METHYL BROMIDE FUMIGATIONS
ANNUAL MONITORING REPORT

Site:  Carotrans

Reporting period: 1 January 2014 – 31 December 2014
1. Monitoring site information

Complete the tables below. All details in section two of this report refers to the site stated below.

<table>
<thead>
<tr>
<th>Name of fumigation site:</th>
<th>Carotrans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical address:</td>
<td>No1 Railway Lane</td>
</tr>
<tr>
<td></td>
<td>Otahuhu</td>
</tr>
<tr>
<td></td>
<td>Auckland</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of fumigation company:</th>
<th>Rentokil-Initial Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical address:</td>
<td>79 Carbine Rd</td>
</tr>
<tr>
<td></td>
<td>Private bag 92905</td>
</tr>
<tr>
<td></td>
<td>Onehunga</td>
</tr>
<tr>
<td></td>
<td>Auckland</td>
</tr>
</tbody>
</table>

Report prepared by

The monitoring report should be prepared by the fumigator on behalf of the person in charge of the site.

<table>
<thead>
<tr>
<th>Name:</th>
<th>Dwayne Stewart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role:</td>
<td>National Fumigation Manager</td>
</tr>
<tr>
<td>Organisation:</td>
<td>Rentokil</td>
</tr>
</tbody>
</table>

Report reviewed by

The report should be reviewed by the person in charge of the site*.

<table>
<thead>
<tr>
<th>Name:</th>
<th>Mike Dunn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role:</td>
<td>Branch Manager</td>
</tr>
<tr>
<td>Organisation:</td>
<td>Carotrans – subsidiary of Mainfreight</td>
</tr>
</tbody>
</table>

* The person in charge of the site (PIC) is responsible for producing the annual report and providing this to the EPA. In practice the preparation of the report is best done by the fumigator as they hold the raw monitoring data and other relevant information necessary to complete the report. The PIC should review the report to ensure it complies with the regulatory requirements and, as a minimum, be aware of the report and its contents. Ultimately, the PIC is legally responsible for the product of the annual monitoring report. The PIC must also retain a copy for their own records on site.
2. Fumigation details
For the reporting period 1 January 2014 – 31 December 2014

2.1. Fumigation type, number and amount
Record the total number of fumigations carried out in the reporting period and the total amount of methyl bromide used for each type of fumigation. When fumigating ships indicate the total number of holds fumigated.

<table>
<thead>
<tr>
<th>Type of contained space fumigated</th>
<th>Number of fumigations</th>
<th>Total amount of methyl bromide used (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ship (hold)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers</td>
<td>320</td>
<td>1274.9</td>
</tr>
<tr>
<td>Tent</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Other (e.g. fumigation cell)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>350</td>
<td>1361.7</td>
</tr>
</tbody>
</table>

2.2. Location
Provide a description of the site and explain where on site the fumigations take place. Attach a map of the site with the fumigation areas clearly marked.

At the front besides the railway, or at the rear of the site for tenting.
2.3. Monitoring and equipment used

Describe how the monitoring for methyl bromide was carried out. This should also include how you monitored the atmospheric conditions (wind speed and direction) at the time the methyl bromide was being vented.

Before opening the enclosure, the wind direction is assessed by using a wind vane with compass plus an anemometer to determine the speed. Standing at the required distance downwind from the fumigated chamber, these two readings are recorded. The VOC’s (if any from the fumigated chamber), are then recorded at required intervals, after the doors have been opened. These recordings will continue for the required period of time, or until you get three consecutive zero readings.

**Equipment**

Give details of the equipment used to undertake monitoring of methyl bromide and atmospheric conditions.

- **Toxirae** - which reads VOC gases in PPM to a minimum limit of 0.1 decimal point.
- **Digitech Thermo Anemometer** to measure wind speed in km per hour.

2.4. Annual methyl bromide exposure levels.

Record the annual TEL for methyl bromide calculated for the reporting period.

The allowed annual TEL for methyl bromide is 0.0013 parts per million (ppm). This is the amount of methyl bromide a person can safely be exposed to over a lifetime. The annual TEL is a chronic value derived on the basis that a person exposed to no more than this amount per year for a lifetime would not suffer adverse health effects. Details on how to calculate the annual TEL are given in the EPA Technical Guide: *Methyl bromide fumigations. Post reassessment guidance for fumigators April 2011.*

No measurable amounts of MB were detected during this surveillance period.

2.5. Unintentional release

Record any unintentional releases of methyl bromide.

**Nil**

2.6. Breaches of the tolerable exposure limits

The allowed 1 hour TEL is 1 parts per million. The allowed 24 hour TEL is 0.333 parts per million.

Record any exceedances of the one hour and 24 hour TELs for methyl bromide and state when and who you notified of these breaches.

**Nil**

2.7. Other issues, accidents or non-compliance matters

Record any other issues, accidents and matters of non-compliance that may have occurred during the reporting period.

**Nil**
Regulatory requirements for reporting of methyl bromide

Clause 5 of table 2 of the EPA decision document: Annual monitoring report

1. The person in charge of a site where more than the reporting threshold set out in clause 5(2) is applied must produce an annual monitoring report.

2. The reporting threshold is 500 kg or more of methyl bromide in one calendar year at a site.

3. Methyl bromide that is recaptured using recapture technology does not count towards the reporting threshold set out in clause 5(2).

4. The annual monitoring report shall contain the following information in respect of the calendar year:
   a. the number of fumigations using methyl bromide carried out at the site;
   b. the total amount of methyl bromide applied at the site;
   c. the types of enclosed spaces to which methyl bromide has been applied;
   d. the types of equipment used to carry out the monitoring of methyl bromide;
   e. the annual exposure level;
   f. approximate total amount of methyl bromide discharged;
   g. number of notifications made in accordance with clause 3(2), identified by each monitoring location;
   h. how many times the exposure levels exceeded the TELair value;
   i. if a breach of a TELair value has occurred, an outline of what risk mitigation measures have been or are being put in place; and
   j. any accidents or other issues related to non-compliance with any of the controls under this approval.

5. The person in charge of the site must provide the annual monitoring report to ERMA New Zealand, Department of Labour, and the relevant Medical Officer of Health by 30 June of the following year.

Clause 3 of table 2 of the EPA decision document: 1 hour and 24 hour exposure levels

1. The person in charge of the site must, for each monitoring location, keep a record of the following information for every ventilation:
   1 hour exposure level; and 24 hour exposure level.

2. The person in charge of the site must notify Department of Labour and the relevant Medical Officer of Health as soon as practicable, but within 5 working days, if either the:
   a. 1 hour exposure level exceeds the 1 hour TELair value for methyl bromide; or
   b. 24 hour exposure level exceeds the 24 hour TELair value for methyl bromide.