

An aerial photograph of an industrial facility, likely a biogas plant, during a major fire. Thick, dark black smoke billows upwards from several points of intense orange and yellow flames. In the foreground, several large, dark cylindrical storage tanks are visible, some of which appear to be involved in the fire. The background shows more industrial buildings and structures, partially obscured by the smoke. The overall scene is one of a significant industrial disaster.

MHF for Biogas Operators Forum

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WORKSAFE
Mahi Haumarū Aotearoa

Agenda

What is an MHF

Substance thresholds

Where does biogas fit in MHF regs

What does it mean if you are, or are not, an MHF

What is a major hazard facility (MHF)

Potential for catastrophic event **offsite** – they are rare, but continue to occur

- NZ regulations came in after Pike River
 - Based on European Seveso, and Australian model Regs
- Whether a site is an MHF depends only on quantities of named hazardous substances (in regulations)
 - Upper tier or Lower tier
 - Type 1, 2 or 3 depending on site activities
- Greater oversight - Specialist team oversee MHF

Schedule 2: Specified Hazardous Substances (SHS)

Table 1 – Generic SHS

P2	2.1.1A— <i>Flammable gases: high hazard</i> or 2.1.1B— <i>Flammable gases: medium hazard</i>	Flammable gases, Category 1 or 2	10	50
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Table 2 – Named SHS

18	Liquefied flammable gases, Category 1 or 2 (including LPG), and natural gas ⁸	—	50	200
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⁸Upgraded biogas

For the purpose of the implementation of these regulations, upgraded biogas is classified under this item if it has been processed in accordance with applicable standards for purified and upgraded biogas, ensuring a quality equivalent to that of natural gas, including the content of methane, and that has a maximum of 1% oxygen.

Which threshold is used for
biogas?

What does the guidance say

See the Notifications and designations MHF
GPG (Good Practice Guide)

<https://www.worksafe.govt.nz/dmsdocument/19981-mhf-notifications-and-designations/latest/>

- Classify the biogas mixture
- Use HSNO/GHS classification
- Look at total quantity – both storage and process
- May have both refined and unrefined biogas at same facility



MAJOR HAZARD FACILITIES: Notifications and Designation

MAY 2017



Other considerations

- Don't forget other SHS in biogas e.g., oxygen, hydrogen sulphide
- What do you store and what is in the process
- Use major hazard facility calculator on WorkSafe website
<https://www.worksafe.govt.nz/assets/dmsassets/Copy-of-major-hazard-facilities-calculation-sheet-140721.zip>

Outcome

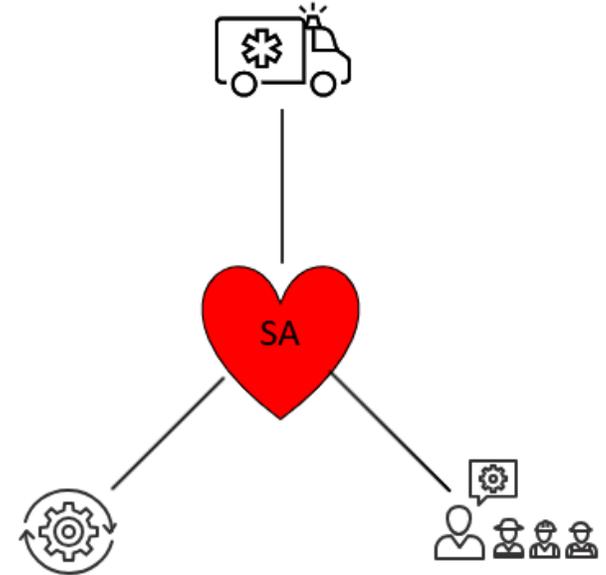
- If not refined must use the lower generic thresholds
- NZ taking same approach as Europe, aligned
- Germany big biogas producer, same approach there
- Australia do not have lower tier MHF

What does it mean if you are
an MHF?

Requirement	Not MHF	Lower tier MHF	Upper tier MHF
HSWA and other reg compliance eg Asbestos, PECPR, GRWM, WEPR	Yes	Yes	Yes
Hazardous substances regs compliance (e.g. LCC)	Yes	Yes	Yes
MHF Regs compliance	No	Yes	Yes
Pay annual MHF levy	No	Yes (\$14.6 -19.9k)	Yes (\$28.8 – 39.9k)
Safety assessment identify major incidents and controls (SCEs)	No	Yes	Yes
Written safety management system	No	Yes	Yes
Emergency plan for major incidents	No (required for haz subs)	Yes	Yes (more detailed)
Safety case	No	No	Yes
MAPP (major accident prevention policy)	No	Yes	No
Reporting MHF incidents (in addition to others)	No	Yes	Yes
Consultation with emergency services and LA	No (required for haz subs)	Yes	Yes
Oversight by	Haz subs team or general inspectors	MHF Team	MHF Team

Key MHF considerations

- Safety assessment to identify major incidents is the heart, or foundation, of MHF
- Worker engagement throughout
- Safety management system to be **proportionate**



A safety management system must—

- be proportionate to the major incident hazards, activities, and complexity of the organisation of the major hazard facility; and
- be based on the assessment of risks associated with each major incident hazard.

MHF Designation

- If you think you will be an MHF
 - Notify us using form on MHF webpage <https://www.worksafe.govt.nz/dmsdocument/20652-notification-of-major-hazard-facility-form/latest/>
- This is different to notifying WorkSafe of a hazardous substance location
- We make a decision and notify you. Site is formally designated as an MHF (or not) after decision made.

Major hazard facility notification

Under Regulations 12 or 13 of the Health and Safety at Work (Major Hazard Facilities) Regulations 2016 (the Regulations)

The information in this notification will be used to determine if the facility is an upper tier or lower tier major hazard facility, in accordance with the Health and Safety at Work (Major Hazard Facilities) Regulations 2016.

Refer to guidance and regulations when completing this form, available on the WorkSafe website.

If you are unable to submit this form electronically you can complete it manually. However, you must, before printing the form, add lines to the specified hazardous substances tables and land use information.

Email: hhu.mhf@worksafe.govt.nz **Post:** Major Hazard Facilities, High Hazards Unit, WorkSafe New Zealand, PO Box 105146, Auckland 1143, NZ

Facility type

- Existing facility (regulation 12)
- Proposed facility (regulation 13)

Notification type

- New notification (regulation 12/13)
- Re-notification (regulation 24 - increased quantities)
- Re-notification (decreased quantities)
- Proposed change of operator (regulation 17)
- Change in type (regulation 74 (1))
- New specified hazardous substance (regulation 74 (2))

1. Operator details

Operator means the PCBU who manages or controls a facility or a proposed facility, and has the power to direct that the whole facility be shut down. See regulation 10.

If more than one PCBU is an operator of all or part of the facility, one of the PCBUs must be nominated, by all or a simple majority of those operators, as the operator of the facility; and the person nominated is the operator of the facility for the purposes of the regulations.

Operator type: Body corporate Individual

Full legal name: (limited liability, individual person, or other)

Trading name: (if different to legal name)

New Zealand Business Number (NZBN): (if applicable)

Operator phone number:

Operator email:

Physical address of operator:

Postal address of operator: Same as above

Nominated contact

Give details here of the person with whom WorkSafe may communicate in relation to the information that is, or must be, contained in the notification.

Name:

Position:

Phone number:

Mobile phone:

Email:

Preferred contact method: Email Post

Postal address of nominated contact: Same as nominated operator

Secondary contact (optional)

Name:

Position:

Phone number:

Mobile phone:

Email:

Preferred contact method: Email Post

Ngā mihi nui Questions?

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