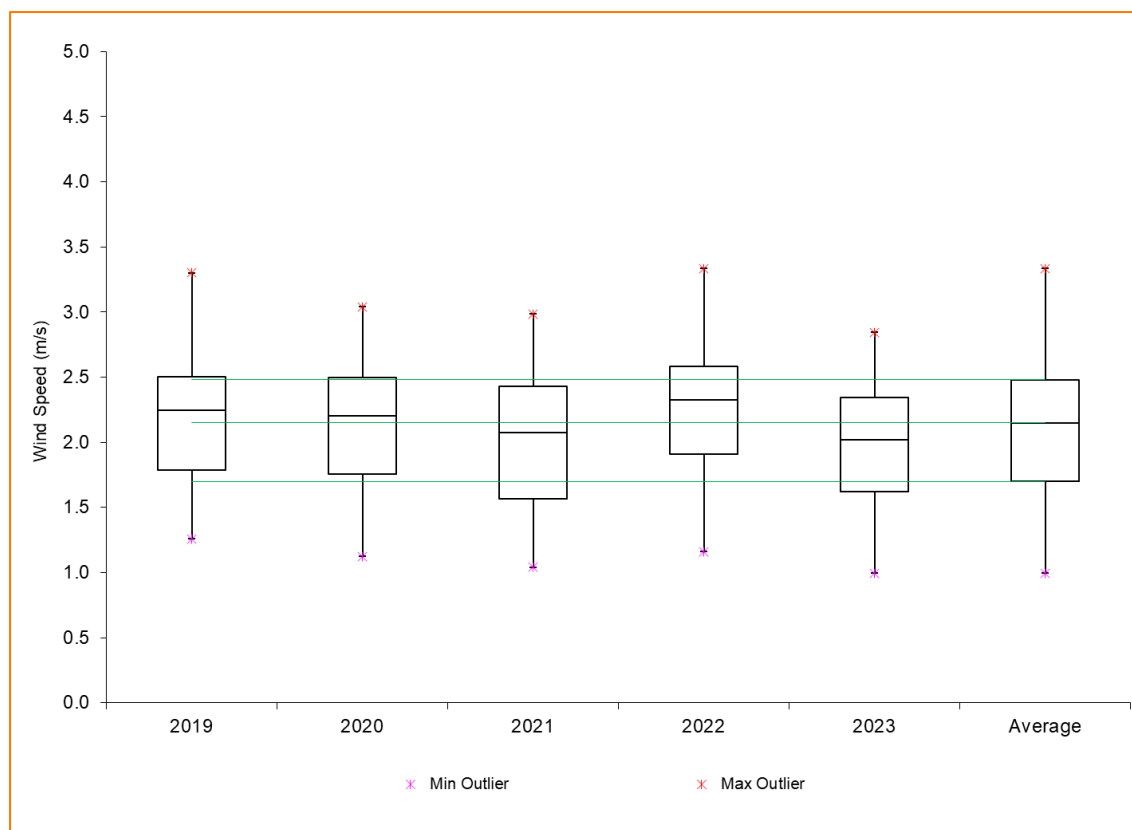


Figure 4-2: Wind Speed - 2019 to 2023

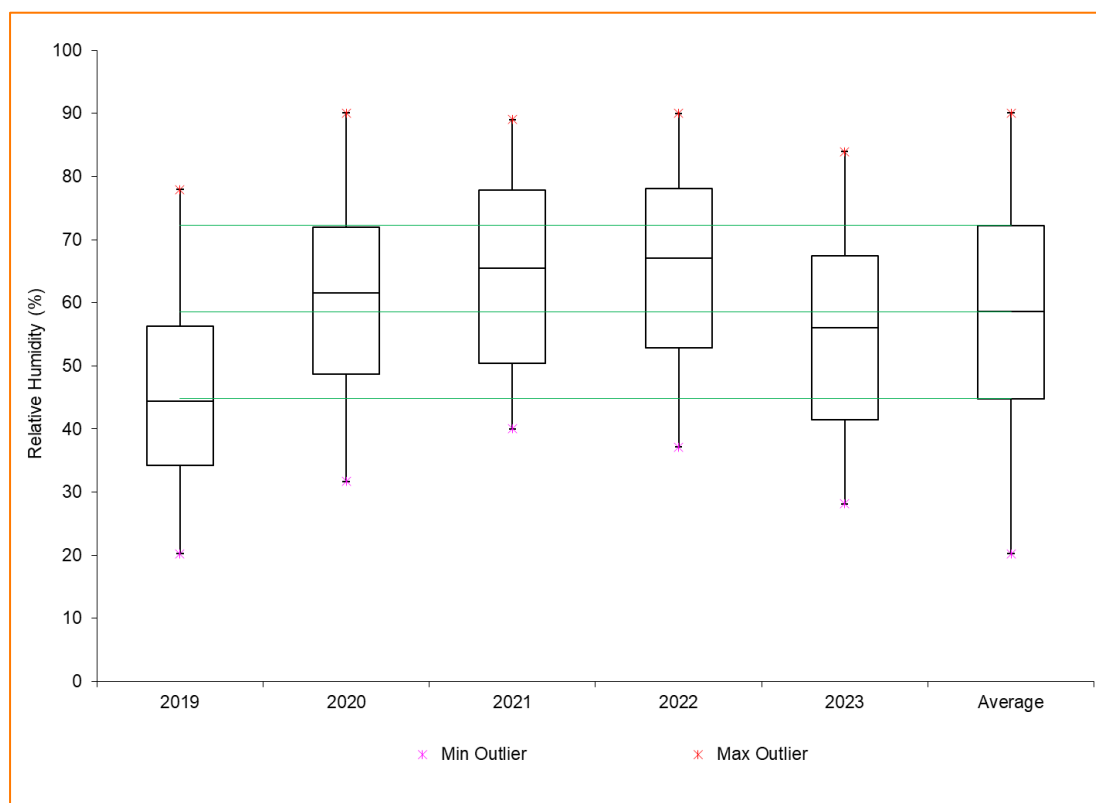


Figure 4-3: Relative Humidity - 2019 to 2023

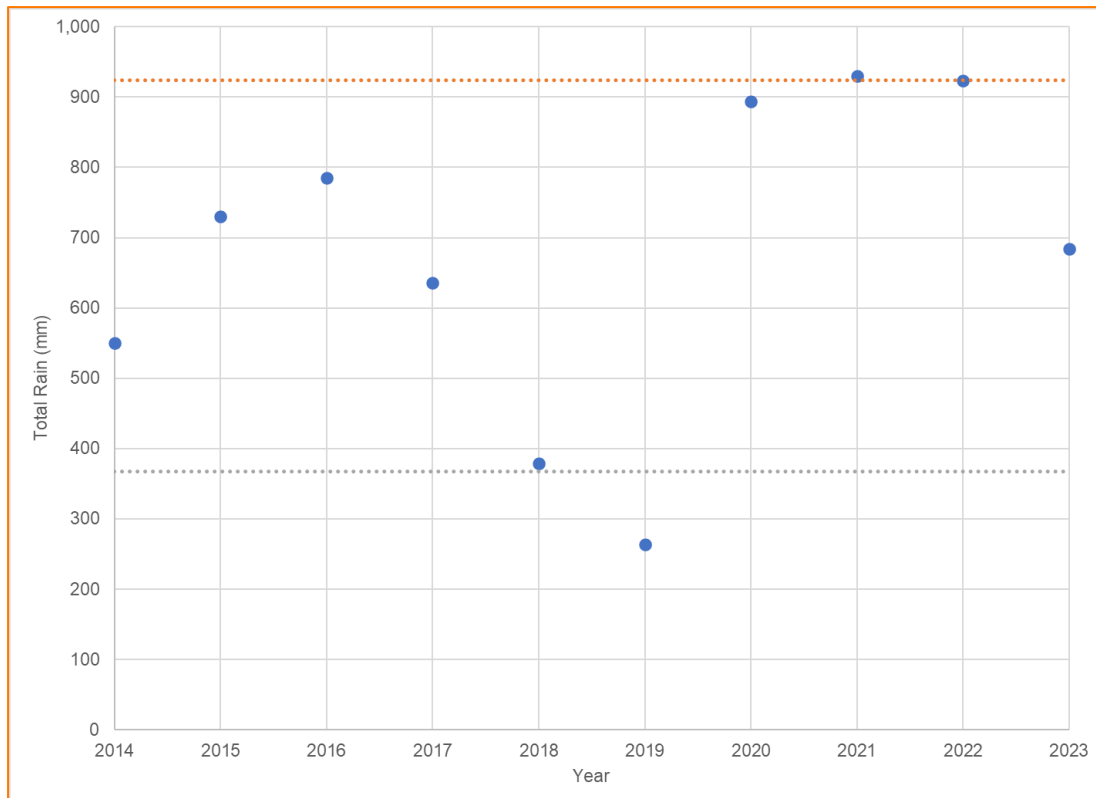


Figure 4-4: Rainfall Analysis - Average and 10th (grey) and 90th Percentile (orange)

4.2 Meteorological Modelling

4.2.1 TAPM

TAPM (version 4), is a three-dimensional meteorological and air pollution model developed by CSIRO. The model is a prognostic model which uses synoptic-scale data to predict hourly meteorology in the area modelled. Details about TAPM can be found in the TAPM user manual (Hurley, 2008a) and details of the model development and underlying equations can be found in Hurley (2008b). Details of validation studies performed for TAPM are also available and include Hurley et. Al. (2008c).

TAPM v4 predicts meteorological data including wind speed and direction in an area using a series of fluid dynamics and scalar transport equations (Hurley, 2008b) and it has both prognostic meteorological and air pollution (dispersion) components. The benefit of using TAPM is that key meteorological aspects including the influence of terrain induced flows are predicted both locally and regionally.

4.2.2 CALMET

CALMET is the meteorological pre-processor to CALPUFF and generates wind fields which include slope flows, terrain effects, and can incorporate factors including terrain blocking. CALMET uses meteorological inputs in combination with land use and terrain information for the modelling domain to predict a three-dimensional meteorological grid (which includes wind speed, direction, air temperature, relative humidity, mixing height, and other variables) for the area (domain) to be modelled in CALPUFF.

A 20 x 20km domain with a terrain resolution of 100 m was modelled with the centre of the domain near the site. A terrain resolution of 30 m was used throughout the domain and was initially taken from the SRTM dataset using CALPUFF view. This dataset was then manually adjusted based a recent aerial image at a resolution of 100 m using CALPUFF View.

4.2.3 CALPUFF

CALPUFF (Exponent, 2011) is a USEPA regulatory dispersion model. It is a non-steady state puff dispersion model that simulates the effects of varying meteorological conditions on the emission of pollutants.

CALPUFF contains algorithms for near source effects including building downwash, partial plume penetration as well as long range effects such as chemical transformation and pollutant removal.

CALPUFF can simulate complex effects including vertical wind shear, coastal winds including recirculation and katabatic drift. The model employs dispersion equations based on a Gaussian distribution of puffs released within the model run, and it takes into account variable effects between emission sources. CALPUFF is widely recognised as being the best model for studies where terrain and light wind effects can be critical. The model setup is summarised in Table 4-1 below.

Table 4-1: TAPM, CALMET And CALPUFF Setup

Model	Parameter	Value
TAPM (v 4.0.5) R1	Number of grids (spacing)	30km, 10 km, 3 km, 1 km
	Number of grid points	41 x 41 x 35 (vertical)
	Year of analysis	2023
	Centre of analysis	31°35.0' South (latitude), 150°33.5' East (longitude)
	Meteorological data assimilation	No
CALMET (v 6.5.0)	Meteorological grid domain	20 km x 20 km
	Meteorological grid resolution	0.1 km
	South-west corner of domain	X = 261.500 km, Y = 6485.500 km
	Surface meteorological stations	N/A
	Upper air meteorological data	N/A
	3D Windfield	m3D from TAPM (1km) input as in initial guess in CALMET
	Terrad	4 km
	Cloud	4 – Gridded cloud cover from Prognostic Relative Humidity at all levels
CALPUFF (v 6.42)	Method used to compute dispersion coefficients	2 – dispersion coefficients using micrometeorological variables
	Building wakes included?	NA
	SVMIN	0.2
	Default settings	All other CALPUFF defaults

Note: McGahan et al. (2021) recommend adjustments to some of the settings listed in OEH (2011) based on expert advice, including from the Author of the OEH document. However, for this report we have maintained the EPA settings unless listed above.

4.3 Emissions

4.3.1 Odour

The odour emissions model of Ormerod and Holmes (2005) was used as the basis of this assessment. The methodology is referred to in the *Best Practice Guidance for the Queensland Poultry Industry - Plume Dispersion Modelling and Meteorological Processing* (PAEHolmes, 2011) and also the *Planning and environment guideline for establishing meat chicken farms, Guide 1 Assessment guide* (McGahan, et al., 2021) (the National Guidelines). The method is based on odour test data at a number of farms and uses a series of equations, which enable emissions to be predicted as a function of:

- the size and number of birds present;
- the stocking density of birds; and
- the ventilation rate, which varies by bird age and ambient temperature.

The odour emissions rate is predicted using the following equation:

$$OER = 0.025 \times K \times A \times D \times V^{0.5} \quad \text{Equation 1}$$

Where **OER** = odour emission rate (ou/s), **A** = total shed floor area (m²), **D** = average bird density (in kg/m²), **V** is the ventilation rate in m³/s and **K** if the K factor.

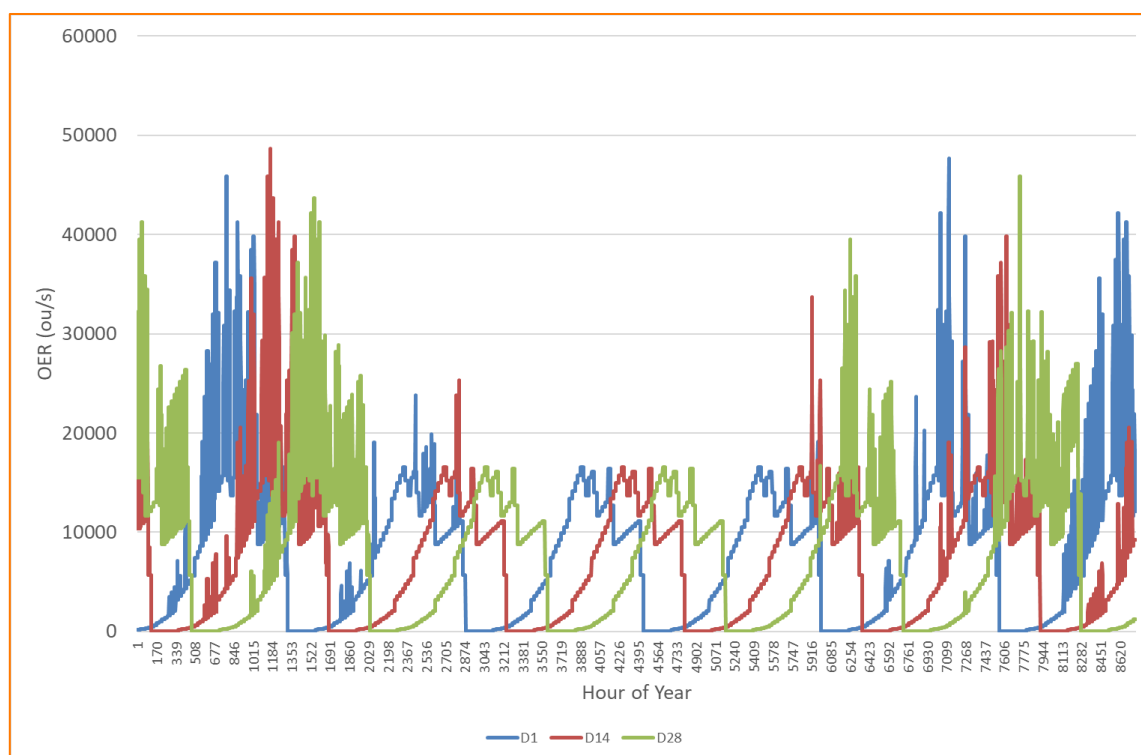
The K factor is a scaling factor which is used to reflect the performance of a farm. For the proposed farm we have used a K factor of 1.9 which is recognised as an upper range of those that occur at modern farms (McGahan, et al., 2021).

Maximum shed ventilation rates were based on industry standard values (~10 m³/hr/bird at maximum) as recommended in the National Guidelines. Table 4-2 shows the shed ventilation rate (% of maximum) as a function of temperature above target temperature based on the method in the National Guidelines. Target temperatures were based on industry standard values. A 65 day batch was modelled with 55 day grow out, 25% of birds placed removed at day 34, a further 25% of birds placed removed at day 38, and a third thin of 25% of birds placed on day 44, with all birds gone by the end of day 55. A cleanout period of 10 days was included in the modelling method (55 day grow plus 10 day cleanout = 65 days). All sheds were assumed to be placed on one day. This is conservative as if for example half the birds were placed on one day, and the rest on a second day, the emissions would be slightly lower.

Table 4-2: Calculated Shed Ventilation as Percentage of Maximum Ventilation

Bird Age (weeks)	1	2	3	4	5	6	7	≥8
Temperature (°C) above Target	Ventilation Rate (% of maximum)							
<1	1.7	2.5	5.1	7.6	9.8	11.5	17.0	17.0
1	1.7	12.5	12.5	25.0	25.0	25.0	25.0	25.0
2	1.7	25.0	25.0	37.5	37.5	37.5	37.5	37.5
3	1.7	37.5	37.5	50.0	50.0	50.0	50.0	50.0
4	1.7	37.5	37.5	50.0	50.0	50.0	50.0	50.0
6	1.7	37.5	37.5	62.5	75.0	75.0	75.0	75.0
7	1.7	37.5	37.5	62.5	75.0	75.0	87.5	100.0
8	1.7	62.5	62.5	62.5	75.0	75.0	100.0	100.0
9	1.7	62.5	62.5	87.5	100.0	100.0	100.0	100.0

An example emission profile for a single shed 1 over a year for Day 1, 14 and 28 placement is shown below in in Figure 4-5. The removal of birds can be seen in the profile where the emissions drop at days 34, 38 and 44. The Day 1, Day 14 and Day 28 cycles are modelled to test what would occur if the peaks for the batches occurred under different meteorological conditions.


Figure 4-5: Example Emission Profiles for Single Shed All Placements (57,900 birds)

4.3.2 Particulate Matter

Particulate emissions were based on the latest methods detailed in the National Guidelines.

Particulate matter (PM₁₀) emission rates in mg/s/1000 birds at a point in time was estimated using the following equation:

$$D(PM_{10})C = 0.0367 \times A \quad \text{Equation 2}$$

Where **A** = bird age in days, **D** = maximum PM₁₀ emissions at growth cycle age (mg/s/1000 birds at age **A**).

The hourly varying PM₁₀ emissions were modelled based on Equation 2..

4.4 Excluded Sources

The following potential emission sources are considered to be minor, or infrequent in nature, and have not been included in this assessment:

- Other combustion emissions – No emissions from the delivery trucks and mobile equipment have been modelled as they are expected to be minor in the context of the regional airshed and total emissions from the site; and
- Cumulative sources² –cumulative non poultry sources have not been modelled in this air quality assessment however background air quality data has been added to the PM₁₀ modelling results to account for this.

5 EXISTING ENVIRONMENT

The principal meteorological parameters that influence plume dispersion are wind direction, wind speed, atmospheric stability (turbulence) and atmospheric mixing height (height of turbulent layer). This section presents a summary of the key meteorological features

5.1 Meteorological Data

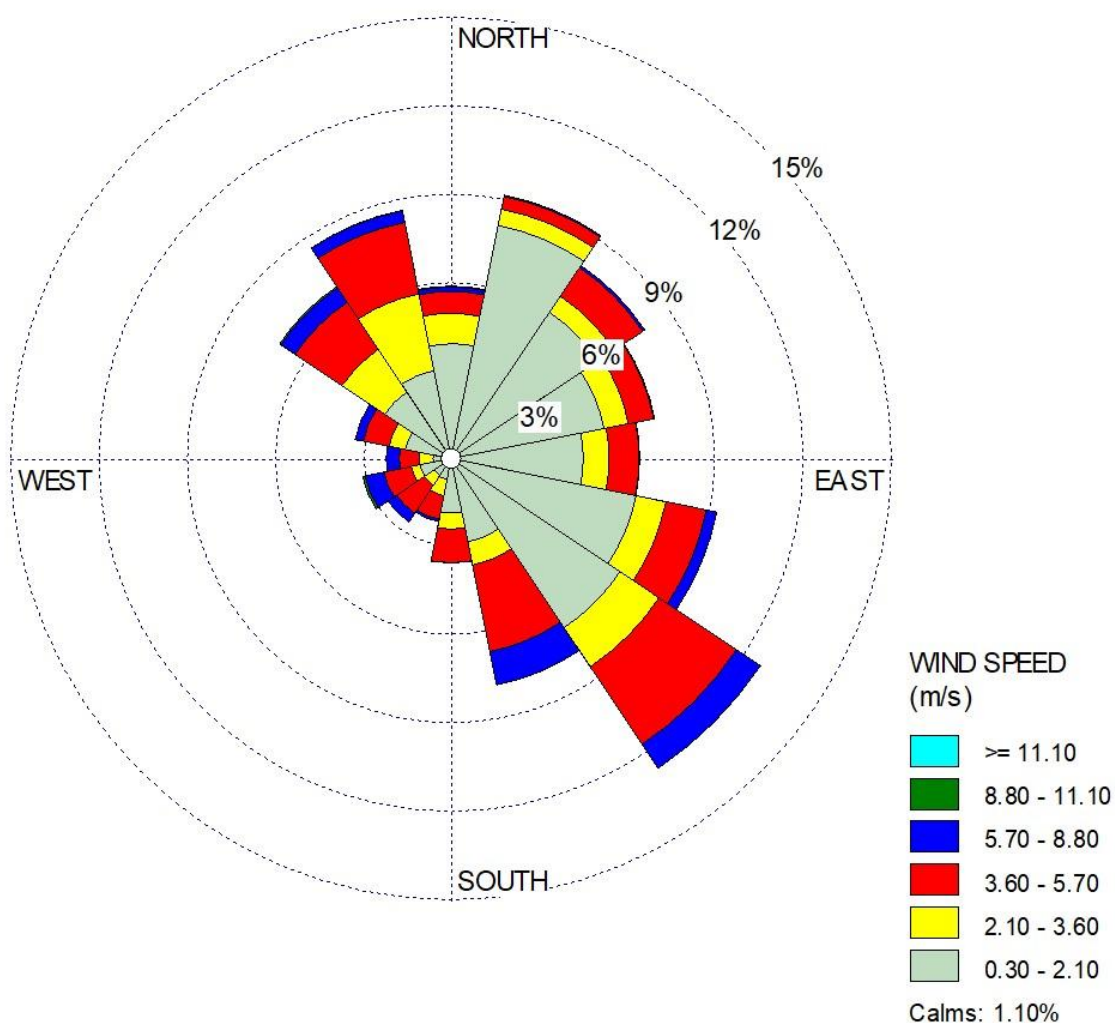
5.1.1 Wind Speed and Direction

Wind roses are used to show the frequency of winds by direction and strength. The bars show the compass points (north, north-north-east, north-east etc) from which wind could blow. The length of each bar shows the frequency of winds from that direction and the different coloured sections within each bar show the wind speed categories and frequency of winds in those categories. In summary, wind roses are used to visually show winds over a period of time.

The wind roses below were created from data extracted from CALMET and are presented in Figure 5-1 and Figure 5-2. The annual wind rose shows that the site is dominated by south easterly winds with winds occurring relatively frequently from most directions except for the south west. Light winds occur most frequently overnight and in the early morning, with strong winds occurring during the day.

² There are no known odour sources within 5 km of the farm so no cumulative assessment required.

The wind roses show a low proportion of calm winds (~1.05%) with light winds over the year (up to 3 m/s) occurring ~68% of the time. The wind speed frequencies are summarised graphically in Figure 5-3.



Location: The Site X: 271,500 Y: 6,459,500	Year: 2023	Data Source: CALMET extract
Calm winds: 1.0%	Average wind speed: 2.5 m/s	Creator: G. Galvin

Figure 5-1: Annual Wind Rose for the Site

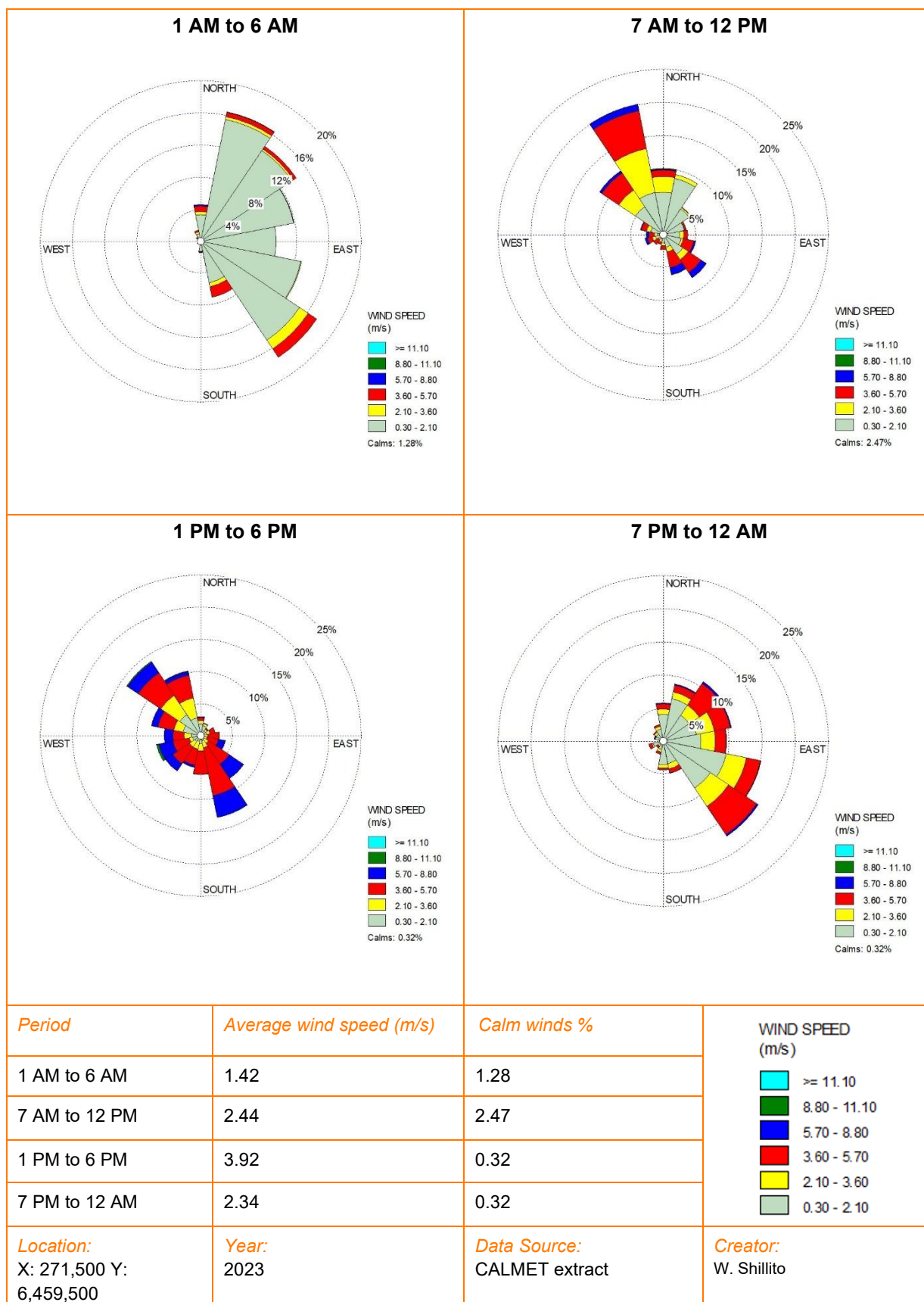


Figure 5-2: Time of Day Wind Roses

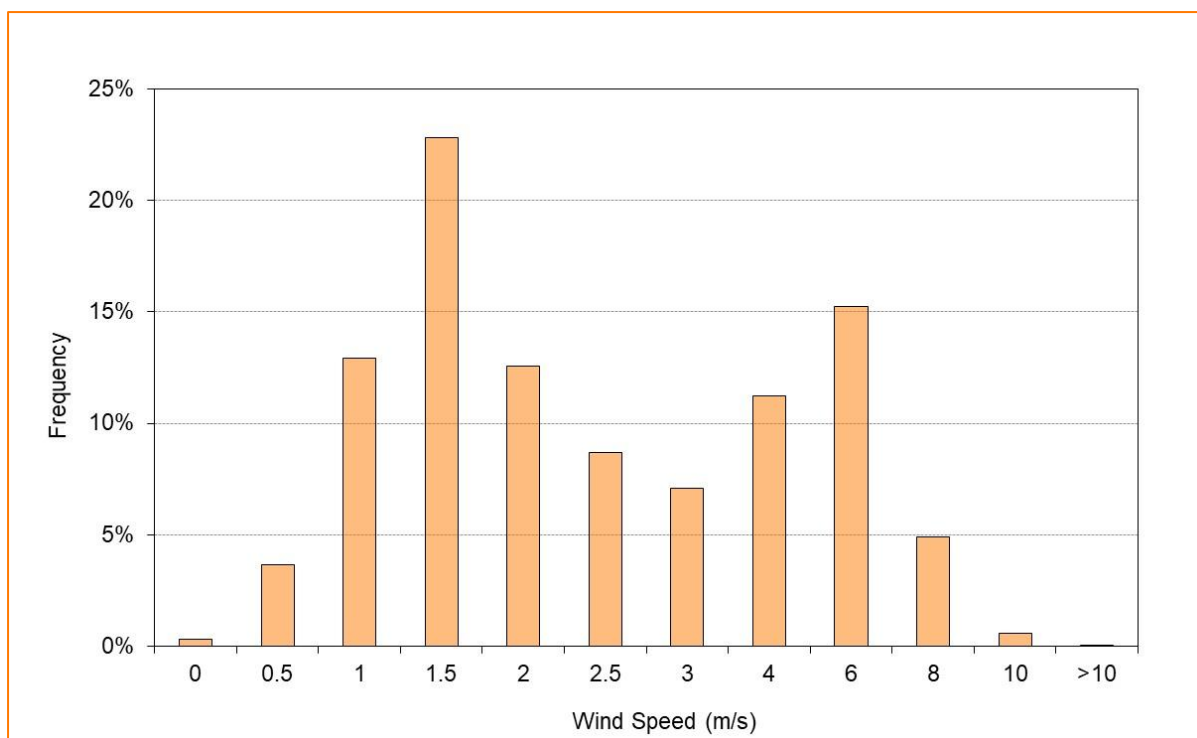


Figure 5-3: Wind Speed Frequency from CALMET

5.1.2 Atmospheric Stability

Atmospheric stability is a key factor in dispersion modelling and is used to describe turbulence in the atmosphere. Turbulence is an important factor in plume dispersion. Turbulence increases the width of a plume due to random motion within the plume. This changes the plume cross-sectional area (width and height of the plume), thus diluting or spreading the plume. As turbulence increases, the rate at which this occurs also increases. Limited or weak turbulence, therefore, does not dilute or diffuse the plume as much as strong turbulence, and leads to high downwind concentrations. This is often associated with calm wind speeds (<0.3 m/s).

The Pasquill-Gifford stability scheme has been in use for many years to define turbulence in the atmosphere. The scheme uses stability classes from A to F³. Class A is highly unstable and at the other end of the scheme are class F conditions, which are very stable conditions that commonly occur at night and in the early morning. As noted above, under stable conditions, plumes do not disperse as well as during the day (unstable conditions) and these conditions can lead to impacts, especially for ground level sources.

Between Class A and Class F are stability classes which range from moderately unstable (B), through neutral (D) to slightly stable (E). Whilst classes A and F are most often associated with clear skies, class D is linked to sunset and sunrise, or cloudy and/or windy daytime conditions. Unstable conditions most often occur during the daytime and stable conditions are most common at night.

The stability classes predicted by CALMET for the site are summarised in Figure 5-4. The data shows that E and F class stability occurs ~45% of the time. The frequency of D class stability (25%) is commonly seen in areas with winds above 2.5 m/s at night or site with a high frequency of cloudy days.

³ Note that CALPUFF uses a more accurate micrometeorological scheme for turbulence.

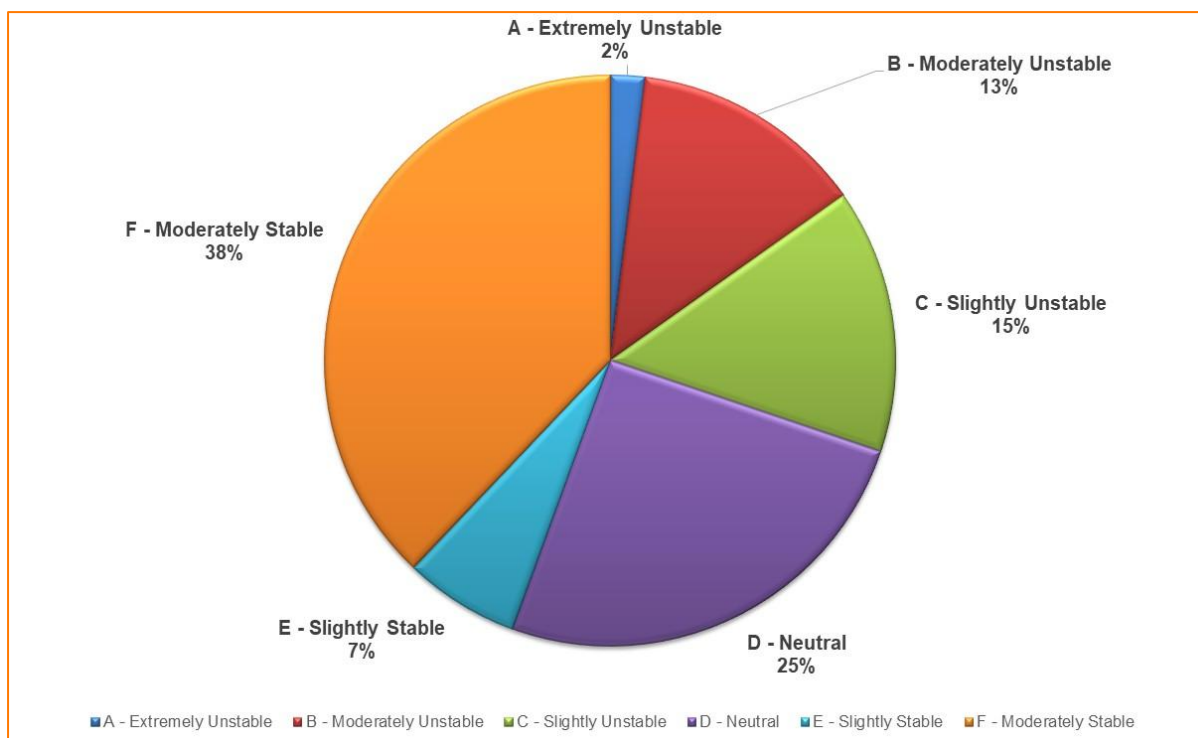


Figure 5-4: Atmospheric Stability

5.1.3 Atmospheric Mixing Height

The mixing height is the height at which vertical mixing of air and suspended gases or particles occurs above the ground. This height can be measured by the observation of the atmospheric temperature profile. A parcel of air rising from the surface of the Earth will rise at a given rate (called the dry-adiabatic lapse rate). As long as the parcel of air is warmer than the ambient temperature, it will continue to rise. However, once it becomes colder than the temperature of the environment, it will slow down and eventually stop (University of Michigan , 2004).

The mixing height is an important parameter in assessing air emissions, as it defines the vertical mixing of a plume. The air below the layer has restricted vertical dispersion, meaning the higher the mixing height, the greater the potential for dispersion. The estimated variation of mixing height over time predicted at the site by CALMET is shown in Figure 5-5. The diurnal cycle is clear in this figure whereby at night the mixing height is normally relatively low and after sunrise, it increases as a result of heat associated with the sun on the Earth's surface. Overall, the estimated mixing heights shown below are as expected however it is noted that the midnight to 4 am mixing heights are low. Low mixing heights during this period would decrease the vertical extent of the plume and result in higher ground level concentrations than if they were higher.

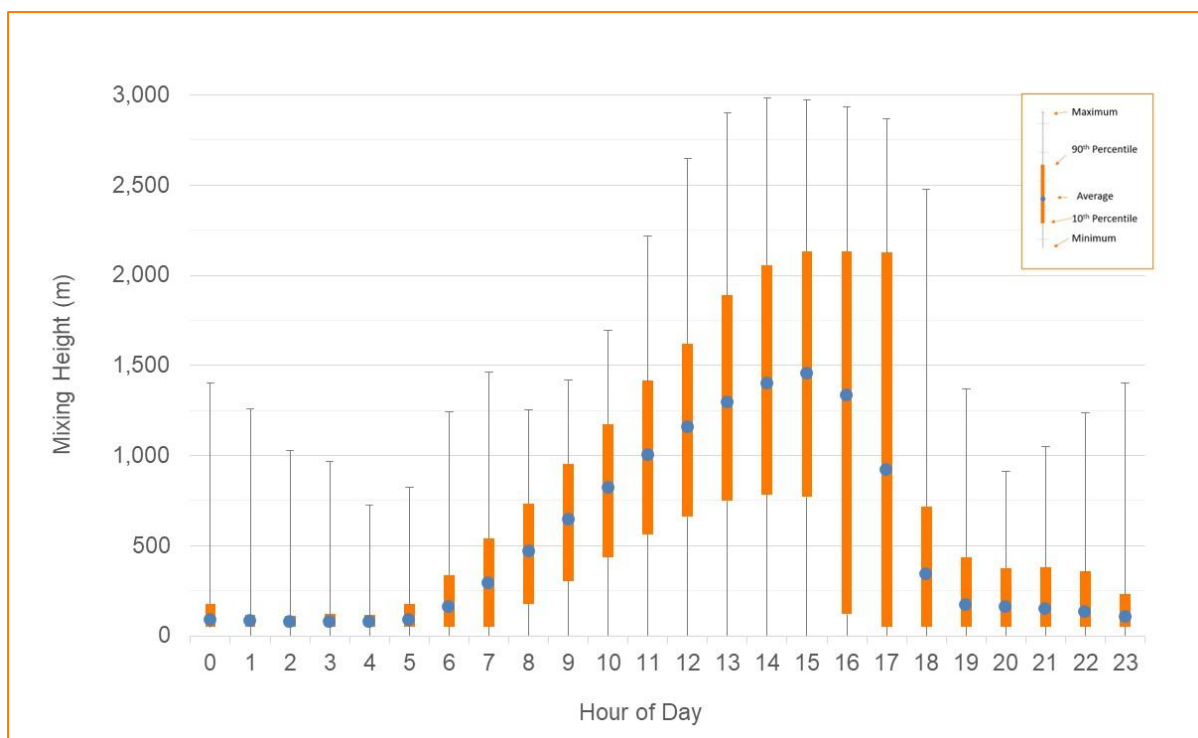


Figure 5-5: CALMET Extract – Predicted Mixing Heights

5.2 Background Air Quality Data

Existing air quality in the region surrounding the farm is influenced by the following sources:

- Dust from agricultural activities (ploughing, harvesting, bailing);
- Particulate matter from the Quarry 12kms to the east;
- Wind erosion from exposed areas; and
- Wheel generated dust from unsealed rural roads.

We are not aware of any air quality monitoring stations with publicly available data in the farm locale however, the Office of Environment and Heritage (OEH) operate several monitoring stations throughout New South Wales.

The Office of Environment and Heritage (OEH) operates several monitoring stations throughout New South Wales. The closest monitoring station is located in Merriwa, located approximately 54kms to the south southwest.

A statistical summary for the 2023 monitoring year (24 hour PM_{10}) is provided in Table 5-1. It can be seen in the table that the average concentration was $14.2 \mu g/m^3$ and the dataset as a whole was dominated by a small number of high values (with the third highest value being $39.6 \mu g/m^3$ once data associated with events such as large bushfires were removed). This means that the use of the maximum background value would produce an unrealistic estimate of the expected maximum dust concentrations in the area around the farm.

Table 5-1: Statistical summary of Merriwa Monitoring Data

Parameter	PM ₁₀ 24 – hour
Monitoring period	01/01/2023 – 31/12/2023
Averaging period	24 hours
Number of validated measurements	355
Data capture	97.3%
Average	14.2 µg/m ³
Standard deviation	7.0 µg/m ³
Percentiles and Concentrations (µg/m³)	
50 th	13.2
70 th	17
90 th	22.4
99 th	36.3
3 rd highest	39.6
2 nd highest	44.0
Maximum	49.4

5.3 Sensitive Receptors

Several sensitive receptors across the area were identified during the project. The location of the receptors as identified by spatial imagery are detailed below in Table 5-2. The receptors are also shown in Figure 5-6.

Table 5-2: Sensitive Receptor Locations

ID	Easting (m, MGA56 E)	Northing (m, MGA56 S)	ID	Easting (m, MGA56 E)	Northing (m, MGA56 S)
SR1	268,737	6,496,864	SR13	270,702	6,494,778
SR2	269,857	6,497,452	SR14	268,460	6,496,246
SR3	269,998	6,496,944	SR15	271,224	6,504,342
SR4	272,918	6,497,378	SR16	272,079	6,503,039
SR5	272,979	6,498,715	SR17	276,343	6,501,413
SR6	273,434	6,495,624	SR18	277,737	6,500,880
SR7	274,065	6,495,128	SR19	264,124	6,497,489
SR8	274,489	6,494,506	SR20	263,175	6,498,447
SR9	275,465	6,493,298	SR21	266,821	6,501,972
SR10	274,095	6,492,448	SR22	267,086	6,501,914
SR11	273,251	6,492,001	SR23	267,412	6,501,993
SR12	270,853	6,494,650	SR24	266,500	6,503,704

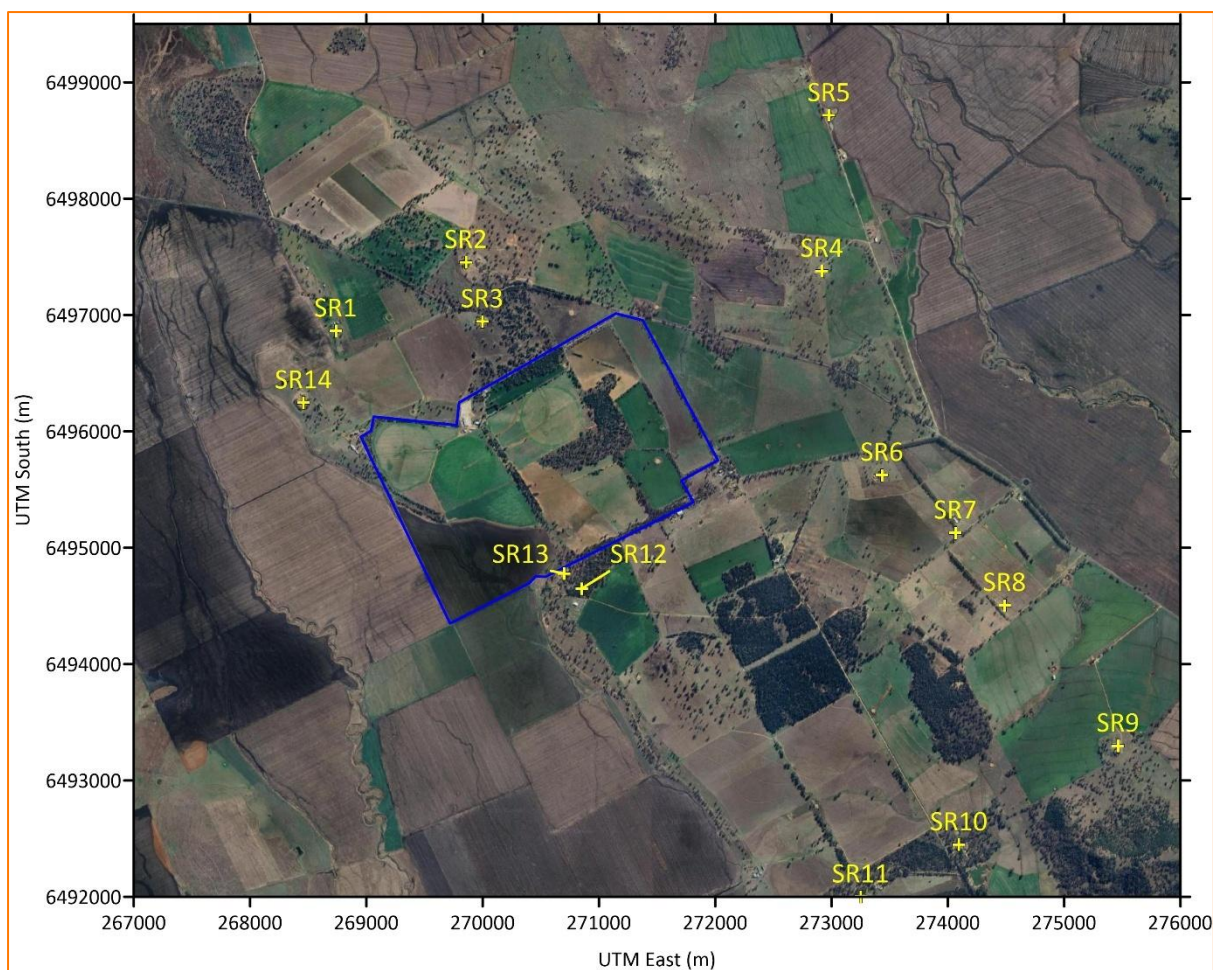


Figure 5-6: Sensitive Receptors

6 RESULTS

6.1 Construction Phase

The *Guidance on the assessment of dust from demolition and construction* (IAQM, 2024)⁴ is a document that provides guidance on how to perform a construction dust impact assessment.

The document contains a five step process which is as follows:

- Step 1: Screen the Need for a Detailed Assessment;
- Step 2: Assess the Risk of Dust Impacts Arising;
- Step 3: Site-specific Mitigation;
- Step 4: Determine Significant Effects; and
- Step 5: Dust Assessment Report.

Of the steps above, steps 1 to 4 are relevant to the site. Full details concerning the methodology can be found in IAQM (2023).

6.1.1 Step 1 – Initial Screening

Step 1 uses a deliberately conservative methodology, and Notes that an assessment will be required if ‘human receptor’ within:

- 250 m of the boundary of the site; and/or
- 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the site entrance(s).

As there are no receptors within 250 m and none within 50 m of the routes as noted above, a detailed assessment is not required. Therefore Step 2 and 3 are not included here.

Although the risk is low, the mitigation measures detailed in Section 8 below should be applied to the site.

6.1.2 Step 4 – Significant Effects

Based on IAQM, significant construction effects are not expected.

⁴ “the document”

6.2 Odour

The results for the farm in isolation are shown in Figure 6-1 to Figure 6-3 below for Day 1 to Day 28 placements.

The receptor concentrations for each scenario are shown in Table 6-1. All results are at a K factor of 1.9. While not shown here, if the farm achieved a K factor of 1.5 rather than 1.9, the results would be ~20% lower.

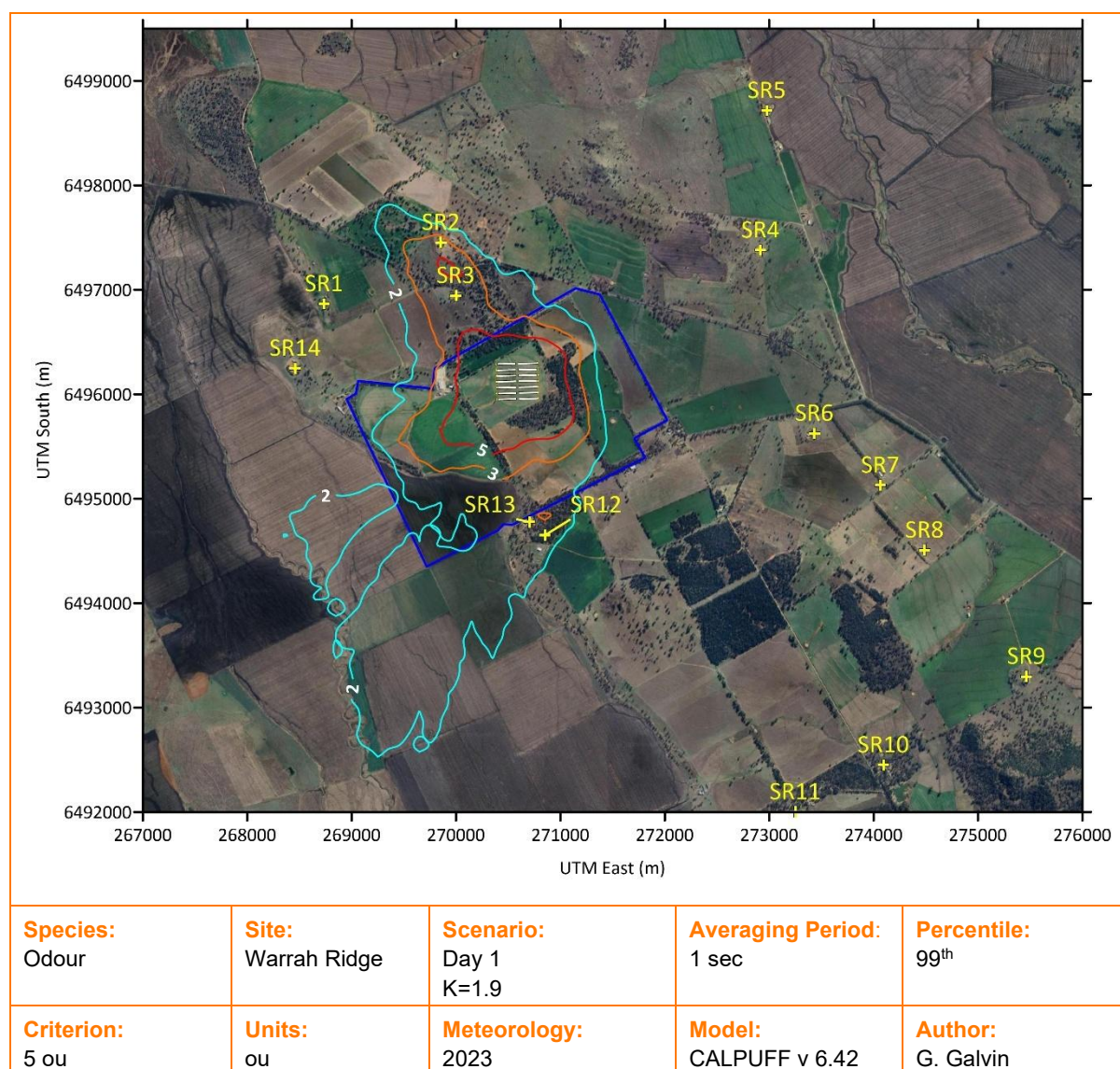


Figure 6-1: Contours - Farm in Isolation Day 1

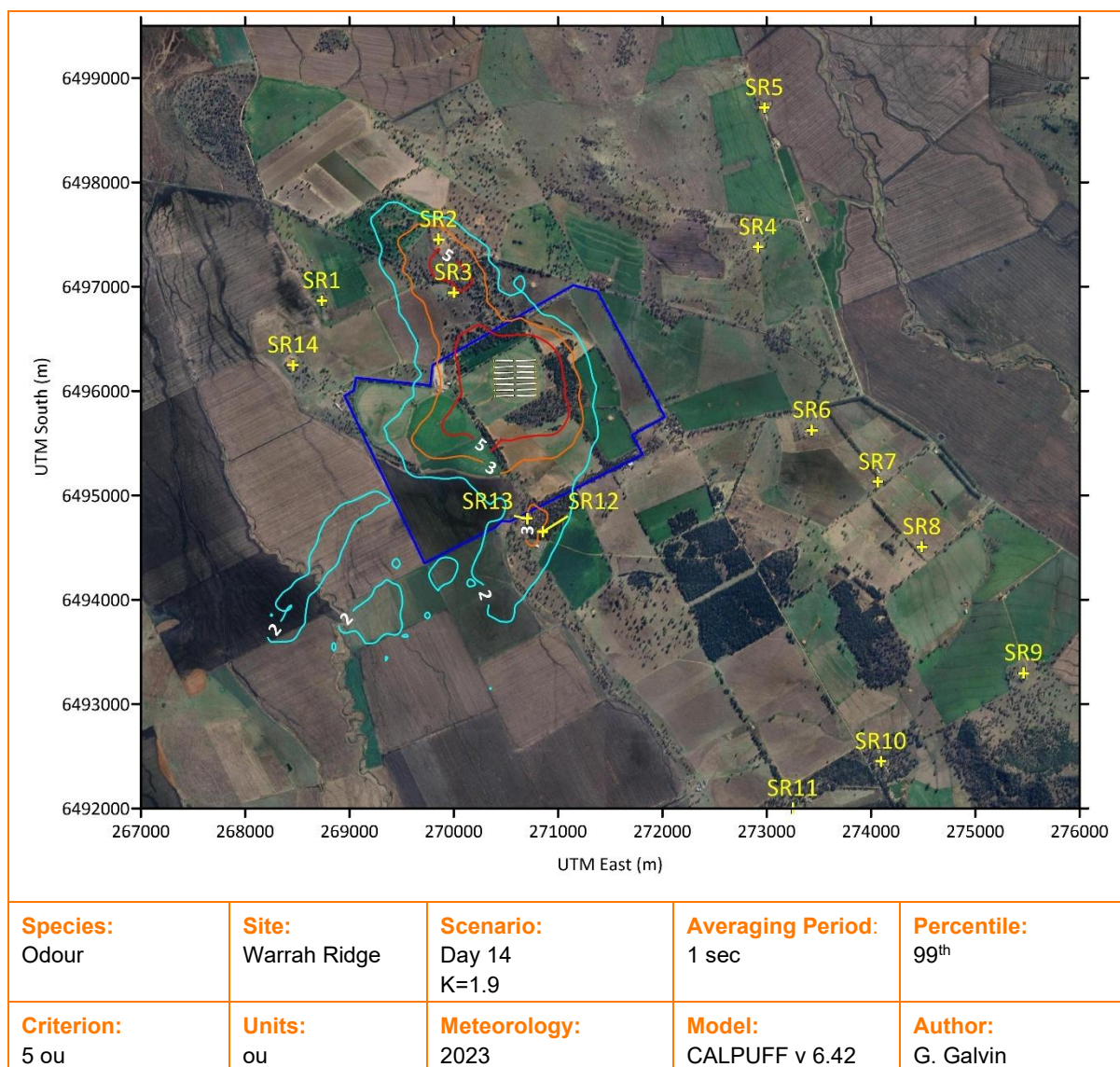


Figure 6-2: Contours - Farm in Isolation Day 14



Figure 6-3: Contours - Farm in Isolation Day 28

Table 6-1: Receptor Results – Day 1 to 28 Placement -K=1.9

Receptor	Batch Stage ($C_{99\ 1sec}$)			99 th Percentile 3 Runs ⁵
	Day 1	Day 14	Day 28	
SR1	0.8	0.6	0.9	0.7
SR2	3.7	4.4	3.5	3.7
SR3	3.9	4.2	3.7	3.9
SR4	0.3	0.3	0.3	0.3
SR5	0.2	0.1	0.2	0.2
SR6	0.3	0.3	0.4	0.3
SR7	0.2	0.3	0.3	0.3
SR8	0.2	0.2	0.2	0.2
SR9	0.2	0.1	0.1	0.2
SR10	0.2	0.2	0.2	0.2
SR11	0.3	0.2	0.2	0.3
SR12	2.5	2.8	2.9	2.8
SR13	2.7	3.0	3.0	2.9
SR14	1.6	1.4	1.4	1.5
SR15	0.1	0.1	0.1	0.1
SR16	0.1	0.1	0.1	0.1
SR17	0.1	0.0	0.1	0.1
SR18	0.0	0.0	0.0	0.0
SR19	0.6	0.8	0.6	0.7
SR20	0.4	0.5	0.4	0.5
SR21	0.3	0.2	0.2	0.3
SR22	0.2	0.2	0.2	0.2
SR23	0.2	0.1	0.2	0.2
SR24	0.2	0.2	0.1	0.2

⁵ Time series extracts were taken from each run. The three years of data were combined into a contiguous dataset and 99th percentile was calculated from the entire dataset for each receptor using excel.

6.3 Particulate Matter

The predicted ground level concentrations of PM₁₀ for both the maximum 24-hour and annual average are presented below as follows:

- Table 6-2: Predicted Isolation Receptor Concentrations PM₁₀;
- Table 6-3: Predicted Receptor Concentrations PM₁₀ – with background;
- Figure 6-4: Contours – Maximum 24-hour PM₁₀ with Background – Day 1, 14 and 28; and
- Figure 6-5: Contours – Annual Average with Background – Day 1, 14 and 28.

We note that the maximum background concentration for the 24 hour average concentration is higher than the 50 µg/m³ limit at 66.6 µg/m³. We also note that the highest background not above 50 µg/m³ is high at 49.4 µg/m³. This unduly impacts the 50 µg/m³ contour in Figure 6-4.

The results show:

- The maximum predicted 24-hour concentration in isolation for all sensitive receptors was 6.0 µg/m³ at SR 2 for Day 14;
- The cumulative 24-hour PM₁₀ assessment which includes the particulate emissions from the sheds, there were additional days above the 50 µg/m³ criterion because of the high (49.4 µg/m³) background;
- Cumulative annual average predictions including background and particulate emissions from the shed are predicted to be in compliance with the impact assessment criteria for the majority of sensitive receptors; and
- For the annual average, no receptors are above the criterion.

Due to the high background, we have contemporaneously assessed the hourly PM₁₀ concentrations in line with the Approved Methods. When assessed contemporaneously (See Table A-1 to Table A-48 below for the closest receptors that have at least one placement day above the criterion), there are no exceedances of the 24 hour PM₁₀ criterion.

Table 6-2: Predicted Isolation Receptor Concentrations PM₁₀

Receptor	24-hour Maximum Concentration – Isolation (µg/m ³)			Annual Average Concentration – Isolation (µg/m ³)		
	Day 1	Day 14	Day 28	Day 1	Day 14	Day 28
SR1	3.3	1.1	1.0	0.1	0.1	0.1
SR2	5.5	6.0	4.1	0.3	0.3	0.3
SR3	5.5	5.4	4.7	0.4	0.4	0.4
SR4	1.7	1.0	1.2	0.0	0.0	0.0
SR5	0.7	0.5	0.2	0.0	0.0	0.0
SR6	1.1	0.9	1.4	0.0	0.0	0.0
SR7	1.1	1.3	2.6	0.0	0.0	0.0
SR8	0.8	1.4	2.1	0.0	0.0	0.0
SR9	1.1	0.8	1.0	0.0	0.0	0.0
SR10	0.7	0.5	0.6	0.0	0.0	0.0
SR11	1.3	0.7	0.8	0.0	0.0	0.0
SR12	2.7	2.7	3.3	0.2	0.2	0.2
SR13	2.9	3.1	4.1	0.2	0.2	0.2
SR14	3.5	1.4	1.7	0.1	0.1	0.1
SR15	0.1	0.2	0.2	0.0	0.0	0.0
SR16	0.4	0.2	0.2	0.0	0.0	0.0
SR17	0.9	0.7	0.5	0.0	0.0	0.0
SR18	0.2	0.2	0.1	0.0	0.0	0.0
SR19	1.0	1.2	1.1	0.0	0.0	0.0
SR20	0.7	0.7	0.6	0.0	0.0	0.0
SR21	0.5	0.8	0.6	0.0	0.0	0.0
SR22	0.6	0.6	0.4	0.0	0.0	0.0
SR23	0.6	0.3	0.2	0.0	0.0	0.0
SR24	0.5	0.4	0.3	0.0	0.0	0.0

Table 6-3: Predicted Receptor Concentrations PM₁₀ – with background

Receptor	24-hour Maximum Concentration – with background (µg/m ³)			Annual Average Concentration – with background (µg/m ³)		
	Day 1	Day 14	Day 28	Day 1	Day 14	Day 28
SR1	52.7	50.5	50.4	14.3	14.3	14.3
SR2	54.9	55.4	53.5	14.5	14.5	14.5
SR3	54.9	54.8	54.1	14.6	14.6	14.6
SR4	51.1	50.4	50.6	14.2	14.2	14.2
SR5	50.1	49.9	49.6	14.2	14.2	14.2
SR6	50.5	50.3	50.8	14.2	14.2	14.2
SR7	50.5	50.7	52.0	14.2	14.2	14.2
SR8	50.2	50.8	51.5	14.2	14.2	14.2
SR9	50.5	50.2	50.4	14.2	14.2	14.2
SR10	50.1	49.9	50.0	14.2	14.2	14.2
SR11	50.7	50.1	50.2	14.2	14.2	14.2
SR12	52.1	52.1	52.7	14.4	14.4	14.4
SR13	52.3	52.5	53.5	14.4	14.4	14.4
SR14	52.9	50.8	51.1	14.3	14.3	14.3
SR15	49.5	49.6	49.6	14.2	14.2	14.2
SR16	49.8	49.6	49.6	14.2	14.2	14.2
SR17	50.3	50.1	49.9	14.2	14.2	14.2
SR18	49.6	49.6	49.5	14.2	14.2	14.2
SR19	50.4	50.6	50.5	14.2	14.2	14.2
SR20	50.1	50.1	50.0	14.2	14.2	14.2
SR21	49.9	50.2	50.0	14.2	14.2	14.2
SR22	50.0	50.0	49.8	14.2	14.2	14.2
SR23	50.0	49.7	49.6	14.2	14.2	14.2
SR24	49.9	49.8	49.7	14.2	14.2	14.2
Background	49.4 (µg/m ³)			14.2 (µg/m ³)		
Criteria	50 (µg/m ³)			25 (µg/m ³)		
Number of exceedances	17	16	13	0	0	0

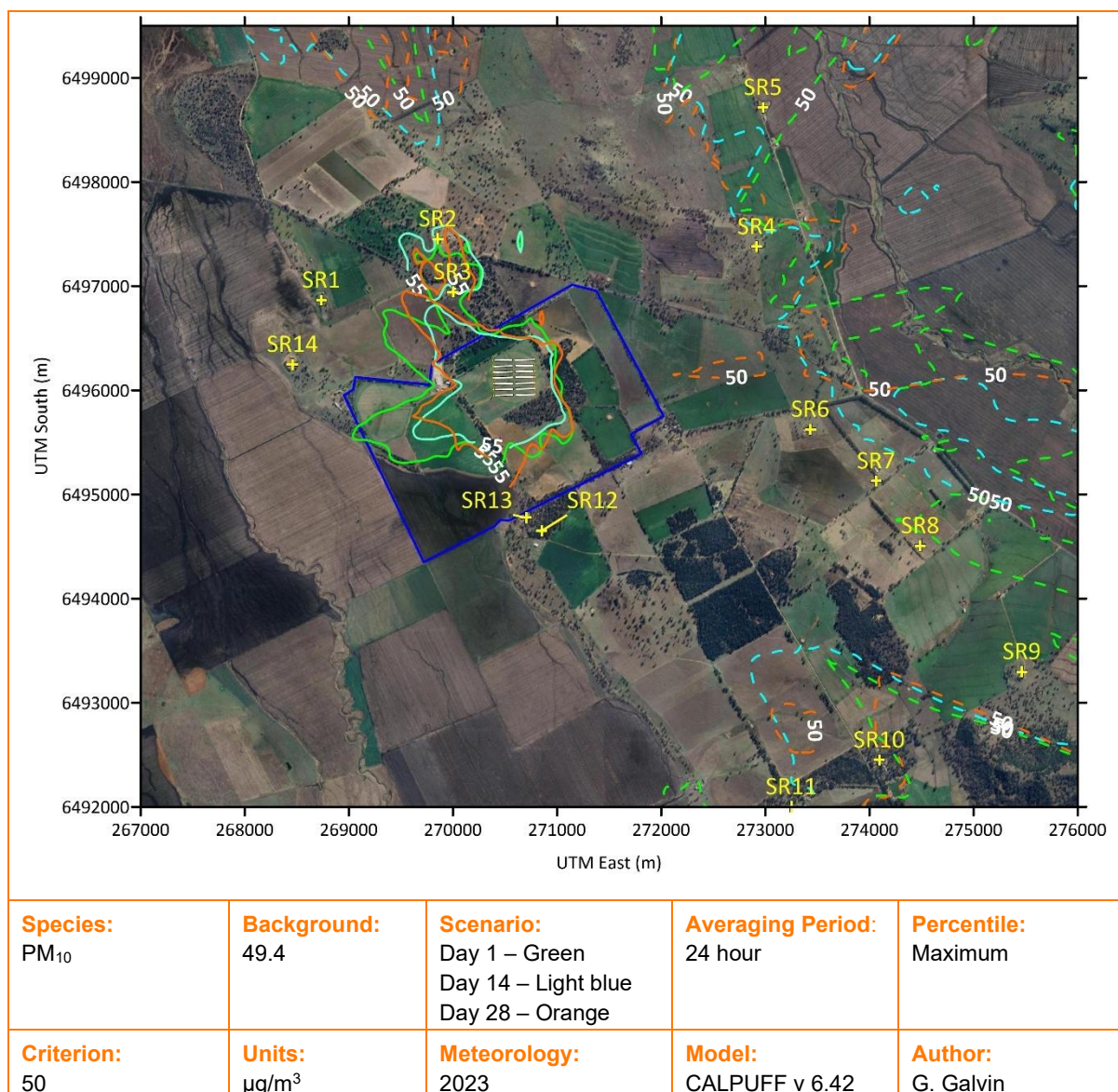


Figure 6-4: Contours – Maximum 24-hour PM₁₀ with Background – Day 1,14 and 28

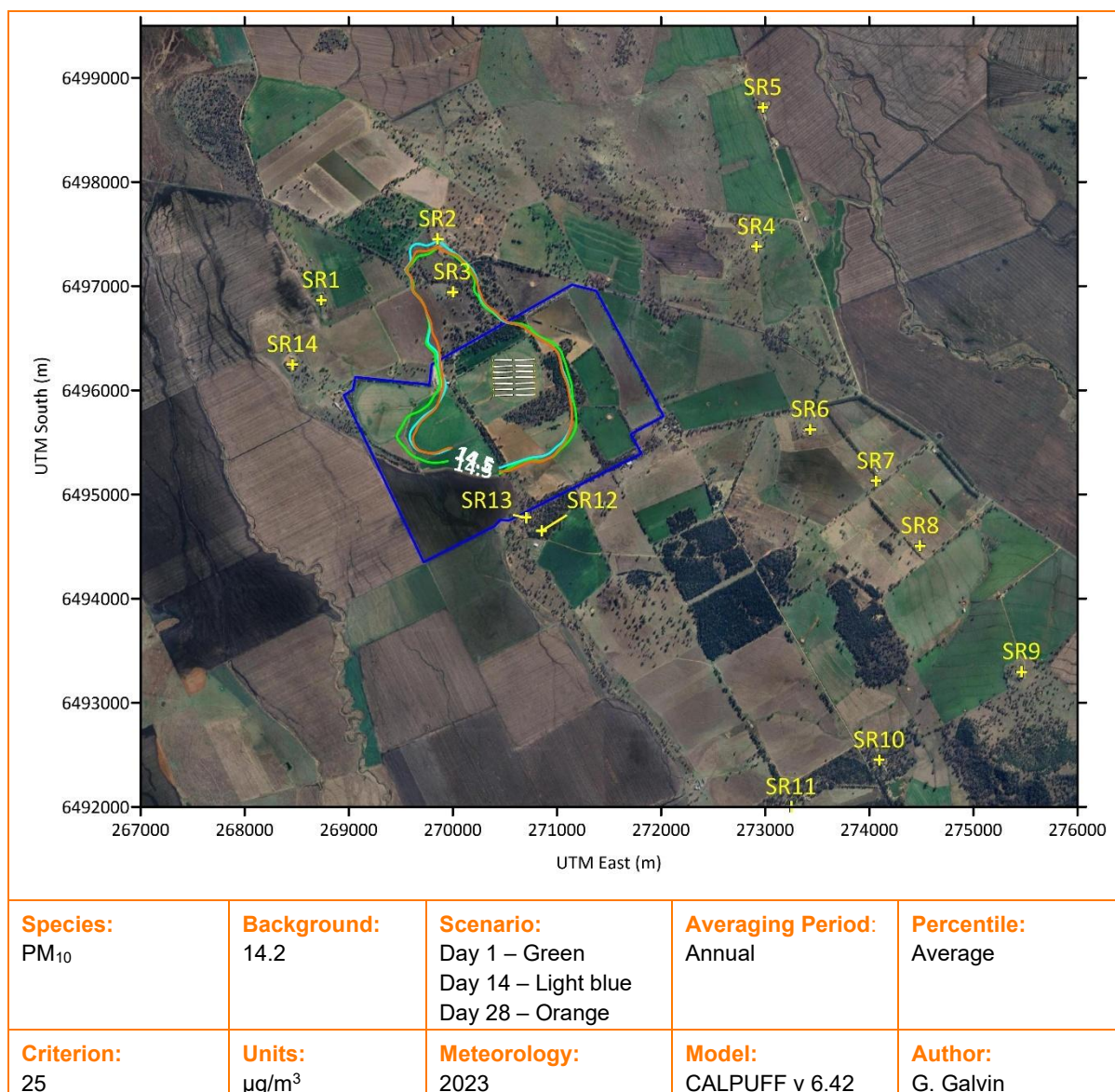


Figure 6-5: Contours – Annual Average with Background – Day 1,14 and 28

7 MONITORING PROGRAM

At this point in time, no ambient monitoring is proposed for the site. However, it is recommended that field odour observations are included as part of a Site Based Environmental Management Plan. These should be performed having regard to NSW EPA (2022d). If nuisance is alleged during construction or while operational, any monitoring performed should be in accordance with the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales* (NSW EPA, 2022b).

8 MITIGATION MEASURES

8.1 Construction

To ensure continual compliance and reduce the risk of dust nuisance, we recommend ongoing management which should consist of:

- minimising disturbed areas;
- treating any long-term stockpiles to minimise dust emissions;
- road management:
 - treatment of the external road surface used by heavy vehicles to stabilise the roads; and/or
 - watering of the roads and/or open areas to reduce dust emissions as required;
- limiting vehicle speeds during conditions where dust emissions have the potential to be higher than normal due to dry or windy conditions;
- revegetating disturbed areas around the site which are not required for vehicle traffic or operations.

With regard to the timing of water truck use during construction, the primary dust management trigger should be visible dust with the potential to leave the site. If dust from the site is observed which has the potential to leave the site, watering should immediately occur. Other measures such as rehabilitation of exposed areas and minimising the area of the site exposed should also be included as part of site management.

8.2 Operational Phase

Best practice for poultry farming in Australia includes a combination of site management and suitable buffers. Overseas, especially in Europe, large separation distances are not possible, so it is important to note that best practice farming in Europe is not the same as in Australia. Moreover, Australia has the RSPCA accreditation system which means that farm management is often better than overseas.

Good management practices in Australia play a significant role in reducing the potential for offensive odour and the emissions particulate matter. We note that this farm has proposed to use vertically mounted fans to enhance dispersion.

The proposed poultry sheds will be similar in design and scale to those used throughout the and across New South Wales. As the farm will grow for Baiada, the sheds will have near identical operational and management procedures to the existing farms. Therefore, the design features, best management practices and mitigation measures used in the region are appropriate and will be implemented here:

Odour

- Vegetative buffers should be planted and maintained around the sheds as soon as practicable following construction. Vegetative buffers reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement from the ground level fans, which reduces dust impacts via dust deposition and also assists in odour dispersion.
- The sheds will be tunnel-ventilated which allow good control over internal moisture levels and also promote optimum growing conditions and bird health. The increased airflow and

improved feed conversion in modern tunnel-vented sheds assists in the maintenance of the bedding material within the optimal moisture range.

- The poultry sheds will be fully enclosed, have wide eaves, and be surrounded by concrete bund walls to prevent rainwater from entering the sheds and to allow for the controlled discharge of washdown water during cleaning. These measures will reduce the moisture level within the poultry sheds associated with rainfall, helping to keep litter moisture low and subsequently reducing the risk of abnormal odour emissions.
- The poultry sheds will be fitted with nipple drinkers with drip cups to minimise water spillage and prevent elevated moisture levels in the litter.
- The feed silos will be fully enclosed to prevent rainwater entry, as wet feed can be a potential odour source.
- The maximum stocking density will not exceed RSPCA specifications.
- Regular monitoring and maintenance of the tunnel ventilation systems and bird drinkers will be performed to avoid spillage, leaks, lowering of efficiency of fans and uneven distribution.
- Stocking densities and bird health within each of the poultry sheds will be regularly checked and, if necessary, appropriate corrective measures will be implemented.
- Daily monitoring and maintenance of the litter will occur to identify, remove and replace any caked material beneath drinking lines and/or areas with excessive moisture content.
- Spent litter will be promptly removed from the sheds and transported off-site in covered trucks at the end of each production cycle during the clean-out phase. Handling of the material will be avoided during adverse climatic conditions, such as cold air drainage in the early morning or at night and during strong winds, wherever possible.
- Poultry litter will not be stockpiled or spread within the site.
- Dead birds will be collected from the sheds on a daily basis and stored in the enclosed on-site dead bird facility before removal from site.
- The insides of the poultry sheds and the surrounds will be maintained at all times to ensure a clean and sanitary environment.
- Shed access points will remain closed at all times other than for allowing access to the sheds.
- Where possible, activities that may increase odour emissions (for example, bedding material replacement) will be undertaken during daytime hours.

Particulate Matter

- Vegetative buffers should be planted and maintained around the sheds as soon as practicable following construction. Vegetative buffers reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement from the ground level fans, which reduces dust impacts via dust deposition.
- The feed silos will be fully enclosed to minimise emissions of particulate matter when loading/unloading.
- Vehicles will not exceed a general speed limit of 40 km/hr within the site and should be confined, where possible, to the internal access roads.
- Internal access roads will be appropriately constructed and maintained to minimise dust emissions.

- The poultry sheds will be thoroughly cleaned between batches, with a focus on the fan end of the sheds.
- The generators are mounted appropriately with a vertical air discharge
- Where possible, the handling of bedding material and litter will be avoided during adverse climatic conditions.
- Poultry litter will be promptly transported off-site in covered trucks at the end of each production cycle.

A standard assessment has been performed and documented in this report. Poultry farm management and profitability are directly related, in that a well-run farm has good bird health and growth and low emissions. K factor measurements at other farms in the area indicate that K factor of 1.5 is achievable and a lower value is expected. On this basis, additional odour control options are not warranted at this point in time.

9 DISCUSSION

9.1 Weather station

In accordance with the SEARs a weather station was installed on site on or about 6 December 2025 by Envirodata. The station measures wind speed and direction using a Vaisala WXT530 Wind Cap ultrasonic sensor. The weather station meets the requirements of NSW EPA (2022).

As the station was installed in early December and TAPM data is only available to the end of December 2025, only a short validation period of has been performed at this point in time. We note that on a 10-minute average between the install date and early January 2026, average winds between 0.2 m/s and 12 m/s have been measured.

TAPM synoptic data for 2026 has not been released, therefore we have not been able to perform a validation from December 2025 to date which would enable the SEARs requirement of at least 3 months to be met.

We note that previous validations of TAPM against observed data at Rushes Creek and the AAM Bective site (provided to the EPA) has shown a good agreement between the modelled and observed data using the standard benchmarks in USEPA (2020). It is expected that the same performance will occur here.

The results in Table 9-1 and Table 9-2 show good agreement with the wind speed and wind direction (for complex terrain) validation.

Table 9-1: Station 1 - Wind Speed Statistics – TAPM 1000 m v Observed – 06/12 to 30/12

Variable	Calculated Value	Criteria	Meets Criteria?
Bias	0.4	± 0.5 ± 2.5 (complex)	Yes
RMSE	1.7	< 2	Yes
IOA	0.7	> 0.6	Yes
SkillE	1.0	< 1	Yes
SkillR	1.0	< 1	Yes
SkillV	1.2	Close to 1	Yes

Table 9-2: Station 1 - Wind Direction Statistics – TAPM 1000 m v Observed – 06/12 to 30/12

Variable	Calculated Value	Criteria	Meets Criteria?
Bias (hourly)	-15.0	$\pm 10^\circ$ $\pm 20^\circ$ (complex)	Yes (for complex)
Gross Error (hourly)	48.5	$\leq 30^\circ$ $\leq 55^\circ$ (complex)	Yes (for complex)
Bias (daily)	-13.3	± 10 $\pm 20^\circ$ (complex)	Yes (for complex)
Gross Error (daily)	30.6	$\leq 30^\circ$ $\leq 55^\circ$ (complex)	Yes (for complex)

9.2 Cold air drainage

The SEARs require an investigation and assessment of odour impacts likely to be associated with cold air drainage.

Cold air drainage can occur under light to calm wind conditions, where cold air on higher terrain, drains downward towards lower terrain in some cases pooling cold air at the lowest point. An example of a site elsewhere where cold air drainage can occur is within the Peel Valley which is bounded by elevated terrain and has a common low point, which is the Peel River.

The site here sits amongst various terrain elements, with the terrain at the site generally sloping downhill to the south west.

By default, the equations underpinning CALMET and CALPUFF take into account cold air drainage.

The wind speed and direction data in Figure 5-2 and the contours in Section 6 above show that in the early morning, light winds dominate. Under these conditions, cold air drainage is likely to occur. This can be seen in Figure 6-1 to Figure 6-3 where the 200 contour extends over a large area to the south west, which is directly related to the frequency of light winds overnight and in the morning.

An example of cold air drainage from CALMET is shown in Figure 9-1 below for 23 June 2023 at 1 am. Here it can be seen that the arrows showing the wind vector (size indicates speed) show higher winds on the elevated terrain, which flow downwards and decrease in speed to the low point to the west of the farm. This simple example clearly shows that cold air drainage is predicted in the modelling.

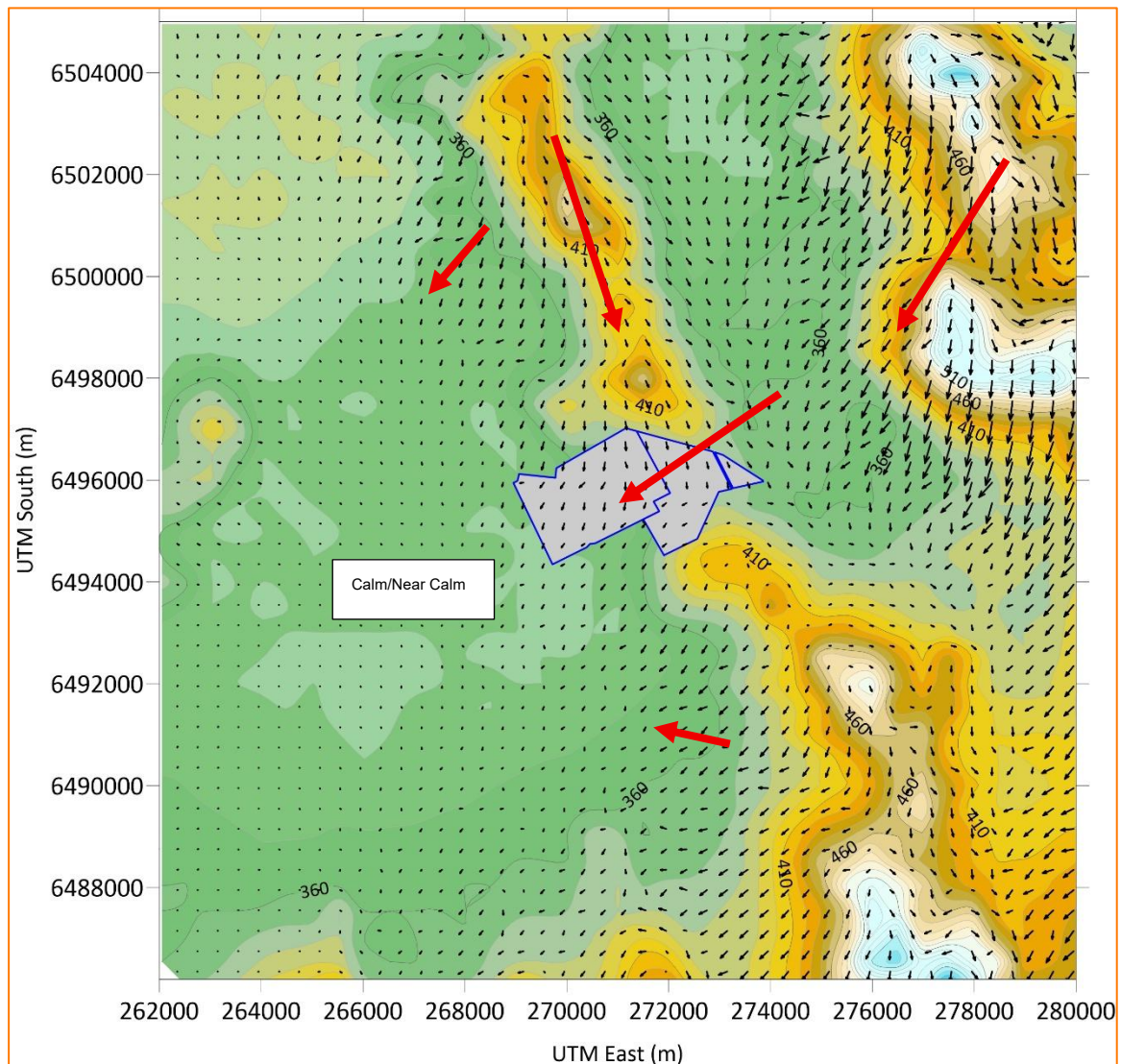


Figure 9-1: Example of Cold Air Drainage – 23 June 2023 – 1 am

9.3 Peak emissions

EPA requested that the report include a consideration of ‘worst case’ emission scenarios, and sensitivity analysis around the timing of peak emissions.

For poultry farms, as noted in McGahan et al., a K factor of 1.9 is considered an upper K factor for new farms. The change from a historical K of 2.2 in for example PAEHolmes (2011) to 1.9 in the national guidelines reflects the decrease in emissions over time, which is most often attributed to the introduction of the RSPCA shed management methods. As such, K=1.9 is often considered worst case.

Regarding the time of peak emissions, we have modelled Day 1 placement, Day 14 placement and Day 28 placement. In effect covering three different years of production across 2023. The results shown in Section 6.2 above showed that the results were not overly sensitive to placement.

Based on the above, both worst case and batch staging have been assessed and not considered to be significant here.

9.4 Compliance with Legislation

The Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales, lists the statutory methods for modelling and assessing emissions of air pollutants from stationary sources in the State (NSW EPA, 2022a).

The criterion in the Approved Methods do not assume no odour, but that offsite odour will be managed by a risk assessment in line with the Approved Methods. The compliance with the criterion from the Approved Methods, and having regard to the *Technical Framework - Assessment and management of odour from stationary sources in NSW* (DEC NSW, 2006), means that the risk of harm or unreasonable interference is low, compared to a site that doesn't comply.

10 CONCLUSION

The modelling presented in this report considers the proposed operation and has been performed in accordance with the Approved Methods having regard to the SEARs requirements summarised in Section 1 above. The modelling indicates that the proposed development would not lead to any exceedances of the odour criterion (5 ou) at the nearest sensitive locations when a K factor of 1.9 was achieved.

The modelling has also demonstrated that the risk associated with particulate matter is low.

Based on our assessment we recommend the proposed farm be operated and managed in line with *Best Practice Management for Meat Chicken Production in New South Wales - Manual 2 – Meat Chicken Growing Management* (DPI, 2012) and any other relevant standards including the National Guidelines published from time to time.

We recommend that vegetative buffers be planted at the fan end of the sheds to assist with reducing potential odour and dust risks, in particular to address potential dust risks identified in the modelling. Guidance on this can be found in *Vegetative Environmental Buffers for Australian Meat Chicken Farms: A Guide for Growers* (RIRDC, 2015).

Care should be taken to ensure the sheds are built and operated in line with the assumptions used in this report to ensure that the K factor of 1.9 is not exceeded.

11 REFERENCES

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APPENDIX A. DAY 1 – CONTEMPORANEOUS PM₁₀ RESULTS

Table A-1: 24 Hour PM₁₀ – SR1 – Day 1

Ranked by Background (µg/m ³)				Ranked by Incremental Concentration (µg/m ³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	25/03/23	3.0	11.6	14.6
19/12/23	44.0	0.0	44.0	28/12/23	1.4	8.7	10.1
17/12/23	39.6	0.9	40.5	24/03/23	1.3	14.0	15.3
11/12/23	36.4	0.0	36.4	15/08/23	1.1	5.6	6.7
18/12/23	36.3	0.1	36.3	26/03/23	0.9	14.6	15.5
20/03/23	35.6	0.0	35.6	17/12/23	0.9	39.6	40.5
13/11/23	35.4	0.0	35.4	3/06/23	0.7	13.5	14.3
7/12/23	32.8	0.0	32.8	10/10/23	0.6	18.3	18.9
6/12/23	32.5	0.4	32.9	1/02/23	0.6	13.1	13.6
12/12/23	30.2	0.0	30.2	30/12/23	0.5	11.3	11.9

Table A-2: 24 Hour PM₁₀ – SR2 – Day 1

Ranked by Background (µg/m ³)				Ranked by Incremental Concentration (µg/m ³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	23/10/23	5.4	12.9	18.4
19/12/23	44.0	0.0	44.0	13/02/23	3.8	29.1	32.8
17/12/23	39.6	0.1	39.7	18/10/23	3.6	18.5	22.0
11/12/23	36.4	0.0	36.4	31/01/23	3.3	8.9	12.2
18/12/23	36.3	0.0	36.3	4/04/23	2.7	10.5	13.2
20/03/23	35.6	0.1	35.7	14/04/23	2.5	8.6	11.2
13/11/23	35.4	0.3	35.6	20/12/23	2.3	9.9	12.2
7/12/23	32.8	0.0	32.8	21/12/23	2.3	8.3	10.6
6/12/23	32.5	0.0	32.5	21/04/23	2.3	12.9	15.2
12/12/23	30.2	0.0	30.2	5/04/23	2.2	10.5	12.7

Table A-3: 24 Hour PM₁₀ – SR3 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	20/12/23	5.5	9.9	15.3
19/12/23	44.0	0.0	44.0	23/10/23	4.8	12.9	17.8
17/12/23	39.6	0.9	40.5	4/04/23	4.7	10.5	15.2
11/12/23	36.4	0.0	36.4	21/12/23	4.3	8.3	12.5
18/12/23	36.3	0.1	36.4	26/10/23	3.1	13.1	16.2
20/03/23	35.6	0.4	36.0	22/12/23	2.7	21.1	23.8
13/11/23	35.4	0.4	35.8	6/08/23	2.6	12.7	15.3
7/12/23	32.8	0.1	32.9	15/08/23	2.3	5.6	7.9
6/12/23	32.5	0.1	32.6	31/01/23	2.2	8.9	11.1
12/12/23	30.2	0.0	30.2	17/04/23	2.2	15.6	17.8

Table A-4: 24 Hour PM₁₀ – SR4 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	14/10/23	1.7	9.1	10.8
19/12/23	44.0	0.0	44.0	10/04/23	0.8	9.1	9.9
17/12/23	39.6	0.1	39.7	19/08/23	0.6	7.8	8.4
11/12/23	36.4	0.0	36.4	9/04/23	0.6	9.5	10.1
18/12/23	36.3	0.0	36.3	12/10/23	0.5	17.8	18.4
20/03/23	35.6	0.0	35.6	15/06/23	0.5	6.8	7.4
13/11/23	35.4	0.0	35.4	3/02/23	0.5	16.8	17.3
7/12/23	32.8	0.0	32.8	29/08/23	0.4	10.8	11.2
6/12/23	32.5	0.0	32.5	11/06/23	0.4	8.9	9.3
12/12/23	30.2	0.0	30.2	9/06/23	0.3	6.0	6.3

Table A-5: 24 Hour PM₁₀ – SR5 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	4/02/23	0.7	10.9	11.7
19/12/23	44.0	0.0	44.0	13/10/23	0.4	8.4	8.8
17/12/23	39.6	0.0	39.7	12/10/23	0.2	17.8	18.1
11/12/23	36.4	0.0	36.4	21/07/23	0.2	8.3	8.6
18/12/23	36.3	0.0	36.3	12/08/23	0.2	11.6	11.8
20/03/23	35.6	0.0	35.6	27/12/23	0.2	9.2	9.4
13/11/23	35.4	0.0	35.4	31/07/23	0.2	5.4	5.6
7/12/23	32.8	0.0	32.8	10/06/23	0.2	7.9	8.0
6/12/23	32.5	0.0	32.5	29/08/23	0.1	10.8	10.9
12/12/23	30.2	0.0	30.2	22/05/23	0.1	7.8	8.0

Table A-6: 24 Hour PM₁₀ – SR6 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	14/06/23	1.1	6.8	7.9
19/12/23	44.0	0.0	44.0	29/03/23	0.9	8.6	9.4
17/12/23	39.6	0.0	39.7	8/04/23	0.8	11.7	12.5
11/12/23	36.4	0.0	36.4	10/04/23	0.7	9.1	9.8
18/12/23	36.3	0.1	36.3	30/03/23	0.6	7.2	7.8
20/03/23	35.6	0.0	35.6	18/08/23	0.5	7.5	8.0
13/11/23	35.4	0.0	35.4	18/06/23	0.5	11.6	12.1
7/12/23	32.8	0.0	32.8	10/08/23	0.5	11.3	11.8
6/12/23	32.5	0.0	32.5	2/06/23	0.5	17.0	17.4
12/12/23	30.2	0.0	30.2	28/03/23	0.4	10.9	11.3

Table A-7: 24 Hour PM₁₀ – SR7 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	18/08/23	1.1	7.5	8.6
19/12/23	44.0	0.0	44.0	29/03/23	1.0	8.6	9.6
17/12/23	39.6	0.0	39.6	8/04/23	0.7	11.7	12.5
11/12/23	36.4	0.0	36.4	19/08/23	0.7	7.8	8.5
18/12/23	36.3	0.0	36.3	10/04/23	0.5	9.1	9.7
20/03/23	35.6	0.0	35.6	9/04/23	0.4	9.5	9.9
13/11/23	35.4	0.0	35.4	21/05/23	0.4	10.1	10.5
7/12/23	32.8	0.0	32.8	29/05/23	0.4	7.2	7.6
6/12/23	32.5	0.0	32.5	30/03/23	0.3	7.2	7.5
12/12/23	30.2	0.0	30.2	31/10/23	0.3	21.0	21.3

Table A-8: 24 Hour PM₁₀ – SR8 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	9/04/23	1.0	9.5	10.5
19/12/23	44.0	0.0	44.0	8/04/23	0.8	11.7	12.5
17/12/23	39.6	0.0	39.6	19/08/23	0.7	7.8	8.5
11/12/23	36.4	0.0	36.4	1/05/23	0.5	12.7	13.2
18/12/23	36.3	0.0	36.3	18/08/23	0.4	7.5	7.9
20/03/23	35.6	0.0	35.6	5/07/23	0.4	4.4	4.7
13/11/23	35.4	0.0	35.4	10/04/23	0.3	9.1	9.4
7/12/23	32.8	0.0	32.8	29/05/23	0.3	7.2	7.5
6/12/23	32.5	0.0	32.5	5/09/23	0.3	13.7	13.9
12/12/23	30.2	0.0	30.2	29/04/23	0.3	11.4	11.6

Table A-9: 24 Hour PM₁₀ – SR9 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	8/04/23	1.1	11.7	12.8
19/12/23	44.0	0.0	44.0	26/12/23	0.6	14.5	15.1
17/12/23	39.6	0.0	39.6	5/07/23	0.5	4.4	4.8
11/12/23	36.4	0.0	36.4	25/06/23	0.4	5.6	6.0
18/12/23	36.3	0.0	36.3	30/04/23	0.4	12.7	13.1
20/03/23	35.6	0.0	35.6	19/06/23	0.3	5.8	6.1
13/11/23	35.4	0.0	35.4	1/05/23	0.2	12.7	12.9
7/12/23	32.8	0.0	32.8	26/06/23	0.2	7.5	7.7
6/12/23	32.5	0.0	32.5	28/03/23	0.2	10.9	11.1
12/12/23	30.2	0.0	30.2	5/10/23	0.1	5.4	5.6

Table A-10: 24 Hour PM₁₀ – SR10 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.5	13/06/23	0.7	6.3	7.0
19/12/23	44.0	0.0	44.0	8/06/23	0.5	8.7	9.2
17/12/23	39.6	0.0	39.6	16/06/23	0.5	7.5	7.9
11/12/23	36.4	0.0	36.4	30/04/23	0.3	12.7	13.0
18/12/23	36.3	0.0	36.3	29/10/23	0.3	7.4	7.6
20/03/23	35.6	0.0	35.6	4/08/23	0.2	12.1	12.4
13/11/23	35.4	0.0	35.4	19/06/23	0.2	5.8	6.0
7/12/23	32.8	0.0	32.8	21/08/23	0.2	5.4	5.6
6/12/23	32.5	0.0	32.5	26/12/23	0.2	14.5	14.7
12/12/23	30.2	0.0	30.2	30/07/23	0.2	8.4	8.6

Table A-11: 24 Hour PM₁₀ – SR11 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.5	9/04/23	1.2	9.5	10.7
19/12/23	44.0	0.0	44.1	13/06/23	1.0	6.3	7.4
17/12/23	39.6	0.0	39.6	8/06/23	0.5	8.7	9.2
11/12/23	36.4	0.0	36.4	16/06/23	0.5	7.5	7.9
18/12/23	36.3	0.0	36.3	30/04/23	0.5	12.7	13.1
20/03/23	35.6	0.0	35.6	23/06/23	0.3	5.1	5.4
13/11/23	35.4	0.0	35.4	15/04/23	0.2	7.5	7.7
7/12/23	32.8	0.0	32.8	5/07/23	0.2	4.4	4.6
6/12/23	32.5	0.0	32.5	4/08/23	0.2	12.1	12.3
12/12/23	30.2	0.0	30.2	22/08/23	0.2	8.7	8.9

Table A-12: 24 Hour PM₁₀ – SR12 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.2	49.7	14/06/23	2.7	6.8	9.5
19/12/23	44.0	0.4	44.4	30/05/23	2.2	8.0	10.2
17/12/23	39.6	0.0	39.6	10/08/23	2.1	11.3	13.4
11/12/23	36.4	0.2	36.6	11/04/23	2.1	14.5	16.5
18/12/23	36.3	0.3	36.5	8/06/23	2.0	8.7	10.8
20/03/23	35.6	0.1	35.7	31/05/23	2.0	7.1	9.1
13/11/23	35.4	0.0	35.4	18/06/23	1.9	11.6	13.5
7/12/23	32.8	0.0	32.8	9/06/23	1.7	6.0	7.7
6/12/23	32.5	0.1	32.6	23/06/23	1.5	5.1	6.7
12/12/23	30.2	0.0	30.2	17/08/23	1.5	10.5	12.0

Table A-13: 24 Hour PM₁₀ – SR13 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.4	49.8	3/02/23	2.7	16.8	19.5
19/12/23	44.0	0.6	44.6	8/06/23	2.7	8.7	11.4
17/12/23	39.6	0.0	39.6	31/05/23	2.2	7.1	9.3
11/12/23	36.4	0.3	36.7	9/06/23	2.0	6.0	8.0
18/12/23	36.3	0.4	36.7	25/10/23	2.0	27.2	29.2
20/03/23	35.6	0.1	35.7	30/05/23	1.8	8.0	9.9
13/11/23	35.4	0.0	35.4	28/07/23	1.6	9.1	10.8
7/12/23	32.8	0.0	32.8	10/08/23	1.6	11.3	12.9
6/12/23	32.5	0.1	32.6	1/10/23	1.4	21.9	23.3
12/12/23	30.2	0.1	30.2	14/12/23	1.4	17.8	19.2

Table A-14: 24 Hour PM₁₀ – SR14 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	23/01/23	3.4	11.9	15.4
19/12/23	44.0	0.0	44.0	25/03/23	2.5	11.6	14.0
17/12/23	39.6	0.5	40.1	23/05/23	2.0	9.0	11.0
11/12/23	36.4	0.0	36.4	22/01/23	1.7	8.4	10.1
18/12/23	36.3	0.4	36.6	29/12/23	1.4	10.9	12.3
20/03/23	35.6	0.0	35.6	1/02/23	1.3	13.1	14.4
13/11/23	35.4	0.0	35.4	2/06/23	1.3	17.0	18.2
7/12/23	32.8	0.7	33.5	28/12/23	1.1	8.7	9.8
6/12/23	32.5	0.0	32.5	9/01/23	1.1	20.3	21.5
12/12/23	30.2	0.3	30.4	10/01/23	1.0	19.6	20.6

Table A-15: 24 Hour PM₁₀ – SR17 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	15/06/23	0.9	6.8	7.7
19/12/23	44.0	0.0	44.0	11/04/23	0.2	14.5	14.7
17/12/23	39.6	0.0	39.6	29/06/23	0.2	4.1	4.3
11/12/23	36.4	0.0	36.4	27/12/23	0.1	9.2	9.3
18/12/23	36.3	0.0	36.3	1/07/23	0.1	4.2	4.3
20/03/23	35.6	0.0	35.6	9/06/23	0.1	6.0	6.1
13/11/23	35.4	0.0	35.4	4/02/23	0.1	10.9	11.0
7/12/23	32.8	0.0	32.8	10/08/23	0.1	11.3	11.4
6/12/23	32.5	0.0	32.5	14/10/23	0.1	9.1	9.2
12/12/23	30.2	0.0	30.2	20/08/23	0.0	5.1	5.2

Table A-16: 24 Hour PM₁₀ – SR19 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	23/12/23	1.0	13.5	14.5
19/12/23	44.0	0.0	44.0	26/08/23	1.0	21.4	22.3
17/12/23	39.6	0.1	39.7	24/10/23	0.5	14.2	14.8
11/12/23	36.4	0.0	36.4	16/06/23	0.5	7.5	8.0
18/12/23	36.3	0.1	36.3	25/08/23	0.5	16.8	17.3
20/03/23	35.6	0.0	35.6	20/10/23	0.5	21.1	21.6
13/11/23	35.4	0.0	35.4	28/08/23	0.4	14.4	14.9
7/12/23	32.8	0.1	32.8	21/06/23	0.4	14.8	15.2
6/12/23	32.5	0.0	32.5	6/02/23	0.4	24.6	25.0
12/12/23	30.2	0.0	30.2	11/06/23	0.4	8.9	9.3

Table A-17: 24 Hour PM₁₀ – SR20 – Day 1

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	23/12/23	0.7	13.5	14.2
19/12/23	44.0	0.0	44.0	26/08/23	0.6	21.4	21.9
17/12/23	39.6	0.0	39.7	25/08/23	0.5	16.8	17.3
11/12/23	36.4	0.0	36.4	11/06/23	0.4	8.9	9.4
18/12/23	36.3	0.1	36.3	6/02/23	0.3	24.6	24.9
20/03/23	35.6	0.0	35.6	28/08/23	0.3	14.4	14.8
13/11/23	35.4	0.0	35.4	3/09/23	0.3	14.8	15.1
7/12/23	32.8	0.1	32.8	21/06/23	0.3	14.8	15.0
6/12/23	32.5	0.0	32.5	14/04/23	0.3	8.6	8.9
12/12/23	30.2	0.0	30.2	16/06/23	0.3	7.5	7.7

APPENDIX B. DAY 14 – CONTEMPORANEOUS PM₁₀ RESULTS

Table A-18: 24 Hour PM₁₀ – SR1 – Day 14

Ranked by Background (µg/m ³)				Ranked by Incremental Concentration (µg/m ³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	28/02/23	1.1	19.9	20.9
19/12/23	44.0	0.0	44.0	26/03/23	0.9	14.6	15.5
17/12/23	39.6	0.7	40.4	4/11/23	0.8	21.2	22.0
11/12/23	36.4	0.0	36.4	15/08/23	0.8	5.6	6.3
18/12/23	36.3	0.1	36.4	25/03/23	0.8	11.6	12.3
20/03/23	35.6	0.0	35.6	17/12/23	0.7	39.6	40.4
13/11/23	35.4	0.1	35.5	5/08/23	0.5	9.4	9.9
7/12/23	32.8	0.0	32.8	14/02/23	0.5	14.9	15.4
6/12/23	32.5	0.0	32.5	25/04/23	0.5	16.7	17.1
12/12/23	30.2	0.0	30.2	1/02/23	0.5	13.1	13.5

Table A-19: 24 Hour PM₁₀ – SR2 – Day 14

Ranked by Background (µg/m ³)				Ranked by Incremental Concentration (µg/m ³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	21/04/23	5.4	12.9	18.2
19/12/23	44.0	0.0	44.0	13/02/23	5.3	29.1	34.4
17/12/23	39.6	0.0	39.7	24/04/23	4.5	14.9	19.3
11/12/23	36.4	0.0	36.4	23/04/23	3.7	8.0	11.8
18/12/23	36.3	0.0	36.3	22/04/23	3.7	10.4	14.1
20/03/23	35.6	0.0	35.6	23/10/23	3.4	12.9	16.4
13/11/23	35.4	0.8	36.2	15/02/23	3.3	16.5	19.8
7/12/23	32.8	0.0	32.8	1/11/23	3.0	28.1	31.1
6/12/23	32.5	0.0	32.5	24/02/23	2.5	14.7	17.2
12/12/23	30.2	0.0	30.2	14/04/23	2.5	8.6	11.1

Table A-20: 24 Hour PM₁₀ – SR3 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	23/04/23	5.1	8.0	13.1
19/12/23	44.0	0.0	44.0	23/10/23	4.9	12.9	17.8
17/12/23	39.6	0.1	39.8	22/02/23	4.0	6.6	10.6
11/12/23	36.4	0.0	36.4	17/04/23	3.8	15.6	19.4
18/12/23	36.3	0.0	36.3	20/04/23	3.8	14.2	18.0
20/03/23	35.6	0.0	35.6	4/04/23	3.2	10.5	13.7
13/11/23	35.4	1.4	36.8	14/02/23	3.2	14.9	18.2
7/12/23	32.8	0.0	32.8	21/04/23	3.2	12.9	16.0
6/12/23	32.5	0.0	32.5	22/04/23	3.1	10.4	13.5
12/12/23	30.2	0.0	30.2	13/02/23	3.0	29.1	32.0

Table A-21: 24 Hour PM₁₀ – SR4 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	14/10/23	1.0	9.1	10.1
19/12/23	44.0	0.0	44.0	29/08/23	0.7	10.8	11.5
17/12/23	39.6	0.0	39.7	10/04/23	0.6	9.1	9.7
11/12/23	36.4	0.0	36.4	15/06/23	0.6	6.8	7.4
18/12/23	36.3	0.0	36.3	8/03/23	0.6	21.1	21.7
20/03/23	35.6	0.0	35.6	19/08/23	0.5	7.8	8.3
13/11/23	35.4	0.0	35.4	5/09/23	0.5	13.7	14.2
7/12/23	32.8	0.0	32.8	15/11/23	0.5	22.7	23.1
6/12/23	32.5	0.0	32.5	8/09/23	0.5	7.2	7.7
12/12/23	30.2	0.0	30.2	9/04/23	0.4	9.5	9.9

Table A-22: 24 Hour PM₁₀ – SR6 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	3/05/23	1.0	5.6	6.6
19/12/23	44.0	0.0	44.0	14/06/23	0.9	6.8	7.7
17/12/23	39.6	0.0	39.6	10/04/23	0.8	9.1	9.9
11/12/23	36.4	0.0	36.4	18/08/23	0.6	7.5	8.1
18/12/23	36.3	0.0	36.3	19/08/23	0.5	7.8	8.3
20/03/23	35.6	0.0	35.6	18/06/23	0.5	11.6	12.1
13/11/23	35.4	0.0	35.4	8/04/23	0.4	11.7	12.2
7/12/23	32.8	0.0	32.8	28/06/23	0.4	6.3	6.7
6/12/23	32.5	0.0	32.5	2/05/23	0.4	0.9	1.3
12/12/23	30.2	0.0	30.2	15/06/23	0.3	6.8	7.2

Table A-23: 24 Hour PM₁₀ – SR7 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	29/04/23	1.3	11.4	12.7
19/12/23	44.0	0.0	44.0	3/05/23	1.3	5.6	6.8
17/12/23	39.6	0.0	39.6	18/08/23	0.9	7.5	8.4
11/12/23	36.4	0.0	36.4	28/06/23	0.8	6.3	7.2
18/12/23	36.3	0.0	36.3	26/06/23	0.7	7.5	8.3
20/03/23	35.6	0.0	35.6	8/05/23	0.6	7.5	8.2
13/11/23	35.4	0.0	35.4	8/04/23	0.5	11.7	12.2
7/12/23	32.8	0.0	32.8	31/10/23	0.4	21.0	21.4
6/12/23	32.5	0.0	32.5	2/05/23	0.4	0.9	1.3
12/12/23	30.2	0.0	30.2	9/04/23	0.3	9.5	9.8

Table A-24: 24 Hour PM₁₀ – SR8 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	29/04/23	1.4	11.4	12.8
19/12/23	44.0	0.0	44.0	26/06/23	0.8	7.5	8.3
17/12/23	39.6	0.0	39.6	1/05/23	0.7	12.7	13.5
11/12/23	36.4	0.0	36.4	9/04/23	0.7	9.5	10.2
18/12/23	36.3	0.0	36.3	28/06/23	0.6	6.3	7.0
20/03/23	35.6	0.0	35.6	3/05/23	0.6	5.6	6.2
13/11/23	35.4	0.0	35.4	5/07/23	0.5	4.4	4.9
7/12/23	32.8	0.0	32.8	5/09/23	0.5	13.7	14.2
6/12/23	32.5	0.0	32.5	2/05/23	0.5	0.9	1.4
12/12/23	30.2	0.0	30.2	8/04/23	0.4	11.7	12.2

Table A-25: 24 Hour PM₁₀ – SR9 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	5/07/23	0.8	4.4	5.2
19/12/23	44.0	0.0	44.0	25/06/23	0.7	5.6	6.3
17/12/23	39.6	0.0	39.6	30/04/23	0.6	12.7	13.2
11/12/23	36.4	0.0	36.4	26/06/23	0.5	7.5	8.0
18/12/23	36.3	0.0	36.3	29/04/23	0.4	11.4	11.8
20/03/23	35.6	0.0	35.6	26/12/23	0.3	14.5	14.9
13/11/23	35.4	0.0	35.4	28/06/23	0.3	6.3	6.7
7/12/23	32.8	0.0	32.8	19/06/23	0.3	5.8	6.1
6/12/23	32.5	0.0	32.5	8/04/23	0.3	11.7	12.0
12/12/23	30.2	0.0	30.2	1/05/23	0.2	12.7	12.9

Table A-26: 24 Hour PM₁₀ – SR11 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	30/04/23	0.7	12.7	13.3
19/12/23	44.0	0.0	44.0	9/04/23	0.6	9.5	10.1
17/12/23	39.6	0.0	39.6	13/06/23	0.4	6.3	6.8
11/12/23	36.4	0.0	36.4	16/06/23	0.4	7.5	7.9
18/12/23	36.3	0.0	36.3	5/07/23	0.4	4.4	4.7
20/03/23	35.6	0.0	35.6	23/06/23	0.3	5.1	5.4
13/11/23	35.4	0.0	35.4	29/04/23	0.3	11.4	11.7
7/12/23	32.8	0.0	32.8	15/04/23	0.2	7.5	7.7
6/12/23	32.5	0.0	32.5	6/07/23	0.2	2.9	3.1
12/12/23	30.2	0.0	30.2	21/08/23	0.2	5.4	5.5

Table A-27: 24 Hour PM₁₀ – SR12 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	14/06/23	2.7	6.8	9.5
19/12/23	44.0	0.2	44.2	23/06/23	2.5	5.1	7.7
17/12/23	39.6	0.0	39.6	25/06/23	2.3	5.6	7.9
11/12/23	36.4	0.1	36.4	10/04/23	2.3	9.1	11.4
18/12/23	36.3	0.1	36.4	18/06/23	2.2	11.6	13.8
20/03/23	35.6	0.0	35.6	30/06/23	2.0	5.0	7.0
13/11/23	35.4	0.0	35.4	26/06/23	2.0	7.5	9.5
7/12/23	32.8	0.0	32.8	6/07/23	1.9	2.9	4.8
6/12/23	32.5	0.0	32.5	24/06/23	1.7	4.2	5.9
12/12/23	30.2	0.0	30.2	22/10/23	1.7	21.0	22.6

Table A-28: 24 Hour PM₁₀ – SR13 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	26/06/23	2.7	7.5	10.2
19/12/23	44.0	0.3	44.3	23/06/23	2.3	5.1	7.5
17/12/23	39.6	0.0	39.6	8/06/23	2.2	8.7	11.0
11/12/23	36.4	0.1	36.4	18/06/23	1.9	11.6	13.5
18/12/23	36.3	0.2	36.4	30/10/23	1.8	16.6	18.4
20/03/23	35.6	0.0	35.6	20/06/23	1.8	5.5	7.3
13/11/23	35.4	0.0	35.4	7/03/23	1.6	20.3	21.9
7/12/23	32.8	0.0	32.8	11/04/23	1.5	14.5	16.0
6/12/23	32.5	0.0	32.5	30/06/23	1.5	5.0	6.5
12/12/23	30.2	0.0	30.2	14/06/23	1.5	6.8	8.3

Table A-29: 24 Hour PM₁₀ – SR14 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	23/01/23	1.4	11.9	13.3
19/12/23	44.0	0.0	44.0	16/06/23	1.3	7.5	8.8
17/12/23	39.6	0.2	39.8	6/02/23	1.3	24.6	25.8
11/12/23	36.4	0.0	36.4	28/12/23	1.1	8.7	9.8
18/12/23	36.3	0.3	36.5	25/08/23	1.1	16.8	17.9
20/03/23	35.6	0.0	35.6	1/02/23	1.1	13.1	14.2
13/11/23	35.4	0.1	35.4	4/11/23	1.1	21.2	22.2
7/12/23	32.8	0.0	32.8	11/06/23	0.9	8.9	9.9
6/12/23	32.5	0.0	32.5	18/04/23	0.9	16.8	17.7
12/12/23	30.2	0.1	30.3	23/10/23	0.9	12.9	13.8

Table A-30: 24 Hour PM₁₀ – SR17 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	29/06/23	0.7	4.1	4.8
19/12/23	44.0	0.0	44.0	15/06/23	0.7	6.8	7.5
17/12/23	39.6	0.0	39.6	11/04/23	0.2	14.5	14.7
11/12/23	36.4	0.0	36.4	1/07/23	0.2	4.2	4.4
18/12/23	36.3	0.0	36.3	8/05/23	0.1	7.5	7.6
20/03/23	35.6	0.0	35.6	27/12/23	0.1	9.2	9.3
13/11/23	35.4	0.0	35.4	8/09/23	0.0	7.2	7.3
7/12/23	32.8	0.0	32.8	9/06/23	0.0	6.0	6.0
6/12/23	32.5	0.0	32.5	20/08/23	0.0	5.1	5.2
12/12/23	30.2	0.0	30.2	9/09/23	0.0	7.7	7.7

Table A-31: 24 Hour PM₁₀ – SR19 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	26/08/23	1.2	21.4	22.5
19/12/23	44.0	0.0	44.0	3/09/23	0.8	14.8	15.6
17/12/23	39.6	0.0	39.7	15/11/23	0.7	22.7	23.4
11/12/23	36.4	0.0	36.4	25/08/23	0.7	16.8	17.5
18/12/23	36.3	0.0	36.3	4/11/23	0.7	21.2	21.9
20/03/23	35.6	0.0	35.6	28/08/23	0.7	14.4	15.1
13/11/23	35.4	0.0	35.4	12/09/23	0.5	17.0	17.5
7/12/23	32.8	0.0	32.8	21/06/23	0.5	14.8	15.3
6/12/23	32.5	0.0	32.5	31/08/23	0.5	5.8	6.2
12/12/23	30.2	0.0	30.2	23/12/23	0.5	13.5	14.0

Table A-32: 24 Hour PM₁₀ – SR20 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	26/08/23	0.7	21.4	22.0
19/12/23	44.0	0.0	44.0	3/09/23	0.6	14.8	15.4
17/12/23	39.6	0.0	39.7	25/08/23	0.6	16.8	17.4
11/12/23	36.4	0.0	36.4	28/08/23	0.6	14.4	15.0
18/12/23	36.3	0.0	36.3	25/04/23	0.5	16.7	17.2
20/03/23	35.6	0.0	35.6	4/11/23	0.5	21.2	21.7
13/11/23	35.4	0.0	35.4	15/11/23	0.4	22.7	23.1
7/12/23	32.8	0.0	32.8	11/09/23	0.4	17.9	18.3
6/12/23	32.5	0.0	32.5	21/06/23	0.3	14.8	15.1
12/12/23	30.2	0.0	30.2	7/11/23	0.3	17.9	18.2

Table A-33: 24 Hour PM₁₀ – SR21 – Day 14

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	21/04/23	0.8	12.9	13.6
19/12/23	44.0	0.0	44.0	20/04/23	0.5	14.2	14.7
17/12/23	39.6	0.0	39.6	13/02/23	0.3	29.1	29.4
11/12/23	36.4	0.0	36.4	1/11/23	0.3	28.1	28.4
18/12/23	36.3	0.0	36.3	17/04/23	0.3	15.6	15.9
20/03/23	35.6	0.0	35.6	20/12/23	0.2	9.9	10.1
13/11/23	35.4	0.0	35.4	27/10/23	0.2	6.8	7.1
7/12/23	32.8	0.0	32.8	26/10/23	0.2	13.1	13.4
6/12/23	32.5	0.0	32.5	21/12/23	0.2	8.3	8.5
12/12/23	30.2	0.0	30.2	2/03/23	0.2	18.6	18.8

APPENDIX C. DAY 28 – CONTEMPORANEOUS PM₁₀ RESULTS

Table A-34: 24 Hour PM₁₀ – SR1 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	6/12/23	1.2	32.5	33.7
19/12/23	44.0	0.0	44.0	25/03/23	0.8	11.6	12.4
17/12/23	39.6	0.0	39.6	24/03/23	0.8	14.0	14.8
11/12/23	36.4	0.0	36.4	14/09/23	0.7	24.8	25.4
18/12/23	36.3	0.0	36.3	4/11/23	0.6	21.2	21.8
20/03/23	35.6	0.0	35.6	19/04/23	0.6	20.6	21.2
13/11/23	35.4	0.2	35.5	16/07/23	0.6	11.2	11.7
7/12/23	32.8	0.0	32.8	23/11/23	0.5	19.3	19.8
6/12/23	32.5	1.2	33.7	18/03/23	0.5	18.1	18.5
12/12/23	30.2	0.0	30.2	4/03/23	0.5	19.1	19.5

Table A-35: 24 Hour PM₁₀ – SR2 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	24/02/23	3.6	14.7	18.3
19/12/23	44.0	0.0	44.0	2/03/23	3.6	18.6	22.2
17/12/23	39.6	0.0	39.6	17/05/23	3.3	10.1	13.4
11/12/23	36.4	0.0	36.4	21/04/23	3.2	12.9	16.1
18/12/23	36.3	0.0	36.3	7/01/23	3.1	9.3	12.3
20/03/23	35.6	0.1	35.7	24/04/23	2.7	14.9	17.5
13/11/23	35.4	1.1	36.4	22/04/23	2.4	10.4	12.8
7/12/23	32.8	0.0	32.8	9/05/23	2.4	8.0	10.4
6/12/23	32.5	0.0	32.5	23/04/23	2.3	8.0	10.3
12/12/23	30.2	0.0	30.2	9/09/23	2.3	7.7	10.0

Table A-36: 24 Hour PM₁₀ – SR3 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	23/04/23	4.9	8.0	12.9
19/12/23	44.0	0.0	44.0	13/02/23	4.1	29.1	33.2
17/12/23	39.6	0.0	39.6	22/02/23	4.0	6.6	10.5
11/12/23	36.4	0.0	36.4	5/01/23	3.5	7.7	11.2
18/12/23	36.3	0.0	36.3	17/04/23	3.4	15.6	19.0
20/03/23	35.6	0.4	36.0	23/02/23	3.1	15.2	18.3
13/11/23	35.4	1.9	37.3	21/04/23	2.9	12.9	15.8
7/12/23	32.8	0.1	32.9	17/11/23	2.9	16.4	19.2
6/12/23	32.5	0.1	32.6	2/03/23	2.9	18.6	21.5
12/12/23	30.2	0.0	30.2	22/04/23	2.8	10.4	13.2

Table A-37: 24 Hour PM₁₀ – SR4 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	8/03/23	1.2	21.1	22.3
19/12/23	44.0	0.0	44.0	15/11/23	1.0	22.7	23.7
17/12/23	39.6	0.0	39.6	8/05/23	0.9	7.5	8.4
11/12/23	36.4	0.0	36.4	8/09/23	0.8	7.2	8.0
18/12/23	36.3	0.0	36.3	29/06/23	0.6	4.1	4.7
20/03/23	35.6	0.0	35.6	5/09/23	0.4	13.7	14.1
13/11/23	35.4	0.0	35.4	7/05/23	0.4	8.9	9.3
7/12/23	32.8	0.0	32.8	29/08/23	0.4	10.8	11.2
6/12/23	32.5	0.0	32.5	18/07/23	0.2	7.5	7.7
12/12/23	30.2	0.0	30.2	15/06/23	0.2	6.8	7.1

Table A-38: 24 Hour PM₁₀ – SR6 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	3/05/23	1.4	5.6	7.0
19/12/23	44.0	0.0	44.0	28/06/23	1.4	6.3	7.7
17/12/23	39.6	0.0	39.6	9/07/23	0.8	12.1	12.9
11/12/23	36.4	0.0	36.4	29/04/23	0.5	11.4	11.9
18/12/23	36.3	0.0	36.3	2/05/23	0.5	0.9	1.4
20/03/23	35.6	0.0	35.6	4/05/23	0.5	10.1	10.6
13/11/23	35.4	0.0	35.4	1/05/23	0.4	12.7	13.1
7/12/23	32.8	0.0	32.8	11/07/23	0.4	4.7	5.0
6/12/23	32.5	0.0	32.5	1/12/23	0.3	7.2	7.5
12/12/23	30.2	0.0	30.2	18/07/23	0.3	7.5	7.7

Table A-39: 24 Hour PM₁₀ – SR7 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	8/05/23	2.3	7.5	9.8
19/12/23	44.0	0.0	44.0	3/05/23	1.9	5.6	7.5
17/12/23	39.6	0.0	39.6	28/06/23	1.7	6.3	8.1
11/12/23	36.4	0.0	36.4	29/04/23	1.7	11.4	13.1
18/12/23	36.3	0.0	36.3	2/05/23	0.7	0.9	1.6
20/03/23	35.6	0.0	35.6	26/06/23	0.4	7.5	8.0
13/11/23	35.4	0.0	35.4	1/05/23	0.4	12.7	13.1
7/12/23	32.8	0.0	32.8	30/07/23	0.4	8.4	8.8
6/12/23	32.5	0.0	32.5	7/05/23	0.4	8.9	9.2
12/12/23	30.2	0.0	30.2	28/02/23	0.4	19.9	20.2

Table A-40: 24 Hour PM₁₀ – SR8 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	8/05/23	2.1	7.5	9.6
19/12/23	44.0	0.0	44.0	29/04/23	1.2	11.4	12.6
17/12/23	39.6	0.0	39.6	1/05/23	1.0	12.7	13.7
11/12/23	36.4	0.0	36.4	3/05/23	0.7	5.6	6.3
18/12/23	36.3	0.0	36.3	5/07/23	0.7	4.4	5.1
20/03/23	35.6	0.0	35.6	2/05/23	0.7	0.9	1.6
13/11/23	35.4	0.0	35.4	28/06/23	0.5	6.3	6.9
7/12/23	32.8	0.0	32.8	16/09/23	0.5	12.6	13.1
6/12/23	32.5	0.0	32.5	7/07/23	0.4	5.3	5.8
12/12/23	30.2	0.0	30.2	26/06/23	0.4	7.5	7.9

Table A-41: 24 Hour PM₁₀ – SR9 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	5/07/23	1.0	4.4	5.4
19/12/23	44.0	0.0	44.0	30/04/23	0.7	12.7	13.4
17/12/23	39.6	0.0	39.6	29/04/23	0.4	11.4	11.8
11/12/23	36.4	0.0	36.4	28/06/23	0.3	6.3	6.6
18/12/23	36.3	0.0	36.3	25/06/23	0.2	5.6	5.8
20/03/23	35.6	0.0	35.6	1/05/23	0.2	12.7	12.9
13/11/23	35.4	0.0	35.4	7/07/23	0.2	5.3	5.5
7/12/23	32.8	0.0	32.8	29/06/23	0.2	4.1	4.3
6/12/23	32.5	0.0	32.5	29/05/23	0.2	7.2	7.4
12/12/23	30.2	0.0	30.2	2/05/23	0.2	0.9	1.1

Table A-42: 24 Hour PM₁₀ – SR11 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.5	30/04/23	0.7	12.7	13.4
19/12/23	44.0	0.0	44.0	29/04/23	0.5	11.4	11.9
17/12/23	39.6	0.0	39.6	5/07/23	0.4	4.4	4.8
11/12/23	36.4	0.0	36.4	15/07/23	0.3	8.5	8.8
18/12/23	36.3	0.0	36.3	13/07/23	0.3	8.8	9.1
20/03/23	35.6	0.0	35.6	15/09/23	0.3	19.5	19.8
13/11/23	35.4	0.0	35.4	6/07/23	0.2	2.9	3.1
7/12/23	32.8	0.0	32.8	6/05/23	0.2	10.4	10.6
6/12/23	32.5	0.0	32.5	10/07/23	0.2	7.3	7.5
12/12/23	30.2	0.0	30.2	26/02/23	0.1	11.3	11.5

Table A-43: 24 Hour PM₁₀ – SR12 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.2	49.7	8/07/23	3.5	5.7	9.2
19/12/23	44.0	0.0	44.0	6/07/23	3.3	2.9	6.2
17/12/23	39.6	0.0	39.6	7/03/23	2.6	20.3	22.8
11/12/23	36.4	0.1	36.5	9/07/23	2.4	12.1	14.5
18/12/23	36.3	0.0	36.3	7/07/23	2.2	5.3	7.5
20/03/23	35.6	0.1	35.7	1/05/23	2.1	12.7	14.8
13/11/23	35.4	0.0	35.4	2/05/23	2.0	0.9	2.9
7/12/23	32.8	0.1	32.8	30/06/23	2.0	5.0	7.0
6/12/23	32.5	0.1	32.6	29/04/23	1.8	11.4	13.2
12/12/23	30.2	0.0	30.2	23/06/23	1.7	5.1	6.8

Table A-44: 24 Hour PM₁₀ – SR13 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.4	49.8	7/03/23	3.5	20.3	23.8
19/12/23	44.0	0.0	44.0	2/05/23	3.3	0.9	4.2
17/12/23	39.6	0.0	39.6	8/07/23	2.8	5.7	8.5
11/12/23	36.4	0.1	36.5	6/03/23	2.6	21.2	23.8
18/12/23	36.3	0.0	36.3	6/07/23	2.5	2.9	5.4
20/03/23	35.6	0.1	35.7	3/05/23	2.3	5.6	7.9
13/11/23	35.4	0.0	35.4	30/06/23	2.2	5.0	7.2
7/12/23	32.8	0.1	32.8	10/07/23	2.0	7.3	9.3
6/12/23	32.5	0.2	32.7	26/06/23	1.9	7.5	9.5
12/12/23	30.2	0.0	30.2	19/09/23	1.8	17.3	19.0

Table A-45: 24 Hour PM₁₀ – SR14 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	25/08/23	1.7	16.8	18.5
19/12/23	44.0	0.0	44.0	4/11/23	1.5	21.2	22.7
17/12/23	39.6	0.0	39.6	25/03/23	1.4	11.6	12.9
11/12/23	36.4	0.0	36.4	3/09/23	1.3	14.8	16.0
18/12/23	36.3	0.0	36.3	13/05/23	1.1	22.4	23.5
20/03/23	35.6	0.0	35.6	27/08/23	1.0	13.2	14.2
13/11/23	35.4	0.1	35.5	16/11/23	1.0	17.3	18.3
7/12/23	32.8	0.4	33.2	23/11/23	0.9	19.3	20.2
6/12/23	32.5	0.0	32.5	18/04/23	0.9	16.8	17.7
12/12/23	30.2	0.0	30.2	21/06/23	0.9	14.8	15.6

Table A-46: 24 Hour PM₁₀ – SR17 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	29/06/23	0.5	4.1	4.6
19/12/23	44.0	0.0	44.0	15/06/23	0.2	6.8	7.0
17/12/23	39.6	0.0	39.6	8/05/23	0.2	7.5	7.7
11/12/23	36.4	0.0	36.4	1/07/23	0.1	4.2	4.3
18/12/23	36.3	0.0	36.3	11/07/23	0.1	4.7	4.8
20/03/23	35.6	0.0	35.6	8/09/23	0.1	7.2	7.3
13/11/23	35.4	0.0	35.4	11/04/23	0.1	14.5	14.5
7/12/23	32.8	0.0	32.8	9/09/23	0.1	7.7	7.7
6/12/23	32.5	0.0	32.5	18/07/23	0.0	7.5	7.5
12/12/23	30.2	0.0	30.2	22/05/23	0.0	7.8	7.9

Table A-47: 24 Hour PM₁₀ – SR19 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	13/09/23	1.0	21.7	22.7
19/12/23	44.0	0.0	44.0	15/11/23	0.9	22.7	23.6
17/12/23	39.6	0.0	39.6	12/09/23	0.9	17.0	17.9
11/12/23	36.4	0.0	36.4	3/09/23	0.6	14.8	15.4
18/12/23	36.3	0.0	36.3	14/09/23	0.6	24.8	25.3
20/03/23	35.6	0.0	35.6	5/05/23	0.4	11.8	12.2
13/11/23	35.4	0.0	35.4	26/08/23	0.4	21.4	21.8
7/12/23	32.8	0.1	32.9	11/09/23	0.4	17.9	18.3
6/12/23	32.5	0.0	32.5	4/11/23	0.4	21.2	21.6
12/12/23	30.2	0.0	30.2	12/07/23	0.4	8.1	8.4

Table A-48: 24 Hour PM₁₀ – SR20 – Day 28

Ranked by Background (µg/m³)				Ranked by Incremental Concentration (µg/m³)			
Date	Measured	Predicted increment	Total	Date	Predicted increment	Measured Background	Total
2/10/23	49.4	0.0	49.4	15/11/23	0.5	22.7	23.2
19/12/23	44.0	0.0	44.0	13/09/23	0.5	21.7	22.2
17/12/23	39.6	0.0	39.6	3/09/23	0.4	14.8	15.2
11/12/23	36.4	0.0	36.4	12/09/23	0.4	17.0	17.4
18/12/23	36.3	0.0	36.3	11/09/23	0.3	17.9	18.3
20/03/23	35.6	0.0	35.6	14/09/23	0.3	24.8	25.1
13/11/23	35.4	0.0	35.4	5/05/23	0.3	11.8	12.1
7/12/23	32.8	0.1	32.8	23/11/23	0.3	19.3	19.6
6/12/23	32.5	0.0	32.5	25/04/23	0.3	16.7	17.0
12/12/23	30.2	0.0	30.2	4/11/23	0.3	21.2	21.5