



METHYL BROMIDE FUMIGATIONS ANNUAL MONITORING REPORT - 2016

Site: Napier Port

Reporting period: 1 January 2016 – 31 December 2016

1. Monitoring site information

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

Fumigation site:	Port of Napier
Physical address: of fumigation site	Breakwater Road
	Napier
Fumigation company:	Genera
Physical address: of fumigation company	11 Maru Street
	PO Box 4106
	Mount Maunganui
	3149

Report prepared by

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

Name:	Mike Goss
Role:	Biosecurity Manager
Organisation:	Genera Ltd

Report reviewed by

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

Name:	Steve Hart
Role:	Safety Advisor
Organisation:	Napier Port

* 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 2016 – 31 December 2016

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.

Type of contained space fumigated	Number of fumigations	Total amount of methyl bromide used (Kg)
Ship (hold)	Vessels - 11 (Holds 55)	32,674
Containers	225	1,031
Tent (logs under cover)	581	59,647
Other (e.g. fumigation cell)	0	0
Unintentional Releases (U/R)	1	150
Total:	817	93,352

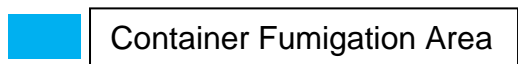
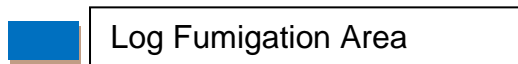
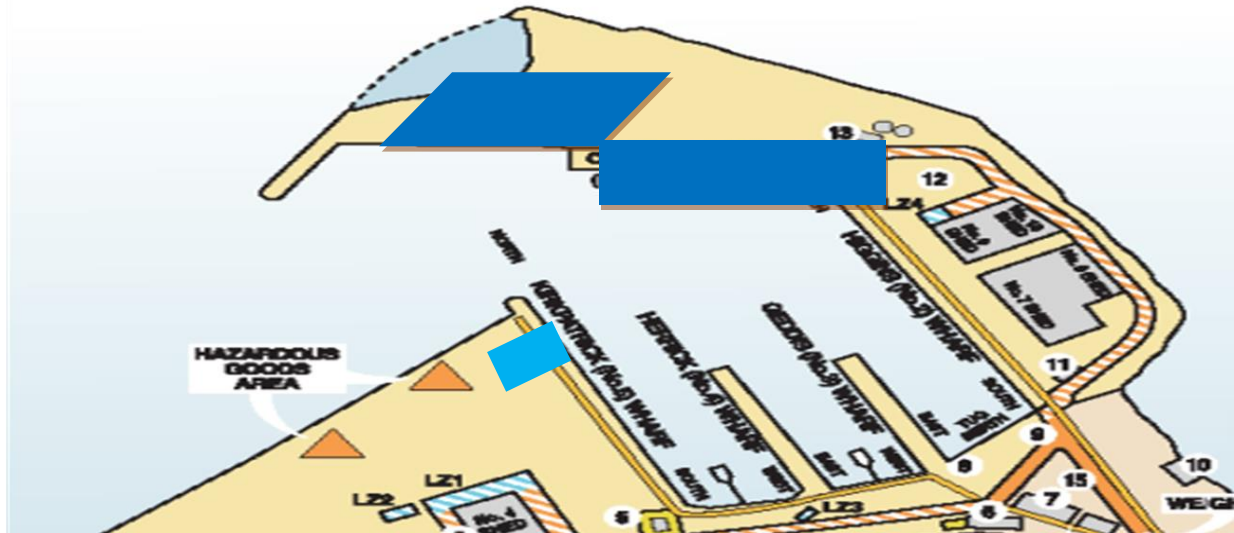
Napier Monthly Methyl Bromide Usage

	Log Rows	In Hold	Containers	Total
Jan	6050	2093	81.5	8224.5
Feb	3756	2437	100.3	6293.3
Mar	3099	2964	17.1	6080.1
Apr	4146	2727	64.9	6937.9
May	6626	2701	116.4	9443.4
June	5102	0	18.6	5120.6
July	5808	3334	95	9237
Aug	5066	3336	100.2	8502.2
Sept	7679		90.5	7769.5
Oct	4280	10487	139.8	14906.8
Nov	4511		114	4625
Dec	3524	2595	92.3	6211.3
Total	59647	32674	1030.6	93351.6

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

The designated areas are in dark blue. No methyl Bromide is used within 200m of the boundary fence.



2.3. Monitoring and equipment used

The log rows are physically covered in accordance with Genera's Safe Operating Procedures (SOPs) and Port Code of Practice (COP).

Routine monitoring includes checking for gas leaks from when the gas is first released into the log row or vessel hold and a final gas leak check is completed when the gas has been fully discharged. A watch person is on duty to monitor during the entire fumigation period.

Once the fumigation period is complete the covers are removed for ventilation, a Monitored Safety Zone (MSZ) is set up prior to this ventilation. The MSZ is cordoned off with cones and signage and the monitoring is conducted, in accordance with the EPA requirements and the Genera SOPs.

Monitoring atmospheric conditions is carried out by a variety of equipment at the PONL site and data is obtained via the Weather Website, Met Service and Met Ocean

Equipment

- Methyl Bromide monitoring is carried out using Industrial Scientific IBRID MX6 instruments.
- Napier Port Weather Station - wind speed and wind direction.

In addition to the monitoring completed by the Genera operational workers, Genera employ an environmental monitoring technician who provides independent reports about the NZ wide operations, these reports are directed to the Genera Executive Board.

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](#).

The Methyl Bromide levels at the boundary of the Buffer Zone (BZ) are monitored and recorded. There were no issues related to either the Workplace Exposure Standard (WES) or TEL during 2016. That is, the levels of Methyl Bromide at the BZ boundary were below the detectable levels during the reporting period ie well below the TEL.

2.5. Unintentional release

Record any unintentional releases of methyl bromide.

Genera had one unintentional release with log rows under a tarp during the reporting period;

22ND October 2016 in the ISO log yard - row D00. The cover was ripped open due to high winds gusts.

A MSZ was set up and the area was monitored.

A Genera watch person is on site when log rows are under fumigation.

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

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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.

During the fumigation of a container the application hose burst releasing Methyl Bromide to air. The correct procedures were followed in accordance to the Genera SOP. Approximately 250 grams of Methyl Bromide would have been in the hose.

Regulatory requirements for reporting of methyl bromide

Control requirements for the annual 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.