

# Icepak Inquiry

## Schedule of Corrective Actions

Updated 9 February 2009

### Introduction

This document records the actions to address the 11 recommendations contained in the report on the "Inquiry into the Explosion and Fire at Icepak Coolstores, Tamahere, on 5 April 2008".

For each recommendation the actions to date are detailed, along with planned next steps. This document will be regularly updated until all the corrective actions are completed.

An overview table of progress towards meeting the recommendations is provided on the last page (p.16).

### *Regulatory environment as a factor in the cause of the explosion and fire*

#### Recommendation 1

**"The Hazardous Substances and New Organisms (HSNO) regulations and standards should be amended so that stationary refrigeration systems, and the refrigerants they contain, are subject to appropriate controls. The Fire Service Commission should take this issue up urgently with the Environmental Risk Management Authority and the Ministry for the Environment."**

**Responsibility:** National Commander (NC)

**Status: Closed**

Recommendation addressed and no further action from the Fire Service Commission required.

**Comment:**

ERMA removed the clause in the "Compressed Gases Mixtures Group Standards", which excluded substances in a refrigeration system.

The action taken to address this recommendation is detailed below.

Action	When	Evidence
1. NC held first meeting of "Tamahere Recommendations Implementation Steering Group". Representatives from ERMA, MfE, Dept of Building and Housing, State Services Commission and Dept of Internal Affairs.	16 Oct 08	Meeting minutes
2. ERMA advises NZFS that a review of controls and conditions for LPG is underway and expected to be completed by mid 2009. Changes to the controls and conditions may result from the review.	21 Oct 08	Email from Andrea Eng of ERMA
3. ERMA advises that the Compressed Gases Mixtures Group Standards have been reviewed. The clause, which excluded substances in a refrigeration system from the conditions of the Group Standard, will be removed, taking effect by the end of 2008.	21 Oct 08	Email from Andrea Eng of ERMA
4. Second meeting of "Tamahere Recommendations Implementation Steering Group" held.	8 Dec 08	Meeting minutes
5. ERMA reports it is working with IPENZ to broaden knowledge of refrigerant gases with engineers and the refrigeration industry generally.	8 Dec 08	Meeting minutes

Action	When	Evidence
6. The clause in the "Compressed Gases Mixtures Group Standards", which excluded substances in a refrigeration system, was removed. The changes were published in the New Zealand Gazette on 27 November 2008.	27 Nov 08	New Zealand Gazette No. 182, published on 27 November 2008 (pages 4762-4764) <a href="http://www.mcdem.govt.nz/pubforms.nsf/NZGZT/NZGazette182Nov08.pdf/\$file/NZGazette182Nov08.pdf">http://www.mcdem.govt.nz/pubforms.nsf/NZGZT/NZGazette182Nov08.pdf/\$file/NZGazette182Nov08.pdf</a>
7. Third meeting of "Tamahere Recommendations Implementation Steering Group" held.	5 Feb 09	Meeting minutes

## Recommendation 2

**“All large scale flammable gas installations should by law require inclusion of stenching agents in the gas to promote safety of all persons affected by activities involving those substances, including users, firefighters, and the public. The Fire Service Commission should also take this issue up urgently with the Environmental Risk Management Authority.”**

**Responsibility:** National Commander (NC)

### **Status: Open**

The Fire Service Commission has taken up the issue with ERMA. In this sense the recommendation has been addressed.

However, the Fire Service will monitor the issue until ERMA completes a review of the controls and conditions for LPG approval.

### **Action to date:**

Action	When	Evidence
1. NC held first meeting of "Tamahere Recommendations Implementation Steering Group". Representatives from ERMA, MfE, Dept of Building and Housing, State Services Commission and Dept of Internal Affairs.	16 Oct 08	Meeting minutes
2. ERMA advises NZFS that the inclusion of stenching agents for large-scale gas installations is currently being investigated as part of the review of the controls and conditions of the LPG approval. Highly flammable gases used as refrigerants are currently required to have stenching agents added. However, a technical question regarding the ongoing effectiveness of such agents will need to be resolved.	21 Oct 08	Email from Andrea Eng of ERMA
3. Second meeting of "Tamahere Recommendations Implementation Steering Group" held.	8 Dec 08	Meeting minutes
4. ERMA advised that an application for the modified reassessment of LPG is being prepared. This application is expected to be notified for public submissions before the end of Jun 09.	5 Feb 09	Feb 09 update from Andrea Eng of ERMA
5. Third meeting of "Tamahere Recommendations Implementation Steering Group" held.	5 Feb 09	Meeting minutes

### **Next steps:**

Action	Who	When	% complete
1. ERMA completes a review of the controls and conditions for LPG approval. (Changes to the controls and conditions may result from the review).	ERMA	Mid 2009	40%

### Recommendation 3

**“The regulatory regime as a whole should be reviewed to promote the sharing of information about hazardous substances between regulatory and other interested agencies. The Fire Service Commission should take this issue up urgently with the Government.”**

**Responsibility:** National Commander (NC)

**Status: Open**

The Fire Service Commission has taken up the issue with the Government. In this sense this recommendation has been addressed.

However, the Fire Service is now communicating with the relevant agencies to review the regulatory regime and will monitor progress for another few months before closing this recommendation.

**Action to date:**

Action	When	Evidence
1. NC held first meeting of "Tamahere Recommendations Implementation Steering Group". Representatives from ERMA, MfE, Dept of Building and Housing, State Services Commission and Dept of Internal Affairs.	16 Oct 08	Meeting minutes
2. ERMA advised NZFS that it holds a register of premises that hold location test certificates (which replaced dangerous goods licences). MED's Regulatory Improvements Bill includes an amendment to the HSNO Act to allow the NZFS legal access to the register for emergency response planning. In the interim until the bill is passed ERMA will work with the NZFS to provide the relevant information through other means.	21 Oct 08	Email from Andrea Eng of ERMA
3. ERMA advised NZFS that it is working with test certifiers, the relevant industry organisations and other agencies on how to comply with the legislation. This covers a wide range of issues such as the legislative requirements for refrigerant gases, refrigeration equipment, electrical safety building consents and resource consents.	21 Oct 08	Email from Andrea Eng of ERMA
4. Commission briefed incoming Minister of Internal Affairs on the following recommendations that require the support of other agencies and Ministers in order to fully implement the recommendations of the Inquiry: <ul style="list-style-type: none"> <li>Hazardous substances regulations should be amended so that refrigeration systems and the refrigerants they contain are subject to appropriate controls.</li> <li>Large-scale gas installations should require stenching agents to be added to the gas to alert workers, firefighters and the public to the presence of gas leaks.</li> <li>The hazardous substances regime as a whole should be reviewed to promote the sharing of information between regulatory and other interested agencies.</li> <li>Inter-agency sharing of information about buildings in a nationally consistent format should be promoted.</li> </ul>	27 Nov 08	Briefing paper
5. NZFS staff (National Manager Operational Standards and Manager Data and Spatial Application) met with ERMA, Maritime NZ and Dept of Labour about sharing of data at significant incidents.	17 Oct 08	Meeting minutes
6. National Manager Operational Standards made presentation to MfE Test Certifier review group.	20 Oct 08	Copy of presentation
6. Second meeting of "Tamahere Recommendations Implementation Steering Group" held.	8 Dec 08	Meeting minutes
7. ERMA (Bryan Watts) and NZFS (Brian Davey and Stuart Waring) met to discuss how ERMA can best provide the NZFS with the information contained in ERMA's register of premises that hold location test certificates.	17 Dec 08	Meeting record

Action	When	Evidence
8. ERMA, the Ministry for the Environment and the Dept of Labour met to discuss the regulatory regime and to identify any issues/failures that need to be addressed. They agreed to form a working group which will continue to meet to deal with this matter.	20 Jan 09	Feb 09 update from Andrea Eng of ERMA
9. Draft operational agreement between ERMA and NZFS developed. This will allow ERMA to provide NZFS information on places which have been issued with a location test certificate and/or stationary container test certificate. The information will be provided on a quarterly basis in the form of an Excel spreadsheet.	4 Feb 09	Operational agreement document
10. Third meeting of "Tamahere Recommendations Implementation Steering Group" held.	5 Feb 09	Meeting minutes

**Next steps:**

Action	Who	When	% complete
1. ERMA and NZFS Chief Executives sign the operational agreement to allow ERMA to provide Test Certificate information to the NZFS.	Rob Forlong (ERMA) & Mike Hall (NZFS)	28 Feb 09	90%
2. ERMA and the Dept of Building and Housing meet to discuss data sharing.	Andrea Eng (ERMA) & Peter Thorby (DBH)	28 Feb 09	0%
3. NZFS develops internal processes to effectively store and use the test certificate information supplied from ERMA.	Brian Davey & Stuart Waring	28 Feb 09	20%
4. NZFS provided with formal access to the ERMA Test Certificate Database so that the Fire Service can search the register of test certificates for emergency response planning purposes.  This formal access will be achieved by the passing of The Regulatory Improvements Bill (introduced into Parliament in Sep 08), which will designate the NZFS as an "approved person".  (Note: Until the Regulatory Improvements Bill has been passed, information on places which have been issued with a location test certificate and/or stationary container test certificates is being provided to the Fire Service under an operational agreement between ERMA NZ and the NZFS).	ERMA	Unknown	50%

## **Preparedness of the Fire Service**

### **Recommendation 4**

**“The National Commander and the National Rural Fire Officer need to undertake an analysis of current rural/urban fire legislation in relation to risk planning and control of fires in buildings throughout New Zealand. This analysis would be designed to clarify responsibilities and provide clear guidance to fire officers on the practical application of the legislation.”**

**Responsibility:** National Commander (NC) and National Rural Fire Officer (NRFO)

**Status:** Open

Work ongoing as detailed below.

#### **Action to date:**

Action	When	Evidence
1. NC and NRFO receive legal advice on rural/urban fire legislation in relation to risk planning and control of fires in buildings throughout NZ.	28 May 08 6 Nov 08	Legal advice
2. NC and NRFO sent joint advisory letter to all Principal Rural Fire Officers. The letter included guidance on urban/rural legislation and associated responsibilities.	9 Oct 08	Letter
3. Meetings between fire regions and fire authorities held in many locations	Oct-Dec 08	
4. “Operational Management Manual, Section K: Fire Protection Agreements” was reviewed by the NZFS legal advisor to ensure it provides accurate and clear guidance to staff when entering into agreements under the Fire Service Act 1975 and the Forest and Rural Fires Act 1977. Minor changes to wording recommended.	7 Jan 09	Legal advisor's report to NC
5. “Operational Management Manual, Section T: Charging for Services” was reviewed by the NZFS legal advisor to ensure it is consistent with the Fire Service Act 1975 and the Forest and Rural Fires Act 1977. Minor changes to wording recommended.	7 Jan 09	Legal advisor's report to NC

#### **Next steps:**

Action	Who	When	% complete
1. Review “NZFS Command and Control Technical Manual” to ensure it provides accurate and clear direction to operational staff on urban and rural operational response responsibilities.	Megan Yardley	28 Feb 09	20%
4. Make minor changes to “Operational Management Manual, Section K: Fire Protection Agreements” as recommended by NZFS legal advisor.	Brian Davey	31 Mar 09	0%
5. Make minor changes to “Operational Management Manual, Section T: Charging for Services” as recommended by NZFS legal advisor.	Brian Davey	31 Mar 09	0%
6. Review standard fire protection agreement templates and prepare drafts for consultation.	Megan Yardley	28 Feb 09	75%
7. Revised standard fire protection agreement templates available for use.	Megan Yardley	31 Mar 09	75%
8. NC and NRFO provide guidance to NZFS and RFA operational staff on their respective emergency response responsibilities in rural fire areas.	Mike Hall & Murray Dudfield	31 Mar 09	50%

## Recommendation 5

**“The National Commander should promote inter-agency sharing of information about buildings using nationally consistent formats. This information sharing should include fire alarm monitoring companies to ensure that they have the correct addresses for premises.”**

**Responsibility:** National Commander

**Status:** Open

Work ongoing as detailed below.

**Action to date:**

Action	When	Evidence
1. NC held first meeting of "Tamahere Recommendations Implementation Steering Group". Representatives from ERMA, MfE, Dept of Building and Housing, State Services Commission and Dept of Internal Affairs.	16 Oct 08	Meeting minutes
2. NC and NRFO sent joint advisory letter to all Principal Rural Fire Officers. The letter: <ul style="list-style-type: none"> <li>Requires Fire Authorities to establish a register of high-risk buildings in their rural area by 31 December 2008.</li> <li>Requires Fire Authorities to maintain the register as part of their statutory Fire Plan. The Register will serve as a flag to NZFS to undertake a more detailed risk evaluation of the building and if necessary prepare a pre-incident tactical or enter into a section 38 Agreement with the owner.</li> <li>Offers Fire Authorities assistance from NZFS region staff in preparing first draft of register.</li> </ul>	9 Oct 08	Letter
3. Waikato AFRC and NZFS Manager of Data and Spatial Application hold workshop in Hamilton with several TAs and RFAs to discuss data sharing as required in NC/NRFO letter of 9 Oct.	21 Nov 08	
4. NZFS Manager of Data and Spatial Application emailed all PRFOs offering assistance with transferring building data to NZFS.	28 Nov 08	Email
4. Second meeting of "Tamahere Recommendations Implementation Steering Group" held.	8 Dec 08	Meeting minutes
5. Data schedule, data supply specification and data template for RFAs and TAs developed to national standard.	Stuart Waring	NRFO email to PRFOs of 18 Dec 08
6. Third meeting of "Tamahere Recommendations Implementation Steering Group" held. Karen Burns of SSC provided overview of the SSCs role in facilitating the sharing of information across the public sector in this initiative.	5 Feb 09	Meeting minutes

**Next steps:**

Action	Who	When	% complete
1. SSC to host workshop of relevant agencies to identify: <ul style="list-style-type: none"> <li>issues with inter-agency sharing of information about buildings</li> <li>how SSC could facilitate more effective information sharing between agencies</li> </ul>	David Espie (SSC)	31 Mar 09	
2. Convene meeting with fire alarm monitoring companies to promote information sharing and correct address information.	Paula Beever and Bill Butzbach	31 Mar 09	0%

Action	Who	When	% complete
3. Prepare briefing paper for NZFS CE on the benefits of establishing a national database of addresses.	Paula Beever, Alma Hong, Murray Dudfield	28 Feb 09	25%
4. NZFS CE/NC to promote the establishment of a national database of addresses with the LINZ CE.	Mike Hall	31 Mar 09	0%
5. Supply NZFS building information to ERMA, RFAs, TAs and Automatic Fire Alarm Service Providers from NZFS databases.	Stuart Waring	28 Feb 09	50%
6. Provide RFAs access to the NZFS Building Information register for maintenance purposes.	Stuart Waring	17 Apr 09	0%
7. Investigate access to building data from TA databases.	Brian Davey, Stuart Waring, Roy Breeze	28 Feb 08	25%
8. NRFO checks that high risk building registers established by all RFAs.	Murray Dudfield	31 Mar 09	25%
9. Fire Regions develop plan to complete risk plans for rural high-risk buildings.	Fire Region Managers	31 Mar 09	25%

## Recommendation 6

**“The National Commander should undertake a review of pre-incident planning processes to identify buildings that currently are not being captured in operational plans. This should include buildings outside the urban fire district.”**

**Responsibility:** National Commander (NC)

**Status:** Open

Work ongoing as detailed below.

**Action to date:**

Action	When	Evidence
1. NC and NRFO sent joint advisory letter to all Principal Rural Fire Officers setting out the range and features of buildings to be captured in the first national scan of high-risk buildings outside urban fire districts.	9 Oct 08	Letter
2. NC reinforced to Fire Region Managers, through their performance agreements, the critical importance of completing the NZFS's detailed Building Risk Evaluation programme for every risk building in urban fire districts.	Nov 08	FRM performance agreements
3. Analysis of NZFS risk planning processes completed. This report included a proposed project plan to review NZFS risk planning.	5 Feb 09	"Operational Risk Planning Review" report by Jonathan Graham

**Next steps:**

Action	Who	When	% complete
1. Operational Risk Planning project plan completed.	Jonathan Graham	13 Feb 09	80%
2. Operational Risk Planning project completed.	Jonathan Graham	30 Jun 09	10%

## Recommendation 7

“The National Commander should review the current instruction on significant incident and post-incident support. Preparedness for supporting Fire Service staff emotionally affected by an incident such as this one should be formalised. Such preparedness would include:

- capturing and documenting good practice put into place at Hamilton
- investigating crisis management training for senior officers
- trigger points for automatically relieving local management
- deployment of a skilled media team to support local management.”

**Responsibility:** National Commander (NC)

**Status:** Open

Work ongoing as detailed below.

**Action to date:**

Action	When	Evidence
1. Former Director of Communications, Debbie Barber conducted a review of the Fire Service's response to the media during the course of the incident. The report included recommendations and a guidance document for senior officers on "Major Incident Media Planning"	24 Nov 08	Media report
2. NZFS National Manager Safety and Wellbeing conducted a review of NZFS arrangements for staff support and welfare during and following major incidents. Report submitted to NC.	6 Dec 08	Report to NC

**Next steps:**

Action	Who	When	% complete
1. Review the operational instruction on "Significant Incident and Post Incident Support".	Brian Davey	30 Apr 09	0%
2. Update the "National Commander's Group Activation Protocols" with changes made to the "Significant Incident and Post Incident Support" policy and the media planning procedure.	Jim Stuart-Black	31 May 09	0%
3. Convert the guidance document for senior officers on "Major Incident Media Planning" into an operational policy/procedure.	Brian Davey	30 Jun 09	0%
4. Improve staff awareness of NZFS welfare services. Develop promotion material for the "Injury and Illness management" and "CISM" programmes.	NZFS Safety and Wellbeing Unit. Julian Hughes	30 Jun 09	0%
5. Arrange a Crisis Management training programme to commence in 2009/10.	Janine Hearn Julian Hughes	30 Jun 09	0%
6. Develop a national policy/process for NZFS funerals.	Janine Hearn Julian Hughes	30 Jun 09	25%

**Recommendation 8**

**“The National Commander should review policy to ensure that privacy concerns over next-of-kin details are balanced against the need to contact families in the event of a serious incident.”**

**Responsibility:** National Commander

**Status:** Open

Work ongoing as detailed below.

**Action to date:**

Action	When	Evidence
1. NZFS National Manager Safety and Wellbeing conducted a review of NZFS arrangements for staff support and welfare during and following major incidents. Report submitted to NC.	6 Dec 08	Report to NC

**Next steps:**

Action	Who	When	% complete
2. Design and implement a standard approach to the way the NZFS notifies emergency contacts. This will include: <ul style="list-style-type: none"> <li>Developing and maintaining emergency contact information on the employee kiosk</li> <li>Updating the employee kiosk to provide users with legal information relating to the collection of personal information.</li> <li>Allowing Comcen shift managers to access contact information in critical circumstances.</li> </ul>	Janine Hearn	30 Jun 09	0%

**Recommendation 9**

“The National Commander should review operational instructions to improve guidance to firefighters on the use of gas detectors, provide more detailed information and guidance on the range of refrigerants in use in New Zealand, and include guidance on seeking advice before attempting to control leaks of unknown substances.”

**Responsibility:** National Commander

**Status:** Open

Work ongoing as detailed below.

**Action to date:**

Action	When	Evidence
1. Training information developed for refrigerants. This material will be included in TAPS training programmes.	30 Nov 08	Training material
2. NZFS policy introduced for gas detectors.	30 Nov 08	Multi-gas detector policy (E6-2a POP) on Firenet
3. New gas detector technical manual developed for the 200 additional gas detectors purchased.	30 Nov 08	Technical manual
4. Guidance on “seeking advice before attempting to control leaks of unknown substances” prepared and will be integrated into relevant National Commander's instructions.	30 Nov 08	Guidance document
5. Comprehensive draft of a NZFS “Hazardous Material Technical Manual” developed.	30 Nov 08	Draft manual

**Next steps:**

Action	Who	When	% complete
1. The guidance on “ <i>seeking advice before attempting to control leaks of unknown substances</i> ” integrated into the Hazmat Technical Manual and other relevant National Commander's instructions.	Brian Davey	30 Apr 09	50%
2. NZFS “Hazardous Material Technical Manual” introduced.	Paul McGill Jim Stuart-Black	31 May 09	90%

### ***Fire Service Response and Management***

#### **Recommendation 10**

**“The National Commander should request the investigation of a more robust form of connection from the hazmat-command vehicle into Fire Service data systems.”**

**Responsibility:** National Commander

**Status: Closed**

Recommendation addressed and no further action from the National Commander required.

**Action to date:**

<b>Action</b>	<b>When</b>	<b>Evidence</b>
NZFS has selected providers for the supply of satellite communication equipment and internet services for the new hazmat-command vehicles.	30 Jan 09	Letters to providers

**Recommendation 11**

**“The National Commander should establish formal security and scene handover procedures for major fires.”**

**Responsibility:** National Commander

**Status:** Open

Work ongoing as detailed below.

**Action to date:**

Action	When	Evidence

**Next steps:**

Action	Who	When	% complete
Research legal aspects of scene security and handover.	Megan Yardley	28 Feb 09	20%
NZFS procedure developed for major fire scene security and handover.	Brian Davey	30 Apr 09	0%

### **Other initiatives resulting from the inquiry report**

The following were not formal recommendations included in the Icepak report. Rather they are matters requiring attention as determined by the National Commander.

#### **12. Requirement for Approved Evacuation Scheme**

The report of the Inquiry referred to the need for the Icepak coolstore buildings to have an approved evacuation scheme.

The Department of Internal Affairs policy team is considering the requirement for building owners to provide and maintain evacuation schemes under Fire Service Act S.21A (d) when "storing or processing hazardous substances in quantities exceeding the prescribed minimum amounts", subject to the same threshold for occupancy. This wording needs to cover hazardous substances used in refrigeration systems.

The Department will consider the most appropriate mechanism to introduce any amendment when the legislative programme is known.

#### **13. Review of Media Management.**

The Chief Executive engaged former Director of Communications, Debbie Barber, to prepare a report with recommendations where appropriate on the Fire Service's response to the media during the course of the incident. The report was submitted 24 November 2008.

The report included a guidance document for senior officers on "Major Incident Media Planning".

**Corrective Action Plan Progress Report**

<b>Recommendation No.</b>	<b>Status</b>	<b>Estimated % Complete</b>	<b>Estimated Completion Date</b>
1	Closed	100%	30 Nov 08
2	Open	90%	30 Jun 09
3	Open	90%	31 Mar 09
4	Open	80%	31 May 09
5	Open	50%	30 Apr 09
6	Open	25%	30 Jun 09
7	Open	50%	30 Jun 09
8	Open	50%	30 Jun 09
9	Open	90%	31 May 09
10	Closed	100%	31 Dec 08
11	Open	10%	30 Apr 09