

# Environmental Management Report – Pakenham Quarry

For Period 14<sup>th</sup> November 2008 – 14<sup>th</sup> December 2008



Compiled by A.Price

## Abstract

As the content of this report demonstrates, Cemex Pakenham has implemented a systematic, whole of site approach to environmental management and compliance with conditions of the *Mt Shamrock Quarry Environmental Management Plan Version 1: 18 January 2008*. All employees and contractors on site are aware of the necessity to conduct operations with minimal disruption to the environment and the local community. Monitoring results reflect this commitment by complying with and surpassing the standards required. The site is on track in relation to scheduled works as per the Environmental Management Plan. All non-compliances and complaints have been documented and any appropriate remedies actioned.

This report provides graphical summaries of all results obtained during the relevant monitoring period. These graphical summaries indicate averages and data trends. Any results obtained that fall outside the required standards are reported in the *Non- Compliances* section.

## Activity Synopsis

- Blast monitoring point N3 has been relocated as requested at the last ERC meeting. The new location is shown on the attached map.
- A single hole misfire occurred in the blast on 26 November. Worksafe were notified and the misfire rectified without incident.
- Sales and Production continue to be strong with 103,718t sold and 84,000t produced during this reporting period.
- A bulk oil distribution system is in the process of being installed, this will result in significant reductions in waste related to oil drums and safety risk reduction.
- Redesign and rebuild of conveyor 12 (C12) chute work resulting in a significant reduction of dust emissions from the screen house building.

## EMP Variances

Variance	Reason
Weather Monitoring Station not installed in pit manager's office. (2.1.3)	Installation of infrastructure underway. Awaiting IT support and hardware to finalise installation.
No dust monitoring (other than depositional monthly) in place. (2.1.4)	Installation of infrastructure underway. Awaiting IT support and hardware to finalise installation.

## Non-Compliances and Complaints

There were no results obtained during this reporting period that did not fall within the standards set out in *Mt Shamrock Quarry Environmental Management Plan Version 1: 18 January 2008*. There were no complaints received in this reporting period.

## Environmental Monitoring Results

### Results Synopsis

Results obtained during this period complied with the standards set out in *Mt Shamrock Quarry Environmental Management Plan Version 1: 18 January 2008*. Airborne dust monitoring was limited due to delays in delivery of equipment (refer EMP Variances).

## 1.1 Rehabilitation and Vegetation

All required actions have been completed in this reporting period.

### 2.1.4 Air Quality – Dust

Currently awaiting results from laboratory.

### 2.2.4 Operating Noise

All locations returned  $L_{Aeq}$  levels lower than the standards set out in *Mt Shamrock Quarry Environmental Management Plan Version 1: 18 January 2008*. At the date of this report there had been no complaints in relation to operating noise and therefore no noise level monitoring at a complainant's residence. Refer to Figure 1.1

### 2.3.4 Blasting

Ground Vibration and Air Blast measurements conducted by specialist consultants were all within required standards as per *Mt Shamrock Quarry Environmental Management Plan Version 1: 18 January 2008*. Refer to Figures 1.2, 1.3. During this period there was a measurement on 10.12.08 that was higher than 115 dBL but lower than 120dBL (116.6 dBL) this does not exceed the conditions imposed as it has occurred in less than 5% of blasts in a 12 month period.

### 2.4.4 Surface and Ground Water

Appropriate visual observations were carried out during this period. All observations were in accordance with the standards set out in *Mt Shamrock Quarry Environmental Management Plan Version 1: 18 January 2008*

Date	Observer	TDS	pH	Turbidity
02.12.08	D. Vardy / J. Aparo	537	8.8	2
11.12.08	D. Vardy / J. Aparo	544	8.9	1.7

Figure 1.0 – Water Testing Results

#### **2.5.4 Slope Stability**

Visual inspections of all the landslips in Toomuc Valley have been carried out after each blast. Visual inspections of the Toomuc Valley landslips were also carried out after each instance of heavy rainfall during this period. There were no morphological variances detected in the landslips as a result of these inspections. Visual inspections have been carried out of vegetation in these areas. All vegetation is healthy and growing well.

#### **2.7.4 Traffic Management**

Evaluation of trucks leaving the site concluded that there is minimal material being tracked onto public roadways, that the vast majority of loads are covered and correctly loaded.

Trucks that were non-compliant were informed and advised that continued non-compliance may result in disciplinary action. Refer Figure 1.4



## References

Rinker Australia, 2008, *Mt Shamrock Quarry Environmental Management Plan*, Version 1: 18 January 2008, Pakenham



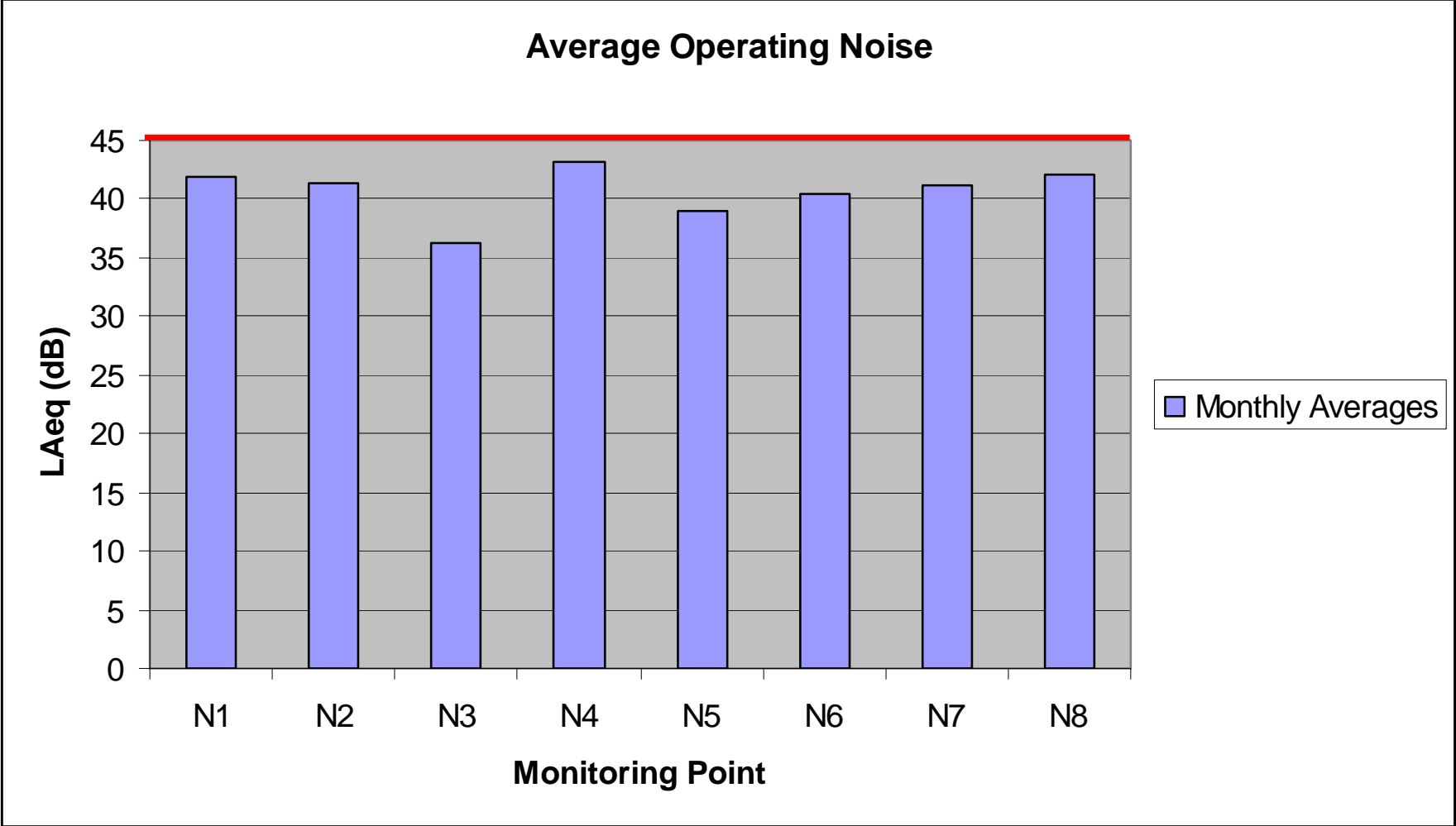


Figure 1.1: Average Daily Values for Noise Monitoring of Sensitive Locations

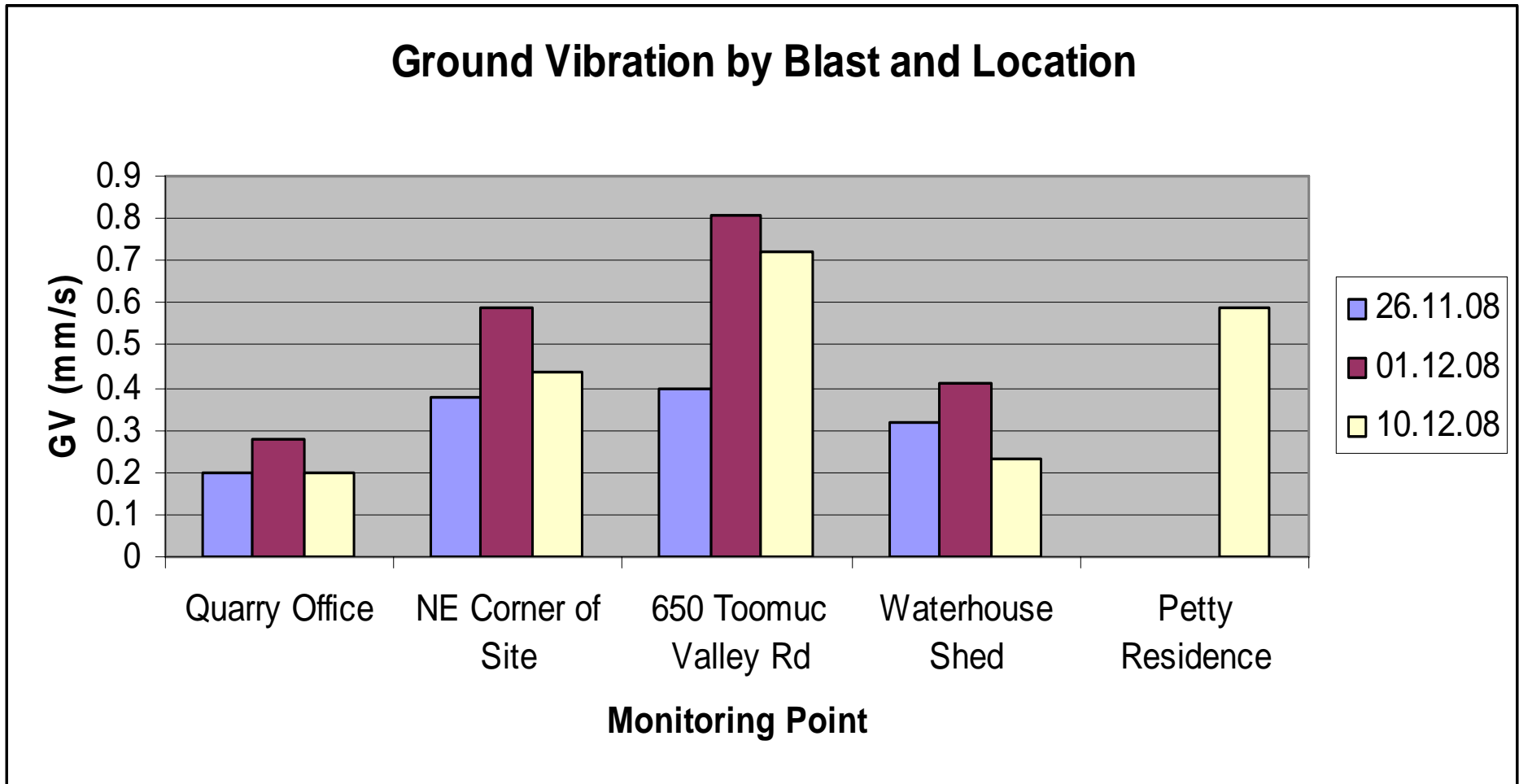
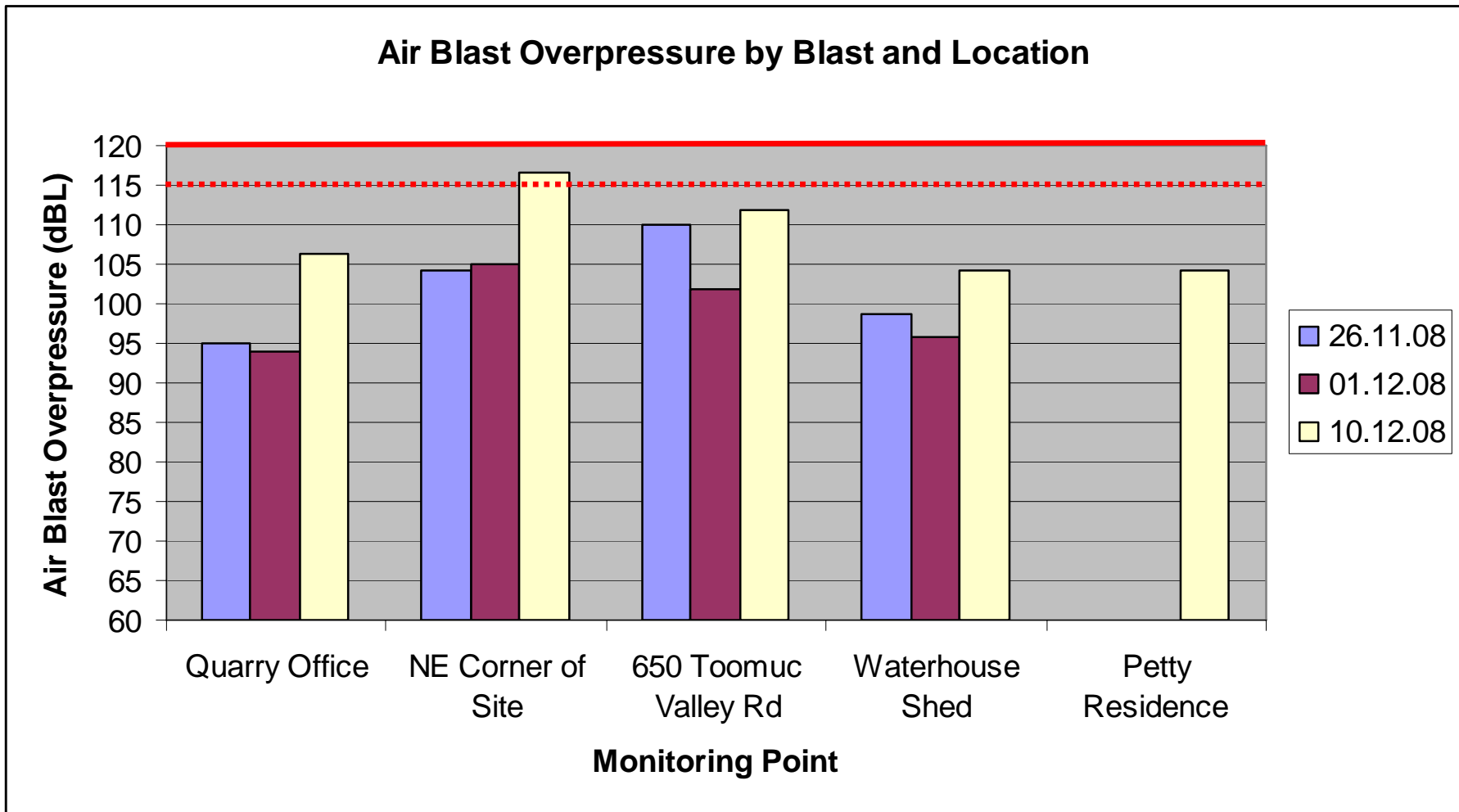


Figure 1.2: Ground Vibration by monitoring location and blast date. (Allowable Limit 5 mm/s)



**Figure 1.3: Air Blast by monitoring location and blast date. (Allowable Limit 115 dBL in 95% of Blasts, 120 dBL in 5% of Blasts in 12 month period)**

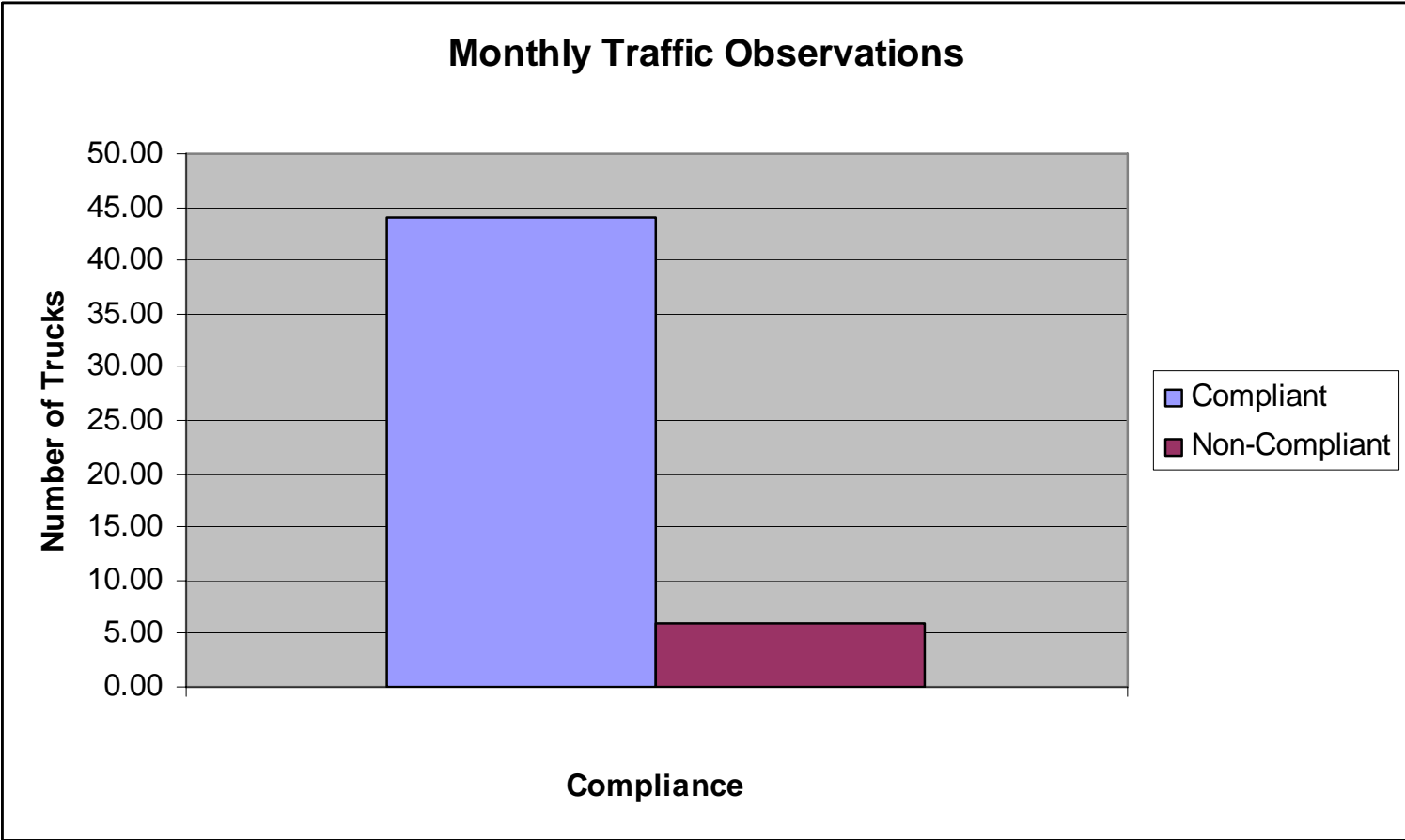
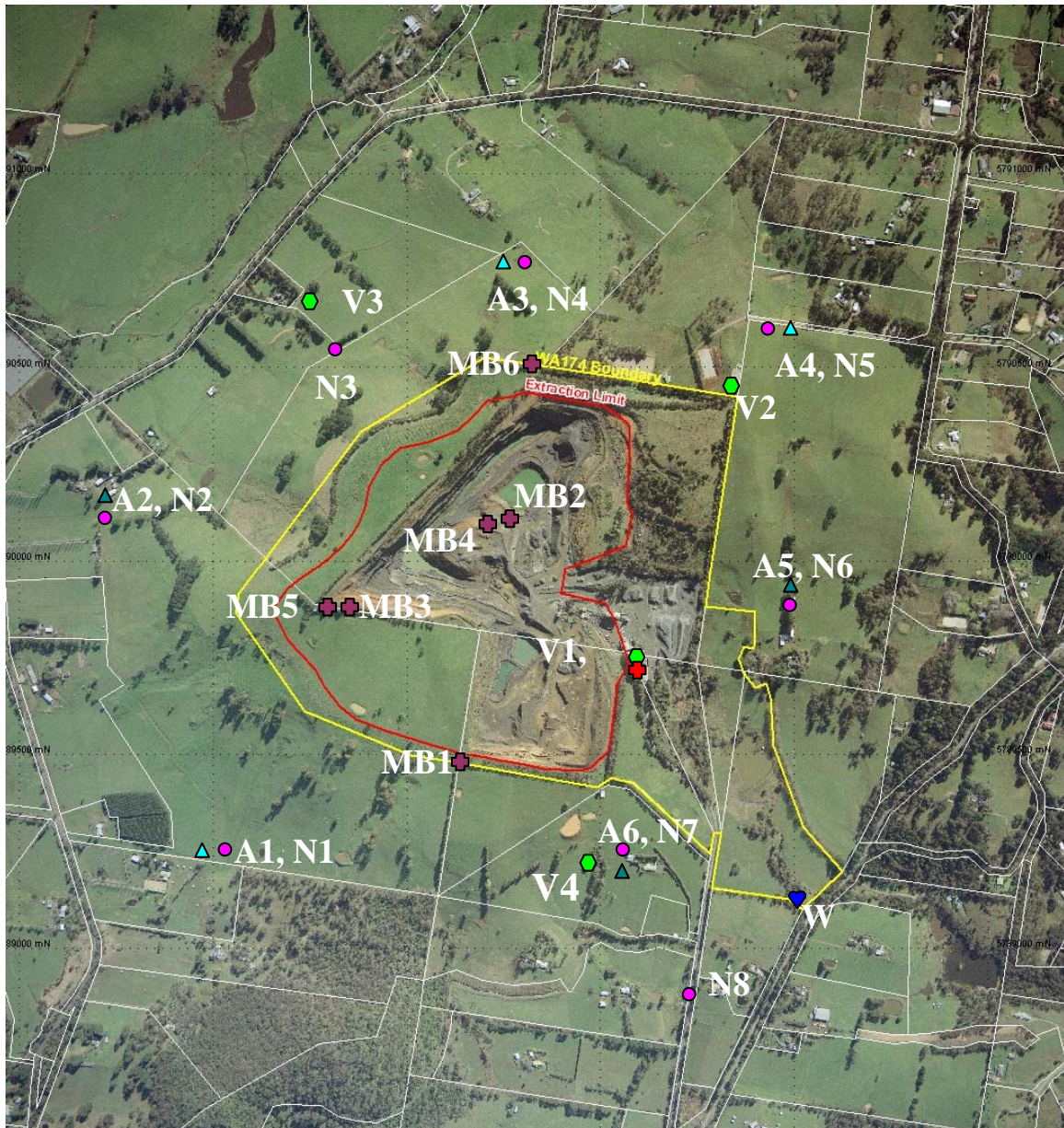


Figure 1.4: Traffic Observations for reporting period

Figure 1.5 – Monitoring Locations



**LEGEND:**

- ▲ A = Air monitoring location ( ▲ signifies high volume compliance monitoring station at A2, A5, A6)  
(Note: Background PM<sub>10</sub> monitoring also at address to be determined)
- N = Noise Monitoring location
- V = Blast Vibration and Noise Overpressure location
- ◆ W = Surface Water Sampling Point
- MB = Groundwater monitoring bores
- S = Weather Station