

**PAN PAC**<sup>™</sup>

**FOREST PRODUCTS LTD**

# **SAFETY CASE**

**SUMMARY HANDBOOK**



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# Why are we providing this information?

We want to give you a general overview of Pan Pac's Whirinaki facility and share with you a summary of our emergency plans and our safety case.

We will explain what a safety case is, why it is required and what important information it contains.

# Overview of Pan Pac Forest Products Limited (Pan Pac)

Established in 1971, our facility is located on the Whirinaki industrial site, at 1161 SH2 Wairoa Road, 20 kilometres north of Napier.

We have three operational divisions: Forests, Lumber and Pulp.

Our Whirinaki site contains our corporate offices, our log processing yard, sawmill, kilns, drymill, pulpmill, water treatment plant, chipmill and our biofuel boilers.



# 1

## FORESTS DIVISION

Our Forests Division manages a large forestry estate, about 35,000 hectares (350 km<sup>2</sup>) and wood purchase business across Hawke's Bay.

At our Pan Pac facility, we receive logs for storage and processing. We grade and cut logs for our customers and for our sawmill and pulpmill to process.

# 2

## LUMBER DIVISION

Our Lumber Division operates a lumber yard, sawmill, kilns and a drymill.

We process radiata pine into:

- Utility-grade, undried, core-wood for national and international markets
- High-grade, outer-wood, dried for national and international markets.

The sawmill produces 430,000 m<sup>3</sup> of lumber each year.

# 3

## PULP DIVISION

In the Pulp Division, we refine wood chips into pulp.

We produce two types of Thermo-Mechanical Pulp (TMP):

- TMP – a natural wood colour pulp
- BCTMP – a white pulp that's been bleached with hydrogen peroxide.

We refine the wood chips by heating them in vessels, then feeding them through machines containing parallel discs, one of which is rotating. The forces between the discs breaks the chips down into pulp.

The pulp is dried and compressed into bales, wrapped, stacked and then delivered to Napier Port for export.

Most of our pulp is sold internationally for use in paper and packaging. Our pulpmill produces up to 900 tonnes of TMP every day.

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## WHAT IS A MAJOR HAZARD FACILITY?

The New Zealand Health and Safety at Work (Major Hazard Facilities) Regulations 2016 define a Major Hazard Facility (MHF) as a facility that stores, handles or processes significant quantities of specified hazardous substances.

The MHF regulations are in place to prevent a major incident. A major incident is an uncontrolled event involving a specified hazardous substance that poses a serious and immediate risk to the health or safety of multiple people.

- **There are over 120 MHFs in New Zealand, of which, six are in Hawke's Bay.**

Pan Pac has been identified as an upper tier MHF, because we store a large quantity of hydrogen peroxide for pulp bleaching (we can store up to 310 tonnes).

We also use another specified substance, natural gas, for drying pulp (piped to site and not stored).

It is possible for hydrogen or hydrogen sulphide, both specified hazardous substances, to be generated by bacterial activity in our pulp or process water storage tanks.

All upper tier MHFs must submit a Safety Case to WorkSafe.

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## WHAT IS A SAFETY CASE?

A Safety Case is a written demonstration of our ability to operate our site safely.

In our Safety Case, we need to demonstrate how we adequately control risks that might lead to major incidents on our site.

The Safety Case includes three main sections:

### Safety Assessment

Shows how we identify and control all the hazards that could result in a major incident.

### Safety Management System (SMS)

Shows the systems we use to manage any health and safety risks on-site.

### Emergency Response Plan

Shows what we will do in the event of an emergency.

We prepared our Safety Case in collaboration with:

- on-site workers and contractors
- safety specialists and consultants
- WorkSafe
- Fire and Emergency New Zealand (FENZ)
- other authorities.

**Our Safety Case was assessed by WorkSafe,  
with acceptance achieved in September 2019.**

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# SAFETY ASSESSMENT

A safety assessment is a comprehensive and systematic investigation that includes analysis of all health and safety risks associated with major incident hazards and major incidents.

It demonstrates how those risks are reduced so far as is reasonably practical.

We have undertaken a safety assessment for our facility. Our assessment process was led by external professional process safety engineers.

These engineers worked with our team of operators, maintenance groups and qualified engineering and management staff.



## The objectives of the safety assessment are to identify:

- › the nature of each major incident and hazard
- › hazards and conditions that could lead to a major incident occurring
- › the risk (likelihood and consequence) of each hazard causing a major incident
- › the potential magnitude, or severity of consequences in the event of a major incident
- › the control measures needed to reduce major incident risks so far as is reasonably practical.

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# POTENTIAL MAJOR INCIDENTS

The externally facilitated safety assessment identified the following potential major incidents that could happen on our site:

- fire or explosion due to a natural gas or hydrogen release
- tank or equipment ruptures due to hydrogen peroxide decomposition
- hydrogen sulphide release.

## Off-site Impact

Results from our externally reviewed studies found that major incidents on our site **will not** have any direct impact beyond the combined boundaries of Pan Pac and the adjacent Contact Energy and Transpower sites.

## Control Measures

A control measure is designed to prevent a hazardous event occurring, or to limit the impact if one does occur.

Our control measures are reviewed, tested and maintained regularly as required by our SMS.

Our major incident control measures include:

- automatic safety systems
- pressure vents and relief valves
- how we grant people permission to work on-site (e.g. permit to work)
- delivery procedures and unique fittings that prevent incorrectly mixing chemicals during delivery
- water flood system.



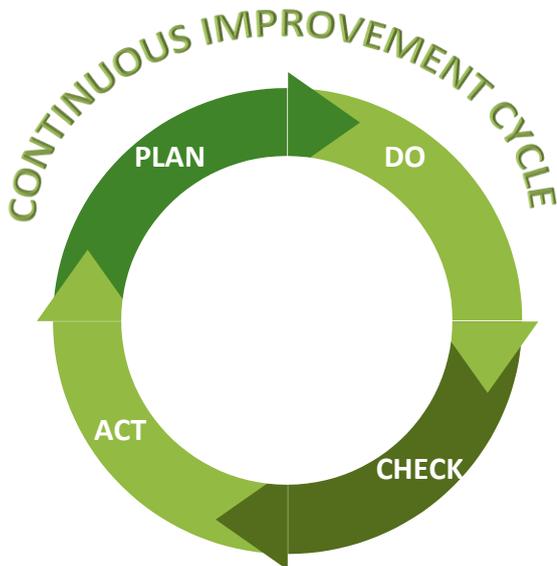
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# SAFETY MANAGEMENT SYSTEM

We are committed to protecting the health and safety of our workers, visitors and the local community.

We have established and implemented a comprehensive SMS for our operations.

Our SMS is designed to provide a structured and consistent approach to managing health and safety risks across our operations.



The SMS contains thirteen management standards, that include:

1. Governance, Responsibility and Accountabilities
2. Continuous Improvement Plans and Objectives
3. Employee Selection, Training and Competency
4. Engagement – Consultation, Cooperation and Communication
5. Risk Management
6. Operations Management and Control
7. Contractor Management
8. Health, Wellness, Injury Management and Rehabilitation
9. Management of Change
10. Emergency Preparedness and Response
11. Standards and Compliance
12. Incident Management
13. Performance Monitoring, Audit and Review.

THE PAN PAC SMS SETS OUT HOW WE WILL LEAD BY EXAMPLE

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# EMERGENCY RESPONSE PLANS

We maintain emergency plans, allocate resources and train staff for all types of on-site emergencies.

We schedule regular drills and exercises to maintain the highest level of emergency preparedness.

Our emergency response plans have been developed in conjunction with FENZ and other authorities.

## What happens in an on-site emergency?

In the event of an on-site emergency, our trained workers and security team will provide an immediate response to the scene until additional resources from FENZ arrive.



## Wider Community

Results from our externally reviewed studies\* found that major incidents on our site **will not** have any direct impact beyond the combined boundaries of Pan Pac and the adjacent Contact Energy site and Transpower Sites.

Emergency services and the local authority's role is to ensure that the community is kept informed in an emergency.

Depending on the event, FENZ may choose to notify the local community, including advising what action they need to take.

Pan Pac will provide community notification support as requested by FENZ. During an emergency, our Managing Director is responsible for communications, supported by our Communications Manager.

\*Pan Pac Forest Products (2017) *Hydrogen Peroxide Hazard Consequence Analysis*.

Safety Solutions Ltd (2017) *Consequence Modelling Napier Pulp & Paper Mill*.

Safety Solutions Ltd (2019) *Consequence Modelling for Hydrogen Sulphide Production in Pulp Tanks Whirinaki Pulp Division*.

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# FURTHER INFORMATION

This information aims to provide a summary of our Safety Case and information relevant to Pan Pac's operation as an upper tier MHF.

Further information, including a copy of this brochure, can be obtained by contacting:

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For information about MHFs:

<https://worksafe.govt.nz/topic-and-industry/major-hazard-facilities/>



**11****GLOSSARY**

**BCTMP** Bleached Chemi-Thermo-Mechanical Pulp

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**FENZ** Fire and Emergency New Zealand

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**MHF** Major Hazard Facility

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**Pan Pac** Pan Pac Forest Products Limited

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**SMS** Safety Management System

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**TMP** Thermo-Mechanical Pulp

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