

Geraldton Community Air Quality Monitoring Program



NOVEMBER 2012 RESULTS

Monitoring Program

The Geraldton community air quality monitoring program is a joint initiative by MMG and Geraldton Port Authority (GPA) to undertake a one year sampling program to provide scientific data on air quality within the Geraldton community. The monitoring program methods and limits are aligned with GPA's Environmental Licence Emission Limit to allow for effective data analysis and interpretation. There are four air quality monitoring stations; three to represent potential community exposure (Point Moore, Maitland Street and George Road) and one control site (Durlacher Street) to represent the background air quality.

For more information on the monitoring program, please refer to the Air Quality Monitoring Plan.

Port Operations

During the month six ships were loaded with metal concentrates. MMG ships were loaded with HPM, copper and zinc.

Weather Conditions

The average wind speed for the month was 8.8 m/s with winds predominantly coming from a sou-sou-west to sou-sou-east direction (Figure 1).



Figure 1. GPA Offshore Wind Data

Monitoring Results

The monitoring results shown in Table 1 of all four locations are well below the GPA licence three month rolling average limit of 0.5 μ g/m³ of Lead in dust as Total Suspended Particulates (TSP). Results from the potential impact sites are at similar levels to those detected at the background reference site.

Table 1. Month and 3 month rolling average with GPA licence 3 month average limit of 0.5 μg/m³ of Lead as TSP

Point Moore		Maitland Street		George Road		Durlacher Street	
(South West)		(South East)		(North East)		(Background)	
Monthly	3 Monthly	Monthly	3 Monthly	Monthly	3 Monthly	Monthly	3 Monthly
µg/m³		µg/m³					µg/m³
Lead as	µg/m³ Lead	Lead as	µg/m ³ Lead as	µg/m³ Lead	µg/m³ Lead	µg/m³ Lead	Lead as
TSP	as TSP	TSP	TSP	as TSP	as TSP	as TSP	TSP
0.005	0.007	0.005	0.006	0.007	0.006	0.009	0.006
	(South Monthly µg/m ³ Lead as TSP	(South West)Monthly3 Monthlyµg/m³µg/m³ LeadLead asµg/m³ LeadTSPas TSP	(South West)(SouthMonthly3 MonthlyMonthlyµg/m³µg/m³ Leadµg/m³Lead asµg/m³ LeadLead asTSPas TSPTSP	(South West)(South East)Monthly3 MonthlyMonthly3 Monthlyμg/m³μg/m³ Leadμg/m³μg/m³ Lead asTSPas TSPTSPTSP	(South West) (South East) (North Monthly 3 Monthly Monthly 3 Monthly µg/m³ µg/m³ µg/m³ Lead as µg/m³ Lead Lead as TSP as TSP TSP	(South West)(South East)(North East)Monthly3 MonthlyMonthly3 MonthlyMonthlyμg/m³μg/m³μg/m³μg/m³ Lead asμg/m³ Lead asTSPas TSPTSPTSPas TSP	(South West)(South East)(North East)(BackgrMonthly3 MonthlyMonthly3 MonthlyMonthlyMonthly $\mu g/m^3$ $\mu g/m^3$ $\mu g/m^3$ $\mu g/m^3$ $\mu g/m^3$ $\mu g/m^3$ Lead as $\mu g/m^3$ Lead as $\mu g/m^3$ $\mu g/m^3$ $\mu g/m^3$ TSPTSPTSPTSPas TSPas TSP

Related Material

For more information on lead in your community, please view the following government websites, fact sheets and reports:

<u>Geraldton dust report (PDF 1.23MB)</u> <u>Dust investigations information sheet - April 2011 (PDF 59KB)</u> <u>http://www.environment.gov.au/atmosphere/airquality/publications/leadfs.html</u> <u>http://www.public.health.wa.gov.au/3/1141/2/lead.pm</u> <u>Lead in playground equipment (PDF 180KB)</u> <u>Lead Sources in the Home - What to avoid (PDF 124KB)</u>