



## **Port Nelson Tank Farm Facility**

# **Safety Case Summary**



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## What is the purpose of this summary brochure?

This brochure provides an easily understood summary of the Aica Port Nelson safety case that was accepted in January 2020. It explains why a safety case is required and what information it contains

The brochure provides insight into how the Aica Port Nelson site operates safely through a mature and well established management system that includes hazard identification, risk assessment and emergency planning processes

This summary is available at [www.aicanz.co.nz](http://www.aicanz.co.nz)

## Port Tank Farm Facility

Aica New Zealand Limited operates the Port Nelson tank farm, this site contains onsite chemical storage and equipment located at Carkeek Street Port Nelson.

The Port tank farm site receives methanol and stores it for further production at a separate facility.

The site in Richmond accepts methanol shipments from Aica's facility at Port Nelson. These chemicals are stored in bulk tanks and then used as feed stock for the continuous or batch processes

## Specified Hazardous Substances

The Aica Port Tank Farm facility has been identified as an upper tier Major Hazard Facility under the Health and Safety at Work (Major Hazard Facilities) Regulations 2016. The site receives, stores and processes materials that are classified as specified hazardous substances according to schedule 2 of the Major Hazard Facility Regulations (MHF)

**Specified Hazardous substances**  
**Methanol**

**Quantities Onsite**

Approximately 5000m<sup>3</sup>

## What is a safety case?

The MHF regulations require that all upper tier Major Hazard Facilities have a safety case that is approved by Worksafe in order to operate. The safety case is a written summary of the systems that are in place and used to identify hazards, risks, and the appropriate controls that are in place to reduce the risk of these hazards so far as is reasonably practicable. Aica is required to have this safety case reviewed every five years by Worksafe.

A **Major Incident** is defined in the MHF regulations as involving specified hazardous substances; and exposing multiple persons to a serious risk to their health or safety (including a risk of death) arising from an immediate or imminent exposure to specified hazardous chemicals

While preparing the Aica Safety case, we have involved workers that are onsite on a regular basis, specialists and external agencies

### The Safety Case contains the following sections

- **Description of Plant and Process**
  - Design and purpose of plant
- **Safety Management System**
  - How risk is managed
- **Emergency Response Plans**
  - What actions will be taken if the worst was to happen
- **Safety Assessments**
  - Methods and results of hazard identification
- **Committed Actions**
  - Actions Aica have committed to in order to ensure that risk is reduced so far as is reasonably practicable

# Safety Management System



## OUR SAFETY MANAGEMENT SYSTEM

### OUR GOALS

- Zero Injury
- Zero Process Safety Accident
- Zero non Compliance

We take safety seriously, the safety of our worker and general public is paramount.

Aica is committed to major incident prevention and management as a company objective. To achieve this we have many systematic and structured processes in place that allow for the identification, elimination and minimisation of hazards

The performance of these systems is monitored through various systems and reviewed fully on an annual basis. The effectiveness of these systems is reported on a regular basis to both the senior management team and to our Board of Directors

Members of the senior management team practice an “open door” policy, where workers can have one on one conversations with leadership.

The Port Site is  
remotely  
Monitored  
**24**  
Hours a day

# Safety Assessments

Aica have carried out detailed process safety studies with the help of subject matter experts and on site workers to identify major incident hazards in the process's carried out on the Port Tank Farm Facility

These studies are formal, documented and approved methods of identifying risk

The studies were used to provide Aica with an overall assessment of the current controls and what was required for improvement



The safety studies combine both qualitative and quantitative techniques and are used to ensure that risk reduction measures are correctly assessed

**Process Safety Engineers continuously review these assessments to ensure Aica's controls remain appropriate**

## Potential Major Incidents

Our safety assessment processes have identified the following scenarios have the potential to occur

- Fire due to flammable liquid release
- Toxic vapour release due to spillage
- Explosion due to process malfunction

**Fires are expected to be limited to effects on and around the Port Tank Farm site**

Computer modelling has been conducted in order to determine the affected areas for all Major Incidents

### OFF-SITE IMPACTS

While it is unlikely that an event will occur that will extend beyond the Port Tank Farm boundary, computer modelling has shown that there is the potential for toxic vapour to extend beyond the boundary limits. If an incident occurs it could have the following consequences

- Potential for offsite odour depending on wind direction and strength
- Potential for visible smoke
- Potential explosion noise
- Temporary health effects
- Potential disruption due to emergency services activity and road closures

Most accidental releases do not result in fire, explosion or toxic release and can be handled through the installed safety systems

**The Port Tank farm is designed with equipment for capturing any spills and preventing unwanted environmental effects**

# Emergency Response Plan

## What to do in an emergency

A site siren will activate to alert on-site personnel of a major incident which will initiate emergency procedures. In the event of an emergency immediately evacuate to the initial muster point, await further instructions from the Incident controller –**DO NOT START OR TAKE VEHICLES PAST THE SITE**

Fire and Emergency New Zealand (FENZ) will assume control of any major incident on arrival at the site in collaboration with Aica, local authorities and emergency services

## Local Community

### Emergency Actions:

The local site siren at Aica does not require any actions from people outside of the Aica boundary. If action is to be taken by others then Aica will send out an emergency text message to those concerned.

The local community will be updated during a major incident and Aica asks that you follow all instructions provided to you

## General Advice

1. Remain indoors, close all windows and doors, turn off all ventilation systems
2. Check your phone for any text message instructions from Aica
3. Turn on a radio and listen to a local radio station
4. Stay away from the Port Tank Farm
5. If advised to do so by police, FENZ or Aica, please self-evacuate
6. Seek medical attention if you feel impacted



## For Further Information

### Contacts:

Finn Cathie

Process Safety Engineer

[Finn.Cathie@aica-ap.com](mailto:Finn.Cathie@aica-ap.com)

03 989 3000

Lane Glentworth

HSE / Training Manager

[Lane.Glentworth@aica-ap.com](mailto:Lane.Glentworth@aica-ap.com)

06 968 1800