Science Snapshot report

Air Quality Monitoring



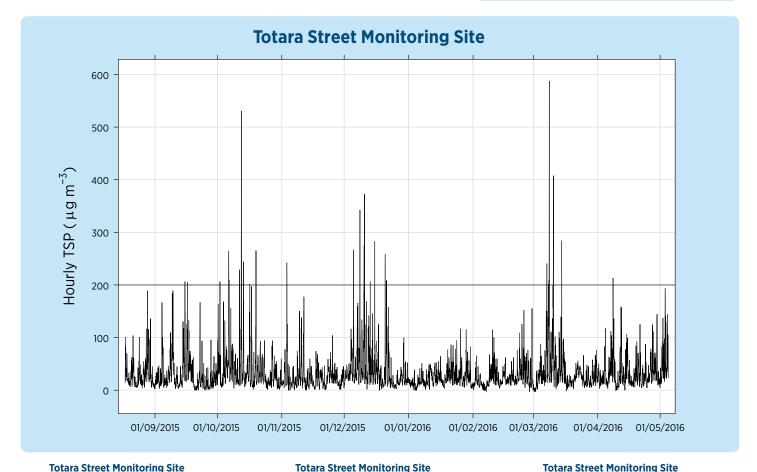
Dust and sulphur dioxide levels **2016**

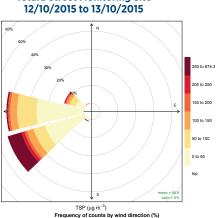
Nuisance dust at Mt Maunganui

Monitoring of Total Suspended Particulate (TSP) at the Totara Street monitoring site shows that there are periods of time where dust levels exceed nuisance guidance levels. Wind data recorded for these elevated periods shows a strong relationship with winds from the westerly quarter.

An audit process is under way looking at all aspects of Port of Tauranga activity at Mt Maunganui and Sulphur Point. This approach is similar to the successful dust reduction work undertaken within the Ngāpuna Industrial area in Rotorua. www.boprc.govt.nz/environment/air/rotorua-air-quality/ngapuna-dust-plan

The regional council regularly assesses and reports on the amount of airborne fine particles at various locations. Data is collected from five air quality monitoring sites in Tauranga, Rotorua and Whakatāne.





10/12/2015 to 11/12/2015

00%
100 to 443.3
150 to 200
100 to 150
50 to 100
0 to 50
1sp

Frequency of counts by wind direction (%)

8/3/2016 to 9/3/2016

50%

150 to 200

150 to 200

150 to 200

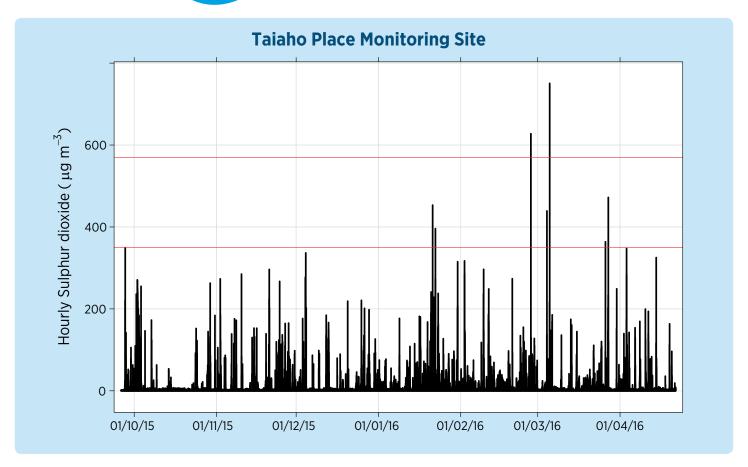
150 to 200

150 to 100

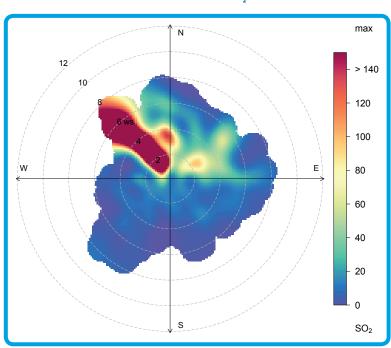
0 to 50

tup

Frequency of counts by wind direction (%)



Above: A time series recorded at Taiaho Place showing exceedances of the National Environmental Standards. Below: By combining 10-minute SO₂ and wind data sources of SO₂ can be identified.



Key Points



Monitoring of SO_2 levels has been undertaken at Taiaho Place, Mt Maunganui since September 2015. Seven occasions have been recorded where levels are above the $350\mu g/m^3$ standard.

On two occasions these levels exceeded the $570\mu g/m^3$ standard. By using wind information recorded at the same time sources of SO_2 can be determined. Council is working with closely affected parties and industrial sites within the area to address this issue.



New sites were installed at Taiaho Place (September 2015) and Tauranga Bridge Marina (April 2016) to focus on industrial emissions.