## **Before the Independent Hearings Panel**

## The Proposed Waikato District Plan (Stage 1)

**Under** the Resource Management Act 1991

In the matter of A submission by Fire and Emergency New Zealand on

the Proposed Waikato District Plan – Hearing 8A –

**Hazardous Substances** 

## Statement of evidence of Craig Sharman on behalf of Fire and Emergency New Zealand (submitter 378)

Date: 19 December 2019

## **Qualifications and experience**

- My full name is Craig Melville Sharman. I have practised as a planning professional for over 20 years. I hold a Bachelor of Resource and Environmental Planning from Massey University (1996) and a Master of Philosophy (Geography) from Massey University (1998). I have been a full member of the New Zealand Planning Institute since 2003.
- I am currently employed by Beca Limited ('Beca') in the position of Senior Associate Planning and am the team leader for the Beca Hamilton Planning Team. I have been employed in this capacity with Beca since 2017. Prior to 2017 I have worked in a variety of planning roles within consultancies and local government.
- Beca has a longstanding contract with Fire and Emergency New Zealand ('Fire and Emergency'), formerly the New Zealand Fire Service Commission, to review and respond to all notified plans, plan changes, resource consents and engineering codes of practice that may impact on Fire and Emergency's properties and operations across New Zealand. I have been involved in the delivery of planning advice given under this contract since early 2017 and, as such, am familiar with Fire and Emergency's role and responsibilities along with the way in which plans provide for the organisation's particular operational needs.
- I was involved with the preparation of the submission and further submission on the Waikato District Council ('WDC') Proposed Waikato District Plan ('Proposed Plan'). In preparing my evidence, I have reviewed the following documents to the extent that they relate to the relief sought by Fire and Emergency and refer to them where relevant:
  - Resource Management Act 1991 (RMA);
  - Section 42A report by WDC;

- Fire and Emergency New Zealand Act 2017 (FENZ Act);
- Fire and Emergency New Zealand's Statement of Intent 2017
   2021 (SOI);<sup>1</sup> and
- Fire and Emergency Statement of Performance Expectations 2019-2020 (**SPE**).

#### Code of conduct

I have read the code of conduct for expert witnesses in the Environment Court Practice Note. I agree to comply with this code of conduct. The evidence in my statement is within my area of expertise, except where I state that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might also detract from the opinions I express.

## Scope of Evidence

- 6 My evidence addresses:
  - The statutory role and responsibilities of Fire and Emergency where relevant in an RMA context and, therefore Fire and Emergency's interests in the Proposed Plan;
  - Fire and Emergency's submission on the Proposed Plan; and
  - The recommendations included in the section 42A Hearings Report that are relevant to the relief sought in Fire and Emergency's submission.
- I have referred to and used as a basis for my evidence discussions with various Fire and Emergency representatives including Ashley Cornor, Senior Counsel and Dr Trudy Geoghegan, National Hazardous Substances Advisor. Dr Geoghegan will also attend the hearing to answer any queries.

<sup>&</sup>lt;sup>1</sup> Prepared under the Crown Entities Act 2004

## **Background and Statutory considerations**

- Fire and Emergency was established by the FENZ Act on 1 July 2017. The FENZ Act, among other matters, created a unified fire services organisation for New Zealand. Some organisations continue to provide independent fire response capability, such as industry brigades (which are privately established to protect specific premises, usually used for industrial or forestry purposes) and defence fire brigades (which generally operate in defence areas).
- 9 The FENZ Act sets out Fire and Emergency's objectives, functions and powers. Section 10 establishes its principal objectives and section 11 recognises the broader services of Fire and Emergency by outlining its main functions, as follows:

#### "10 FENZ's principal objectives

The principal objectives of FENZ are—

- (a) to reduce the incidence of unwanted fire and the associated risk to life and property:
- (b) in relation to the main functions of FENZ under section 11 and the additional functions of FENZ under section 12,
  - (i) to protect and preserve life; and
  - (ii) to prevent or limit injury; and
  - (iii) to prevent or limit damage to property and land; and
  - (iv) to prevent or limit damage to the environment.

## 11 Main functions of Fire and Emergency

- (1) Fire and Emergency must carry out the main functions specified in subsection (2).
- (2) The main functions are—
  - (a) to promote fire safety, including providing guidance on the safe use of fire as a land management tool; and
  - (b) to provide fire prevention, response, and suppression services; and
  - (c) to stabilise or render safe incidents that involve hazardous substances; and
  - (d) to provide for the safety of persons and property endangered by incidents involving hazardous substances; and
  - (e) to rescue persons who are trapped as a result of transport accidents or other incidents; and
  - (f) to provide urban search and rescue services; and

- (g) to efficiently administer this Act.
- (3) Fire and Emergency must also-
  - (a) perform and exercise the functions, duties, and powers conferred or imposed on Fire and Emergency as a main function by or under this Act and any other enactment; and
  - (b) perform any other functions conferred on Fire and Emergency as a main function by the Minister in accordance with section 112 of the Crown Entities Act 2004.
- (4) Subsection (3)(a) is subject to section 12."
- 10 Fire and Emergency's additional functions are set out in section 12 and include:
  - responding to medical emergencies;
  - responding to maritime incidents;
  - performing rescues;
  - providing assistance at transport accidents;
  - responding to severe weather-related events, natural hazard events and disasters;
  - responding to incidents in which a substance presents a risk to people, property or the environment;
  - promoting safety in hazardous substances management; and
  - responding to other situations where Fire and Emergency has the capability to assist.
- 11 Fire and Emergency will assist with these additional functions, to the extent that it has the capability and capacity to do so, without prejudicing its ability to perform its main functions efficiently and effectively. To fulfil its statutory objectives and also community expectations, Fire and Emergency requires, amongst other matters, the ability to efficiently and effectively respond to emergencies.
- 12 Fire and Emergency's interest in the Proposed Plan is underpinned by its statutory objectives and functions and the need to provide for:
  - The ability to undertake training activities for firefighters, including live fire training and equipment training.

- The ability to establish fire stations throughout the district to respond to population growth and development and to enable efficient responses to emergencies.
- The ability to arrive quickly at emergencies and to effectively fight fires and save lives.
- In the remainder of my evidence I specifically address the relief sought in Fire and Emergency's submission, in respect of matters covered by Hearing 8A Hazardous Substances.

## The Fire and Emergency Submission

- In seeking to meet its statutory obligations, Fire and Emergency made a comprehensive submission across various sections of the Proposed Plan in support of, or seeking amendments to, existing provisions, and seeking additional provisions.
- I have reviewed Council's section 42A report relating to the
  Hazardous Substances provisions and confirm full support and/or
  agreement to the changes proposed by Councils section 42A
  Reporting Officer, in so far as they relate to the Fire and
  Emergency submission for the following provisions:

## 15.1 Chapter 10 – Hazardous Substances

- Objective 10.1.1 Effects of hazardous substances (Sub 378.8); and
- Policy 10.1.3 Residual risks of hazardous substances (Sub 378.10).
- Several other submission points are also discussed in more detail below (Sub 378.9, 378.14, 378.81, 378.24, 378.84, 378.92, 378.100, 378.104, 378.110, 378.33, 378.41, 378.48, 378.54, 378.75 and 378.78).

# Submission Point [378.9] on Policy 10.1.2 'Location of new hazardous facilities'

- 17 Fire and Emergency supports in part Policy 10.1.2 on the basis that residual risk associated with the storage, use, or disposal of hazardous substances is managed to ensure that the effects on people, property and the environment are acceptable.
- However, while Fire and Emergency recognise that "sensitive land use" is defined, Fire and Emergency seek clarity around what a sensitive environment includes, as this is not defined in the District Plan as notified.
- As outlined in Fire and Emergency's submission, fire stations must be strategically located within and throughout communities to maximise their coverage and response times so that they can efficiently and effectively provide for the health and safety of people and communities by being able to respond to emergency call outs in a timely way, thus avoiding or mitigating the potential for adverse effects associated with fire hazard and other emergencies. As such many fire stations are located in residential areas that border residential properties.
- As a sensitive land use includes residential activity, and Policy 10.1.2 requires hazardous facilities to be separated from incompatible activities (such as sensitive land use and sensitive environments) this could significantly restrict new fire stations from being sited within an urban environment, as otherwise they will be in conflict with Policy 10.1.2. While fire stations located in the urban environment will generally be able to avoid bulk storage of hazardous substances, there will still be the requirement for general storage of hazardous substances on site. As such Fire and Emergency is seeking clarity around what a sensitive environment entails, and how that compares to sensitive land use.

## **Submission Points [378.14] New Definition for 'Non-Hazardous Gas'**

Fire and Emergency requested the addition of a new definition for the term 'non-hazardous gas' to provide clarity as to whether the volumes proposed in Appendix 5 are the compressed or uncompressed volumes held. For example, a breathing apparatus (BA) cylinder (9L) at 300 Bar has approximately 2.6m³ of air in it. This definition is important to Fire and Emergency as it will assist in determining whether the District Plan provides for the storage of a sufficient amount of BA cylinders at a station in a residential area.

## Section 42A Report Recommendation regarding Submission 378.14

- The Reporting Officer has relied on expert advice sought from Norbert Schaffoener from Resources Consulting with regard to technical aspects of the hazardous substances topics to determine whether a definition for "non-hazardous gas" is required to provide clarity to thresholds specified in Appendix 5.
- Mr Schaffoener has indicated that the Hazardous Substances and New Organisms Act 1996 (HSNO Act) does not define "non-hazardous gas". Further, Mr Schaffoener points out that the conditions applicable to determine quantity are clearly set out in Rule (2) of Table 5.1 in Appendix 5 and suggests that in order to assist with clarity of the rule, the entry under non-hazardous gases is amended to 'All non-hazardous gases, compressed or liquified', as overpressure is the hazard to be controlled.
- In response to the BA tanks example included in Fire and Emergency's submission, Mr Schaffoener points out that even for the most sensitive zones (with the lowest threshold of 200m³), over 70 BA units can be stored as a permitted activity, which would include what is stored on up to 10 HAZMAT and other response vehicles.

- 25 Based on the above advice from Mr Schaffoener, the Reporting Officer considers that a definition for non-hazardous gas is not necessary, as the quantity threshold table included in Appendix 5 adequately covers non-hazardous gas, and in the case of fire stations and associated fire operations, the amounts required would likely be permitted.
- The Reporting Officer also notes that all existing fire stations would have existing use rights; therefore, any concerns regarding compliance with the District Plan requirement would occur with respect to future fire stations or additional activities to those currently undertaken at existing sites.
- 27 Fire and Emergency seek clarity about Mr Schaffoener's comment in section 24 "...which would include what is stored on up to 10 HAZMAT and other response vehicles" and whether this statement means that he considers BA to be independent of the amount of corrosives held.
- Fire and Emergency agree in part to the Reporting Officer's recommendations however concur with Mr Schaffoener's suggestion that clarity is required for the entry under non-hazardous gases in Table 5.1 of Appendix 5 and therefore request that the table is amended to read 'All non-hazardous gases, compressed or liquified'.
- 29 Fire and Emergency do not wish to be reliant on establishing existing use rights at fires stations within the district. Whilst the fire station as a facility will have existing use rights, providing evidence of the amount and type of hazardous substances stored and used at each fire station will be problematic and uncertain. Fire and Emergency instead is seeking an enhanced level of clarity as to the permitted activity thresholds within the District Plan.

## **Submission Point [378.81] Appendix 5 – Hazardous Substances**

- 30 Fire and Emergency supports in part Appendix 5 as while fire stations and associated firefighting activities involve the use and storage of hazardous substances at quantities that are considered minor, it is possible that the thresholds within Appendix 5 for some zones will trigger the need for consent. This could affect Fire and Emergency's ability to operate as easily and smoothly as needed.
- 31 Fire and Emergency has encountered a number of challenges and limitations with the way the hazardous substances rules are written in District Plans. Some of Fire and Emergency's issues relate to:
  - Unrealistic quantity limits;
  - Bunding requirements that do not differentiate between solids and liquids and/or that are significantly different to Health and Safety at Work Act 2015 (HSW)/HSNO Act;
  - The use of the hazard ratio system; and
  - The fact that a number of fire stations are located in urban areas but there are no provisions to account for their specialist activities.
- As such, Fire and Emergency requested in their submission that the thresholds within Appendix 5 be amended as follows:
  - The 8.3 Classification has a relatively low limit in many zones - lots of household products are eye corrosives from dishwashing powder to laundry powder. This would limit and potentially prevent Fire and Emergency having a HAZMAT vehicle based in this zone as they carry neutralising agents which are eye corrosives. A greater concern is that some of Fire and Emergency's fire

retardants and foams also have this classification and this limit could potentially require that Fire and Emergency need a resource consent to hold a small amount or any of these chemicals on site, as a lower limit would be largely taken up by ordinary household chemicals used on site.

The 8.3A classifications is for eye corrosion. A person is only affected by product with this hazard class if they come into direct contact with the product. This hazard is also managed under the HSW and HSNO legislation usually via labelling and personal protective equipment requirements. Fire and Emergency appreciates the need to prevent large volume of hazardous substances being stored next to sensitive areas in a way that it could affect people on neighbouring properties, but considers that this limit does not account for the fact that many household products trigger this classification. We note that household products in household quantities are not excluded from the trigger limits as they are for some provisions of HSW.

Fire and Emergency also note that some threshold limits are reduced to prevent hazardous substances entering waterways. However, this is generally an issue for liquid substances that can flow into waterways. Some of Fire and Emergency's fire retardants are solids rather than liquids and the reasons for the limits specified in the District Plan do not make sense for solids. Fire and Emergency's current main fire retardant is a powder however Fire and Emergency are also looking at new foams which come in bricks. As such, the higher restrictions for waterways do not make sense for these products as they do not leak or flow.

## Section 42A Report Recommendation regarding Submission 378.81

The Reporting Officer requested further information from Fire and Emergency regarding the quantities of hazardous substances stored at fire stations and on HAZMAT vehicles.

- Fire and Emergency confirmed that citric acid (classes 6.1E, 6.3B, 8.3A) and sodium carbonate (classes 6.1D, 6.3, 6.4A) are stored at some fire stations and approximately 120kg of neutralising agents are stored on HAZMAT vehicles. With respect to sodium carbonate, Mr Schaffoener has confirmed that this substance is permitted by the Activity Status Table in any quantity.
- In the 42A report, Mr Schaffoener also indicated that the only product that is likely to trigger resource consent is the class 8.3 substances (mainly citric acid). However, depending on which zones the stations are located in, this may or may not be an issue.
- Through the further information request, Fire and Emergency confirmed that there are a number of other class 8.3A products on site such as laundry detergents, bleach, sanitisers, household cleaning products, specialist cleaning product for equipment and domestic workshop products such as CRC and methylated spirits.
- As raised in paragraph 32 above, the 8.3 classification has a relatively low limit in many zones. As some ordinary consumer chemicals used on site are of the 8.3 classification, this would limit and potentially prevent Fire and Emergency having a HAZMAT vehicle based in the zones with significantly lower limits (such as the Residential, Village and Country Living Zones) as they carry neutralising agents which are eye corrosives.
- A greater concern is that some of Fire and Emergency's fire retardants and foams also have this 8.3 classification and this limit could potentially require that Fire and Emergency need a resource consent to hold a small amount of these chemicals on site, as a lower limit would be largely taken up by ordinary consumer products.
- Fire and Emergency therefore requests that class 8.3A consumer products be excluded from the quantity limits across the District's

zones to remove the potential for consumer products to put fire stations over the maximum thresholds and ensure that Fire and Emergency have the ability to operate as easily and smoothly as needed. Fire and Emergency note that the WorkSafe provisions (under Health and Safety at Work (Hazardous Substances) Regulation 2017 require all hazardous substances to be managed appropriately, but recognise that consumer (household) products held in consumer quantities present a very low risk and are therefore exempt from some provisions such as the need to have a safety data sheets.

- Fire and Emergency seek that Council consider removing the more restrictive thresholds in Appendix 5 for hazardous substances in proximity to waterways where the substance is in solid form.
- 41 Fire and Emergency also seek further clarity around Rule 1 of Appendix 5. Fire and Emergency consider that this rule is unclear as to whether the use, storage and disposal of hazardous substance sub-classes listed in this rule are exempt from Table 5.1 of Appendix A and are therefore permitted in any quantity or whether they automatically default to a discretionary activity.

Submission Points [378.24] [378.84] [378.92] [378.100] [378.104] [378.110] [378.33] [378.41] [378.48] [378.54] [378.75] [378.78] Hazardous Substances Rules – All Zones

Fire and Emergency oppose the hazardous substances rules across all of the zones of the District Plan. Whilst fire stations and associated firefighting activities involve the use and storage of hazardous substances at quantities that are considered minor, it is possible that the permitted provisions may not provide for Fire and Emergency to operate as required and could therefore affect their ability to operate as effectively as needed.

- Fire and Emergency have therefore sought to exclude fire stations and associated fire service operations from the following provisions:
  - Chapter 16 Residential Zone 16.2.5 Hazardous substances
  - Chapter 17 Business Zone 17.2.5.4 Hazardous substances
  - Chapter 18 Business Town Centre 18.2.5 Hazardous substances
  - Chapter 19 Business Zone Tamahere 19.2.5 Hazardous Substances
  - Chapter 20 Industrial Zone 20.2.6 Hazardous Substances
  - Chapter 21 Industrial Zone Heavy 21.2.6 Hazardous substances
  - Chapter 22 Rural Zone 22.2.4 Hazardous substances
  - Chapter 23 Country Living Zone 23.2.4 Hazardous substances
  - Chapter 26 Motorsport and Recreation Zone 26.2.9
     Hazardous substances all precincts
  - Chapter 24 Village Zone 24.2.5 Hazardous substances
  - Chapter 27 Te Kowhai Airpark Zone 27.2.11 Hazardous Substances
  - Chapter 28 Rangitahi Peninsula Zone 28.2.5 Hazardous substances

## **Section 42A Report Recommendation**

- The Reporting Officer has recommended that the zone-specific rules for hazardous substances be amalgamated into one rule to align with the national planning standards. This one rule will apply across all zones of the Waikato District.
- Fire and Emergency support in part the recommended new Rule 10.3.1 Hazardous Substances in All Zones, however seek clarification of the permitted activity rule (P1) and how it relates with the interpretation of Rule 1 of Appendix 5 and whether the use, storage and disposal of hazardous substance sub-classes listed in this rule are exempt from Table 5.1 of Appendix A and are therefore permitted in any quantity or whether they automatically default a discretionary activity. Clarification of this rule has also been sought in paragraph 41 above.
- While Fire and Emergency generally appreciate the reasoning for not excluding fire stations and associated fire service operations from the permitted activity provisions, Fire and Emergency remain concerned about the lack of provision for the temporary use and bulk storage of hazardous substances during emergency events.
- Fire and Emergency often requires the temporary storage of chemicals necessary for providing an emergency response during an emergency and within a short period after the emergency i.e. there may be a small period of time where Fire and Emergency may need a truck to remove a container which has firefighting chemicals in it. Fire and Emergency may need to wait for several working days after the emergency has finished for a contractor to do that work. Not providing for this could restrict Fire and Emergency's ability to respond to bush or other major events e.g. major wildfires (such as occur in Nelson and the Port Hills of Christchurch) or large acid spills and other HAZMAT events.
- Another example of circumstances where large quantities of fire retardant and foam may be used is during events such as the

Nelson fires in 2019 where 5,600kg of product was being used per day, and the temporary storage of up to 15 – 30,000kg or L of product was needed to be stored on site. In such events, quantities are unlikely to comply with permitted volumes and therefore resource consent would be required.

- It is noted that in most cases, storage of large quantities of hazardous substances during temporary emergency events are either stored at airfields, aircraft operations or local stations and are set up to achieve the HSW and HSNO standards and therefore remain regulated.
- Given that emergency events (such as the Nelson Fires) are unplanned, it is unrealistic and impracticable to expect Fire and Emergency to apply for resource consent for the temporary use and storage of hazardous substances above the permitted thresholds. Reliance on existing use rights in these sorts of circumstances is also considered too uncertain to be tenable for Fire and Emergency.
- 51 The District Plan as notified puts Fire and Emergency in a position where responding to large emergency events could result in a breach of the RMA in order to bring in the necessary products to resolve the issue and prevent harm to people or the environment. Consequently, non-compliance with the District Plan provisions could see Fire and Emergency prosecuted, should the District Plan provisions be enforced during temporary emergency events.
- This compromises Fire and Emergency's ability to fulfil its statutory objectives and also community expectations, and amongst other matters, the ability to efficiently and effectively respond to emergencies. Fire and Emergency therefore require a level of assurance that they can continue to operate without the risk of infringing statutory requirements in order to meet their own statutory functions under the FENZ Act.

- It is also noted that Section 330 of the RMA does not apply to Fire and Emergency therefore removing the ability for Fire and Emergency to apply for resource consents retrospectively.
- Fire and Emergency therefore request that the panel consider the exclusion of temporary emergency events associated with fire service operations from the provisions of proposed Rule 10.3.1 P1.
- Fire and Emergency would also like to note that while outside of the scope of Fire and Emergency's submission, the 'Hazardous Waste' definition requires a correction where the reference to 'Hazardous Substances (Minimum Degrees of Hazard)

  Regulations 2001' needs to be replaced with 'Hazardous Substances (Minimum Degrees of Hazard) Notice 2017'.
- In preparing this hearing evidence I have considered the submission by Fire and Emergency and consider the amendments proposed are appropriate, particularly to recognise the contribution of emergency services in providing for the health, safety and wellbeing of communities.

Charran