

Waikato District Council – Hazardous Substances Management Background Report

**PROPOSED HAZARDOUS SUBSTANCES PROVISIONS OF THE WAIKATO
DISTRICT PLAN - EXPLANATION OF ISSUES IN RELATION TO SUBMISSIONS
TO SUPPORT COUNCIL'S S. 42A REPORT**

r e s o u r c e s

Hazardous Substances Management

Proposed Hazardous Substances Provisions of the Waikato District Plan – Issues in relation to submissions

Prepared for
Waikato District Council

Prepared by
Norbert Schaffoener
MNZPI
resources consulting

Revision History


Revision	Revision Date	Details	Authorised	
			Name	Signature
1	31/10/2019	Draft for comment by client	N Schaffoener	
2	21/11/2019	Final	N Schaffoener	

Table of Contents

1.0	INTRODUCTION	- 4 -
2.0	STATUTORY CONTEXT FOR LAND USE PLANNING IN RELATION TO HAZARDOUS FACILITIES	- 5 -
3.0	COUNCIL'S ROLE IN MANAGING LAND USE	- 9 -
4.0	STRUCTURE OF PROPOSED PROVISIONS	- 13 -
5.0	THE AST AS METHOD TO DETERMINE THE ACTIVITY STATUS	- 14 -
6.0	REFERENCES	- 16 -

1.0 INTRODUCTION

This background report was prepared at the request of the Waikato District Council to append to Council planner's S42A report. It includes the following:

- Explanation of the function of relevant legislation, specifically the RMA, HSNO & HSW, concerning the management of hazardous substances.
- Setting out Council's role in managing land use, outlining circumstances where RMA controls are considered necessary, and discussing the approach that WDC has taken to the rules for the specific zones.
- Explanation of how the proposed rules do not duplicate HSNO or HSW requirements and outline the benefits to regulate through District Plan rules.
- Discussion of the benefits of a single chapter in the District Plan against rules for sensitive zones (i.e. Residential, Village, Country Living), Industrial (including heavy) and Business zones and Specific Purpose zones.
- Explanation of the role of the AST in Appendix 5.

The purpose of the report is to address broadly a number of common themes raised in submissions. More detailed comments on individual submission points are included in Appendix 1.

2.0 STATUTORY CONTEXT FOR LAND USE PLANNING IN RELATION TO HAZARDOUS FACILITIES

A number of statutes are concerned about different aspects of managing hazardous substances. The Hazardous Substances and New Organisms (**HSNO**) Act 1996 is, in relation to hazardous substances, currently primarily providing for their assessment. The Health and Safety at Work (**HSW**) Act 2015 incorporates the management of hazardous substances for the purpose of protecting workers and workplaces. The Resource Management Act 1991 (**RMA**) is the primary planning and environmental statute dealing with public health and safety, and the environment. It is the only statute with functions and processes in relation to the use of land for managing hazardous facilities.

There are other statutes that include specific aspects of the management of hazardous substances throughout or applying to part of their lifecycle, such as transport and building legislation, or substance-specific legislation such as the Medicines Act. None have a role comparable to the RMA.

2.1 The RMA

The RMA includes as a purpose in section 5 enabling 'people and communities to provide ... for their health and safety'. Section 31 (1) (a) specifies as one of the functions of territorial authorities 'the establishment, implementation and review of objectives, policies and methods to achieve *integrated management*' of the effects of land use. Section 31 (1) (b) includes the specific control of effects of natural hazards; man-made hazards are not mentioned (with the specific exception of contaminated land, generally a result of the mismanagement of hazardous substances). The 4th Schedule includes (after all amendments) the assessment of adverse effects of hazardous installations as a relevant matter [it is noted that the term 'hazardous installation' is not defined in the RMA.]

The Resource Legislation Amendment Act 2017 removed (among many other changes to the RMA) the specific function of territorial authorities in Section 31(1) (b) of the RMA with regard to the management of hazardous substances. The same applies to the equivalent in section 30 for the specific function of Regional Councils and the part of section 62 which provides for the split of functions within a region to be specified in a Regional Policy Statement. While that arrangement had generally worked well across the country for over 25 years, some people considered the possibility of duplication of controls under other legislation to be a problem at the time. There was little factual information or analysis provided in 2017 by the Ministry for the Environment (**MfE**) to support the removal of section 31 (1) (a) (and the equivalent in s. 30), apart from a perception of possible overlaps in the implementation with requirements of the Hazardous Substances and New Organisms (**HSNO**) Act 1996 and its regulations.

2.2 Functions of HSNO legislation

Apart from the management of new organisms the HSNO legislation is currently primarily providing for the overall approval process and classification of newly imported or manufactured hazardous substances, or the re-assessment of some selected existing hazardous substances, where that is deemed necessary. Relevant controls remaining in place under the HSNO legislation in some form relate to minimum requirements for disposal, fireworks, pesticide application and some miscellaneous provisions which are included in various EPA Notices.

The majority of the minimum substance-specific and lifecycle requirements for hazardous substances have been moved from the HSNO regime to the workplace safety legislation. All related HSNO Regulations were repealed and are not in force anymore (there appears to be a widespread lack of knowledge of this fact).

While the amendments to the HSNO legislation have reduced its overall scope significantly with regard to the management of hazardous substances, it is important to remember that the HSNO legislation is not, has actually never been, and wasn't designed to be, a land use planning statute concerned with public health and safety.

2.3 Functions of HSW legislation

2017 saw the Health and Safety at Work (Hazardous Substances) Regulations 2017 under the Health and Safety at Work (**HSW**) Act 2015 starting to come into effect. The majority of the minimum substance-specific and lifecycle requirements for hazardous substances had been moved from the

HSNO regime to the workplace safety legislation, in particular – in somewhat abbreviated form - to the HSW (Hazardous Substances) Regulations 2017. The requirements of the regulations apply to existing workplaces and are not a planning tool of any kind for the establishment of a new hazardous facility.

The purpose statement of the HSW Act 2015 refers to ‘... a balanced framework to secure the health and safety of workers and workplaces ...’. While it is debateable what balance is supposed to be achieved and what the health of a workplace is, it is clear that this is not an environmental protection or sustainability objective but one in relation to occupational health and safety.

It is claimed in some of the submissions that land use planning requirements for hazardous facilities are unnecessary as the HSNO and HSW legislation, and in particular its Regulations, provide a comprehensive, complete and maximum level of control on all hazardous substances. As an example of limitations of the HSW Regulations in managing hazardous substance risks to acceptable levels in all circumstances, below is a brief review of one aspect of the HSW (Hazardous Substances) Regulations 2017. I outline what the HSW Regulations do not require with regard to emergency management planning, and what is sensibly a resource management matter. This can be repeated for other matters in relation to the Regulations, however, in the time available it is impossible for me to document all the respective differences – this would be a task for MfE but to my knowledge has not been undertaken as yet.

The provision in the HSW (Hazardous Substances) Regulations 2017 specifying the circumstances and content of emergency response plans are in Regulations 5.6 to 5.13. They do only apply for reasonably foreseeable emergencies (Regulations 5.7 (2) and 5.7 (3)), less likely events are not necessarily covered. This is particularly important where an adverse effect of an emergency in a particular location may fall within the definition of RMA s.3(f) as one of low probability which has a high potential impact. The ability to provide for such emergencies, in addition to the minimum HSW requirements, is location specific and hence a resource management matter. Also, some of the thresholds in the Regulations are relatively high before controls apply. The higher thresholds for emergency response planning are as high as five or ten tonnes. These represent significant quantities in sensitive environments or zones which consequently rely on land use controls for emergency management if stored in quantities below these thresholds in those areas.

In addition the HSW (Hazardous Substances) Regulations do NOT provide for any of the following:

1. Any involvement of the Council, local community or even affected parties off-site to be involved in the development, testing/review or implementation of emergency response plans, be it in the form of consultation about off-site effects and the appropriate response to those, or even being informed about the existence or content of such plans;
2. Any response in terms of buildings, structures or environmental features off-site potentially affected by an emergency (specific reference in Regulation 5.7 (3) (iii) is limited to injury to persons);
3. Any response to hazardous substance emergencies off-site to manage potential cumulative effects;
4. Any information to be provided to potentially affected off-site parties BEFORE an emergency, even just to inform about the type of emergency likely or possible;
5. Any meaningful differentiation in controls for more sensitive land use activities or environments reflecting variable risks (this applies in fact to most HSW Regulations and EPA (HS) Notices).

There may be additional matters that I have not identified in the time available to compile this list. It is my professional opinion that these matter are important enough to warrant an ability to add to the minimum controls under legislation other than the RMA, when considered necessary in the resource management context.

2.3 Government position

Some submissions reflect a particular perception of central Government's position on land use planning for managing hazardous facilities. Specifically it is implied that central Government does not want local authorities to manage such land use activities.

While there is no direction from central Government in this regard, there has also not been qualified guidance for some time (the post-HSNO Land Use Planning Guide for Hazardous Facilities 2002 being the last). However, various recent Government publications clearly acknowledge the role of local Government in the RM context. As an example below are some examples from the HSNO Enforcement Report 2018 by the Environmental Protection Authority (EPA).

EPA's HSNO Enforcement Report 2018

In its HSNO Enforcement Report 2018 published in June 2019 the EPA assesses the enforcement of the HSNO Act 1996 for the 2017/18 financial year.

On the RMA the report states the obvious:

"RMA rules and consents relating to hazardous substances and new organisms are additional to HSNO and are only valid when they provide additional requirements (i.e. they cannot remove HSNO requirements)."

In the report's summary the EPA states that:

"Significant and complex hazardous substances issues have been identified through the compliance work of the agencies listed above. Some of these issues have included legacy sites that have required a high level of resources to resolve the risks to public safety. If prompt, connected, and assertive action had been taken at the appropriate time, the level of resourcing required to manage the situation may have been reduced, and the risk mitigated."

Under the heading 'Managing Environmental harm' the EPA report states on enforcement of hazardous substances controls:

"HSNO requirements could interface with, or complement territorial authority powers under other legislation to enable further hazardous substances harm reduction. Effective enforcement involves ensuring regulatory boundary issues, including the need for overlapping jurisdictions to be compatible, to ensure that any gaps identified do not exacerbate problems."

Enforcement agencies must take a wider view and consider the desired outcome. They need to be able to confidently select the most effective tool from a number of regulatory frameworks, to effectively manage wider hazardous substances issues. Issues such as management and disposal of wastes, contaminated sites, discharges to the environment and emergency management and safety cannot be addressed under a single Act within the New Zealand legal framework as it now stands."

Weaknesses noted need to be considered in this wider context. Enforcement under one, for example by councils using RMA, can manage some incidents that could also be managed under the HSNO Act. The important thing is that incidents requiring an enforcement response are noticed and responded to in one way or another."

Concerning the current regulatory context, particularly the recent transfer from HSNO to the HSW regime, the report states the following:

"With the fragmented nature of New Zealand legislation, combined with a poor understanding of the roles, and the regulatory tools available to manage hazardous substances, there is a risk that an effective response to incidents or problems may be limited because of the concern as to whether it fits within the enforcement agencies' direct jurisdiction."

There is also a general shortage of skills and knowledge across many enforcement agencies relating to hazardous substances, their hazard properties, proper treatment, and disposal. This affects not only HSNO enforcement, but enforcement of their legislative regimes and effective prioritisation of any operational activity.

The changes in legislation and the resulting transition period have meant that past non-compliance issues are now framed in a new context, which adds further complexity. This includes issues that crossed or now cross the boundaries of a number of legislative frameworks. Examples of this include confusion relating to the places where activities involving hazardous substances are being carried out.”

On the present function of the HSNO legislation managing hazardous substances and the role of local government the report finds that:

“The largest quantity of hazardous substances in any territorial council area are in workplaces and are now managed under HSWA, not the HSNO Act. Feedback from the 2017 discussions with councils indicated that a major concern was with large volumes of hazardous material, and these were almost exclusively held in workplaces. Councils will need to refocus concerns with these premises away from the HSNO Act activity and engage more in compliance activity under other legislation, such as RMA and HSWA.... While the decrease in many councils’ capabilities to undertake HSNO enforcement is a concern, in some cases it merely reflects the fact that the highest priorities relating to hazardous substances, such as storage conditions and sites with significant quantities of hazardous substances, are no longer regulated under the HSNO Act. Those councils undertaking enforcement are still adjusting to the changes of responsibilities between the different Acts, especially as the focus of previous enforcement work was workplaces that contain hazardous substances.”

2019 Report on Hazardous Substances Compliance

In 2018 MfE and the EPA set up a ‘Hazardous Substances Compliance System Technical Working Group’. The reasons for that are set out in the report referred to above:

“As a result of incidents involving the legacy of poor compliance in the past, including the Concours Electroplating incident in Timaru, the EPA is now examining the enforcement of hazardous substances regulation in a wider context. The problems have involved failings under more than one Act. An independent Technical Working Group has been set up by the EPA and the Ministry for the Environment to make recommendations for improving the national hazardous substances compliance system in general. This should help improve understanding, and ultimately performance, on those compliance issues that involve a number of different Acts and enforcement agencies.”

The terms of reference for the Technical Working Group states as context that the system comprises ‘a complex framework of legislation’ - and this specifically lists the RMA – and operations and processes that are managed by a variety of agencies, including territorial authorities. The independent Working Group reported back in June 2019 but the report has not been made publicly available at the writing of this report.

[Note: Incidentally the terms of reference also mention a review of the Health and Safety at Work (Hazardous Substances) Regulations 2017 to be conducted by MBIE and WorkSafe NZ already. The rationale for that – before the regulations are even fully in force – appears to be the wholesale transfer of requirements from the HSNO regime to the new Regulations without detailed analysis at the time.]

In the context of above, the NPS, the fact that the current Government has a different position to the previous – see the latest proposed RMA amendments – it is evident that central Government is not opposed to sensible land use management approaches such as what is proposed.

3.0 COUNCIL'S ROLE IN MANAGING LAND USE

To achieve integrated management of the effects of land use, all relevant hazards and risks should be considered together. This applies to man-made and natural hazards, and the interaction between them. It also applies to the interaction between land uses, in particular if one is the source of a man-made hazard and the other is sensitive to it. The following are matters widely acknowledged by the majority of local authorities as relevant in land use safety planning for hazardous facilities:

- The effects of hazardous facilities on any part of the natural environment and eco-systems within a district (and possibly beyond)
- The effects of hazardous facilities on public health and safety, particularly, but not exclusively, in relation to sensitive land uses
- The interaction of identified natural hazards and hazardous facilities, and possible synergistic effects due to that interaction
- Cumulative risks from hazardous facilities on different sites (in particular where a new hazardous facility is proposed in the vicinity of an existing hazardous facility)
- The reverse sensitivity effects of new sensitive land uses on existing hazardous facilities with relevant off-site risks.

In addition, adverse effects which can only be managed within the resource management regime include disruption of access or egress to nearby properties, property damage or generically business continuity of activities adversely affected by a hazardous facility, or the financial and liability risks to the local authority itself.

Where benefits of a hazardous facility are identified and quantified, the distribution of benefits must be considered in relation to the distribution of risks.

It is noted that the provisions by WDC on this matter received submissions generally in support from the Waikato Regional Council, the Waikato District Health Board, Tainui and Fire and Emergency New Zealand (FENZ).

Of the options to update and consolidate provisions or doing nothing Council has rightly chosen the former. Doing nothing, while possible, is not considered an appropriate option as it does nothing to protect people, local communities or environmental features from risks associated with specific hazardous facilities, beyond the legal minimum of other legislation in relation to matters other than land use safety planning. It is not an approach that has been favoured by the vast majority of local authorities in New Zealand in the two decades the RMA and HSNO legislation have been in place together. Specifically, it is also not an approach taken by any of the Councils neighbouring the Waikato District. This approach would expose the Waikato District Council to environmental, legal and consequently financial risks if incidents occur with adverse effects which could be prevented. The approval of buildings which turned out to be leaky under previous building legislation, or of subdivisions of contaminated land which have proven to be costly to many local authorities are relatively recent examples of where 'doing nothing' (or doing little) has led to highly undesirable results. It is not without some irony that contamination caused by the mismanagement of hazardous substances has become a more prominent matter in the RMA regime over time.

The following provides additional detail on the matters identified above.

3.1 The Effects on the Natural Environment and Eco-systems

The primary environmental statute concerned with sustainable management and the protection of the environment is the RMA. The protection of workers and workplaces is not designed, or able to achieve, protection of the natural environment or eco-systems. Relevant effects include the risks of unintended releases of toxic, eco-toxic and environmentally harmful substances and both acute and long-term consequences on the environment. While it is assumed in the proposed provisions that such adverse effects can be largely contained within a site for the vast majority of hazardous facilities (which would be permitted without any standards or performance requirements applying), some more significant facilities may need to be assessed on a case-by-case basis to establish whether the risks are acceptable in a specific location.

3.2 The Effects on Public Health and Safety

There is a widespread misconception that the HSNO and HSW legislation include specific public health and safety requirements beyond workplaces from hazardous substances activities. This is incorrect. There is no control mechanism in either legislation to influence land use beyond the boundary of a hazardous facility (being a workplace). This includes the types of land use activities, the number of people around a facility at any given time, the susceptibility to risk of the public or the environment in those areas, the comprehension of people outside the workplace of the risks originating from that workplace or a number of other matters relevant to land use safety planning. While PCBUs under the HSW legislation have a somewhat ill-defined (or sometimes misinterpreted) duty of care (under s. 36 HSWA), this cannot practically extend beyond the boundary of the facility. Apart from that the duty extends only 'as far as reasonably practicable' in any case, a requirement to provide any information, training, instruction or supervision for example is by its very definition limited to people within a workplace and cannot include the general public. There cannot be language, comprehension, physical ability or any other relevant type of test undertaken under the HSW legislation to establish compliance for any member of the public potentially affected by a hazardous substance incident. This is common sense, and there does not appear to be any case law questioning that.

It is noted that WorkSafe NZ in its Introduction to the Health and Safety at Work Act 2015 specifies that:

“The type of training, instruction or supervision required will depend on the nature of the work carried out and the experience of the workers, and the risk that workers and others, such as clients and customers, are exposed to.”

Clients and customers would generally be visitors to a workplace, not the general public outside of the workplace over which a PCBU has no control whatsoever.

The effects of land use activities involving hazardous substances on public health and safety are first and foremost a resource management matter, and activities of relevant significance (i.e., storing/using hazardous substances above specified thresholds) ought to be assessed in the land use planning context.

3.3 The Interaction between Natural Hazards and Hazardous Facilities

The issue of interaction between natural hazards (such as land instability, coastal hazards, seismic events, flooding etc.) and hazardous facilities has been recognised for some time. In particular a natural event may damage a hazardous facility and trigger the release or reaction of one or more hazardous substances with adverse effects on the surrounding environment. This is a location (and natural hazard) specific risk which is not addressed by HSNO or HSW requirements.

It is understood that particularly some flooding hazards (and potentially associated land instability) may have been identified as being relevant for the Waikato District. These matters are best addressed in a Natural Hazards section of the WDP (which I understand is the next Stage of the Plan Review process). Therefore these matters would not need to be addressed in specific controls in the provisions for the management of hazardous facilities, apart from assessment matters (information requirements) for more significant facilities, but appropriate cross-references between the two sections will need to be included in the Plan.

3.4 Cumulative Risks

Most controls under the HSNO or HSW legislation do not specifically take into account the additional risk that may result from the accumulation and concentration of a range of different hazardous substances present in different, not even necessarily adjacent, sites. For example, two facilities which store bulk flammable liquids on one and other reactive substances (such as oxidisers) on the other may present a combined cumulative off-site fire risk which may be significant and which requires an added degree of risk management. Similarly, numerous minor hazardous substance spills from different sites within a catchment may be deemed tolerable individually but may result in potentially significant adverse cumulative effects in the receiving environment. Only an assessment on a case-by-case basis can establish whether this may become significant or not. This is generally only possible through the consenting process.

3.5 Reverse Sensitivity Effects

Reverse sensitivity effects are traditionally defined in relation to amenity issues. Matters such as noise, lighting etc. are often the cause of reverse sensitivity conflicts when land uses change in an area. This can be addressed by more restrictive controls, no-complaint covenants and the like. In case of hazardous substance risks the matter is different as risks cannot be sensed, observed, detected or measured. On that basis it has become a fairly common practice to identify the issue in land use planning and, where the necessity has been established, provide for controls on more sensitive land uses near lawfully established and operating hazardous facilities. This is of specific relevance if the existing facility involves hazardous substances with hazardous properties potentially damaging to human health and property. This matter has proven to be significant for a number of major facilities in other parts of the country (e.g., Auckland Waterfront/Western Reclamation/Wynyard, Wiri industrial area – South Auckland, Dunedin Stadium). It has been acknowledged that this issue requires specific planning scrutiny in particular as risk as an adverse environmental effect is harder to manage (and even understand) than amenity issues more often associated with reverse sensitivity.

More significant hazardous facilities have an associated risk profile which can be shown on the basis of a quantitative risk assessment (**QRA**). Such an assessment may be undertaken in relation to providing assurance of the ability to continuously operate a facility if changes are proposed to the facility or to the land use surrounding the facility (within the range of relevant risk).

The management of reverse sensitivity effects is only sensible if the adverse effects (risks) of a hazardous facility are appropriately minimised in the first place. To avoid future reverse sensitivity issues it is important to assess such effects in the land use planning context initially, when a sufficiently large hazardous facility with potential for adverse effects off-site is established.

The proposed provisions provide for both matters explained above but at this point no specific facility is identified in the Plan that has reverse sensitivity controls with regard to hazardous substances risk placed around them.

It is noted that the Health and Safety at Work (Major Hazard Facilities) Regulations 2016 do not control neighbouring land use effects with regard to risk which could affect the operation of a Major Hazard Facility. In any case there is currently no facility listed for the Waikato District in WorkSafe NZ's register of Major Hazard Facilities.

3.6 The Waikato Regional Council's position

The Waikato Regional Policy Statement (**WRPS**) became operative on 20 May 2016. Section 4.2.9 of the WRPS sets out the responsibilities for controlling the use of land to prevent or mitigate the adverse effects of the storage, use, disposal, or transport of hazardous substances. The responsibility for specifying objectives, policies and methods including rules is specified as being the District Councils in the Waikato Region in relation to all land outside of the coastal marine area and beds of rivers, lakes and other water bodies. This remains current policy until amended.

It is noted that the Waikato Regional Council made a submission on the provisions stating that the objective and associated policies address issues around sensitive land uses, incompatible activities and the environment being properly separated from hazardous facilities are supported as they are giving effect to WRPS Policy 14.4.

3.7 Approaches of Other Local Authorities around the Waikato District

WDC shall have regard to the extent the proposed Plan provisions need to be consistent with the plans of adjacent territorial authorities under RMA section 74(2)(c). While a detailed analysis of this issue was provided during the plan development process, it is noted that:

- The approaches with regard to the management of land for hazardous substances and facilities of adjacent territorial authorities has not changed in the last 3 years;
- All TAs have chosen to control the matter through District (Unitary in the case of Auckland) Plan provisions, including rules;
- Both Auckland and Otorohanga have provisions similar of what is proposed for the Waikato District, including the AST threshold quantity method;

- The scope of the proposed provisions is similar to, and consistent with, those of all adjacent districts.

3.8 Summary

Some aspects of the management of hazardous substances are sufficiently controlled through regulatory regimes other than the RMA such as the workplace safety legislation, HSNO or transport statutes, and should not be repeated in resource management plans. However, those regimes are generally limited to specific technical aspects, provide minimum requirements based on legacy legislation (Dangerous Goods, Explosives, Toxic Substances Acts etc.) and are aimed at keeping the substances safe in a workplace, rather than addressing wider environmental concerns. Requirements such as the integrity of packaging, labelling, competency of handlers etc. are matters that should not be repeated or amended in the land use planning context. However the regimes outside the RMA don't take into account land use patterns or sensitive environments, or provide for a process of local consultation and co-operation on off-site risks. These limitations are acknowledged by most local authorities in New Zealand which continue to include provisions for the land use management aspects of hazardous substance use, storage, disposal and, possibly, transport in their planning documents as part of an integrated management approach.

4.0 STRUCTURE OF PROPOSED PROVISIONS

4.1 Structure

The structure of the hazardous substances and facilities provisions as notified largely repeat the rules in the proposed zone-specific provisions of the Plan. Council decided on this approach apparently on the basis of presenting all controls together within the zone-specific provisions rather than in a specific section of the Plan. However, I recommended in 2017 a stand-alone chapter in the district-wide section of the District Plan. The advantages of that approach include:

- Less repetition
- Consistency of rules between zones in the entire district
- Addressing the misconception that hazardous facilities are limited to industrial zones
- Providing relevant provisions for man-made and natural hazards together in the Plan.

Following the National Planning Standards (**NPS**) 2019 this approach is now mandatory within a maximum period of 5 years [from April 2019, according to the Implementation Standard].

4.2 National Environmental Standards

The NPS include relevant requirements in the District-wide Matters Standard. That Standards states:

“12. If provisions relating to hazardous substances are addressed, they must be located in a chapter titled Hazardous substances under the Hazards and risks heading.

13. If the following matters are addressed, they must be located in a Hazardous substances chapter:

- a. any provision required to manage the land use aspects of hazardous substances*
- b. provisions relating to the use, storage and disposal of hazardous substances on land that presents a specific risk to human or ecological health, safety and property*
- c. provisions required to manage land use in close proximity to major hazard facilities to manage risk and reverse sensitivity issues.”*

The Definitions Standard includes as only relevant term ‘hazardous substance’, referring to the definition in the Act. Other relevant definitions can be added.

4.3 Recommendation

On the basis of the requirements of the NPS and the identified advantages I support the consolidation of the hazardous substances/hazardous facilities provisions in one chapter within a Hazards and Risks section of the Plan at this point in time, rather than make the necessary changes in the next few years. It is my understanding that the scope of submissions enables this approach.

5.0 THE AST AS METHOD TO DETERMINE THE ACTIVITY STATUS

Despite only being one specific tool in the planning framework, the method to determine the activity status of a hazardous facility is considered an important matter. Acceptable risk levels of hazardous facilities cannot be easily specified, measured and enforced, and systems combining quantities and hazard levels as an approximation of risk are generally applied. This approximation is well established, and actually used to determine the applicability of many hazardous substance controls under the HSNO and HSW legislation as well.

The Activity Status Table (AST) proposed (Table 5.1, Appendix 5) is similar to the one in the Operative Waikato District Plan – Waikato Section. It was developed in the early 2000s as a simpler and more user-friendly alternative to other methods. The AST has now been adopted by about 12 TAs, in some cases (such as the Waikato District Plan – Waikato Section, Rotorua District, Ruapehu District, Thames-Coromandel District and Auckland) replacing a more complex method. The AST generally covers all relevant HSNO sub-classes for hazards. The permitted quantities in the AST are largely derived from standardised use and storage scenarios and provide a high degree of consistency between the TAs that have adopted the method. The thresholds are reasonably permissive and result in relatively low numbers of consent applications.

The main reasons for the investigation and adoption of the AST by District Councils were the problems some territorial authorities faced in applying the more complex method adopted in their District Plans correctly, as well as the increasing acceptance that a simpler alternative would lead to a higher level of compliance. By stating permitted quantities directly in the plan, there is no need for the plan to explain mathematical operations, and therefore it simplifies the task of identifying the activity status of hazardous facilities.

Another feature of the AST is that it refers directly, and only (with the exception of high BOD substances), to the HSNO classifications of substances. This allows for much easier identification of the specific hazards of substances in the New Zealand context. Overall administration of this system is much simpler than under more complex systems (such as the HFSP currently used by Hamilton City). In most cases applicants should be able to establish themselves if they need consent, instead of relying on Council staff or specialists to assist with assessment.

The definition of the substances classes and subclasses in the AST are based on those in the Hazardous Substances Classifications Regulations 2001 which assists in the classification of substances for planning purposes (as their HSNO classification is known). It also ensures consistency with the controls and management approach under the HSNO and HSW legislation. The advantage compared to substance lists is that only the quantities of substance categories and classes are necessary, not of individual substances.

There are some HSNO subclasses for which specific land use controls are often not considered to be necessary. This is either due to their lower hazard level compared to other substances or the perception of other requirement being adequate. For example, some hazard categories for (particularly chronic) toxicity are not included as they are more likely to be a workplace health issue, or adverse effects are more likely caused by intended application or discharge (the control of which is a Regional Council function). In particular the numerous categories of toxic or eco-toxic substances are not fully reflected in the proposed provisions due to the main sub-classes of 6.1 (acute human toxicity) and 9.1 (aquatic toxicity) being the most important within their class. Specific sub-classes not included in the AST are 1.4, 1.5, 1.6, 6.1D, 6.1E, 6.3, 6.4, 6.5, 9.1D, 9.2D, and 9.3. [It is noted that the Environmental Protection Agency (EPA) is working on a different nomenclature for the various HSNO classes, based on international agreements such as the Globally Harmonised System (GHS). However, at the writing of this report that work has not been finalised.]

The aggregate quantity thresholds defining the activity status in the AST within hazard classes are largely based on previously developed scenarios for the storage of substances, and consequently have been subject to analysis and scrutiny when proposed for inclusion in the planning process. The aggregate quantity thresholds defining the activity status in the AST such as in the Waikato Section of

the WDP, in Auckland, Kaipara or Thames-Coromandel are based on the work carried out in the early 1990s by a national Review Group which also included an Australian reviewer (Professor Mark Tweeddale of the University of Sydney). The development and application of the principles and relevant values/thresholds of both HFSP and AST have been subject to repeated rigorous analysis over several decades. A more detailed analysis with examples of how thresholds were set (such as for LPG) have been provided during the Plan development process and are not repeated here.

The 'buffer' provisions currently adopted by most Councils that have this method are unique for substances with specific hazardous properties, and consequently can be more precisely targeted than buffer zones sometimes adopted with a more complex method such as the HFSP.

It is noted that a number of territorial authorities use substance (class or category) lists not too dissimilar to the AST but with varying thresholds, some of which may be based on historically used limits of legacy plans for the district. Such TAs include Western Bay of Plenty, Dunedin and Invercargill.

A few Councils have started to use activity or substance specific lists again which are basically specific to individual business sectors or chemicals, and often represent a historical link to what was considered 'noxious industries'. They have the advantage of being relatively clear and simple but have numerous disadvantages. These include potential confusion about scope (e.g., the term 'milk processing' may include bulk storage of chemicals or apply equally to an artisan cheese maker, the term 'chemical storage' to a small warehouse or a bulk storage facility) and, by its very nature, the limitation to the listed activities or substances. The activity status of substances or activities/industries not listed is often unclear. The quantity thresholds for listed substances are often based on historical precedents or perceptions and do not necessarily reflect current thinking. Some TAs have adopted a combination of substance and activity lists – potentially leading to confusion which one is supposed to be used to establish an activity status.

Generally controls in Plans that have activity and/or individual substance threshold lists are by their very nature activity rather than effects (risk) based. This can lead to inconsistencies between activities with cases of more significant adverse effects not included being treated more permissive than specified activities with lower risk. Assessment matters or information requirements are often not stated. These matters can often also lead to either gaps or overlaps in land use planning requirements between different parts within one Plan where, for example, amenity issues or nuisance effects (e.g., smoke, dust, odour) are addressed differently.

Based on my experience, good planning practice and a desire to provide for a clear, consistent and fair methodology, I support WDC's decision to select the AST as the method to determine the activity status of hazardous facilities. Replacing the AST with one of the alternatives used in some parts of the country would lead to increased confusion, inconsistencies and increased risks due to likely lack of compliance. This could set an undesirable precedent for the Waikato Region and beyond.

6.0 REFERENCES

Auckland Unitary Plan: Operative in Part 2016

EPA, HSNO Enforcement Report 2018

EPA/MfE, Review of Hazardous Substance Compliance System, 2019 [yet to be made publicly available]

Hazardous Substances and New Organisms Act 1996

Health and Safety at Work Act 2015

Health and Safety at Work (Hazardous Substances) Regulations 2017

Health and Safety at Work (Major Hazard Facilities) Regulations 2016

National Planning Standard, April 2019

Operative Otorohanga District Plan, October 2014

Resource Legislation Amendment Act 2017

Resource Management Act 1991

WorkSafe NZ, Introduction to the Health and Safety at Work Act 2015 – special guide

APPENDIX 1