# HGI Plan Review: section 32 report for Hazardous Facilities and Contaminated Land

## 1.0 Executive summary

This report summarises the evaluation undertaken by the council of hazardous facilities and contaminated land in terms of section 32 of the Resource Management Act.

The main conclusions are:

- Council must take a precautionary approach to contaminated land management because of the lack of accurate information on the degree and location of land contamination on the islands;
- Objectives, policies and rules are required to:
    - Ensure the risk of adverse effects on the environment including contamination of the land and water as a result of activities involving hazardous substances is avoided or mitigated;
    - Ensure the avoidance, prevention or mitigation of any adverse effects on the environment of the development, subdivision, or use of contaminated land;

## 2.0 Introduction

### 2.1 Purpose of this report

This report is to meet the section 32 requirements of the Resource Management Act.

### 2.2 Proposed plan provisions

The proposed plan provisions introduce specific controls consisting of three elements:

- A set of minimum performance requirements that apply to any facility using, storing or otherwise handling hazardous substances. These standards apply to:
    - Site design
    - Site Layout
    - Storage of hazardous substances
    - Site drainage systems
    - Spill containment systems
    - Washdown areas
    - Underground storage tanks
    - Signage
    - Waste management

- The application of quantity based Hazardous Facilities Consent Status Table (HFCST).

- The application of controls on the remediation and redevelopment of contaminated and potentially contaminated land as a way of minimising the effects of site contamination and preventing further off site effects as a result of remediation.

## 2.3 Consultation

### 2.3.1 Consultation to date

The council undertook consultation in 2005 in preparation for drafting the proposed Plan.

**Initial consultation**

The main consultation period was from April to July 2005. Consultation during that period consisted of:

- public meetings, workshops, nga hui, and one on one meetings
- a photographic exercise on Waiheke
- inviting written feedback on a consultation document which contained issues and options papers on a wide range of topics.

**Focus groups**

At the close of consultation, the council analysed the feedback forms received. From these, key issues were identified that subsequently became topics for focus groups on Waiheke. The four topics for the focus groups were:

- landscape
- transport
- sustainability
- future planning (including subdivision, growth, and providing for business activity).

An additional workshop was also held on Great Barrier to give a further opportunity to discuss issues raised through the feedback forms.

**Telephone survey**

The council commissioned an independent research company to undertake a phone survey in late 2005. The survey was of a randomly selected sample of 1002 on-island residents and off-island ratepayers of Waiheke, Great Barrier and Rakino. The questionnaire used for the survey was designed to get responses on the key issues that had emerged from the consultation process and stakeholder feedback.

The survey provided a means of canvassing the views of a wide range of people who may not have been previously involved in the consultation process.

**Consultation with other stakeholders**

During the preparation of a proposed plan, the council has also consulted with the following parties:

- the Auckland Regional Council ('ARC')
- the Department of Conservation ('DOC')
- tangata whenua
- network utility authorities
- the Ministry for the Environment ('MfE').

**Specific consultation**

- NZ fire service
- Thames Coromadel District Council
- Southland District Council
- private operators for hazardous/industrial operations:
    - GBI Gas Company Ltd, and Great Barrier Island Fuel Company Ltd.
    - BoC Gas Ltd (Waiheke Island)

**Public notification**

Notification of the Plan provides an opportunity for further public participation through the formal submission and appeal process.

### 2.3.2 Issues raised during consultation

- A particular emphasis should be placed on protecting the character of outstanding natural landscapes and coastal areas
- Protection of significant natural features
- Reducing of overlap between ARC and ACC controls on the disposal of waste water and solids
- Anticipation of potential changes in land use
- A more prescriptive framework and greater control over some activities is necessary
- Provision of protection yards for water features
- Encouragement of aspects such as renewable energy
- A need to address the assessment of contamination and remediation
- A definition of industrial activities is supported to ensure what are appropriate activities in land unit 15.

## 3.0 Resource management issues and objectives

## 3.1 Issues

The significant resource management issues which need to be addressed in the Plan are:

The use, storage, transportation and disposal of hazardous substances are associated with primary production, manufacturing and processing activities, as well as retail, business and domestic activities. There are risks associated with hazardous substances that could adversely affect the environment and human health. The risks are the likelihood of occurrence of an adverse effect from a hazard and the resulting consequences adversely affecting people and the environment. These hazards include explosiveness, flammability, corrosiveness, toxicity and ecotoxicity.

Hazardous substances need to be managed in a safe manner to avoid, remedy or mitigate any adverse effects on human health and the environment caused by an accidental or deliberate release of hazardous substances. Measures need to be taken to reduce the risk to the local community and environment from the location of hazardous facilities.

Particular attention should be paid to:

- How to provide for the use storage, transportation and disposal of hazardous substances in the Hauraki Gulf Islands, recognising that these can be a necessary part of primary production, manufacturing, business and domestic activities.
- How to manage the risks associated with the use storage, transportation and disposal of hazardous substances in the Hauraki Gulf Islands, so as to avoid adverse effects on the environment.
- How to manage and facilitate remediation of land which may have been contaminated as the result of past activities in a way which avoids adverse effects on the environment.

There are a number of sites on the Hauraki Gulf Islands which have become contaminated to varying degrees thorough discharge or spillage of hazardous substances. Such land presents a risk not only to the natural environment in terms of contamination of the land, and waterbodies, but also to the health and safety of occupiers on the site and on adjoining properties. These risks need to be actively controlled.

## 3.2 Objectives

### 3.2.1 Hazardous Facilities

To avoid or mitigate the risks of adverse effects presented by hazardous facilities on the environment.

### 3.2.2 Contaminated land

To avoid or mitigate the risk of adverse effects created by the use, redevelopment or remediation of contaminated and potentially contaminated land on human health and the environment.

## 4.0 Statutory requirements under Part II, sections 31, 32, 72 and 76 of the Resource Management Act

Section 74(1) of the RMA states as follows:

> A territorial authority shall prepare and change its district plan in accordance with its functions under section 31, the provisions of Part 2, a direction given under section 25A(2), its duty under section 32, and any regulations.

Section 31 sets out the council's functions for the purpose of giving effect to the Act. The council's functions include:

> (a) The establishment, implementation, and review of objectives, policies and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district:
>
> (b) The control of any actual or potential effects of the use, development or protection of land for the purpose of:
>
> …
>
> (ii) the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances; and
>
> (iia) the prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land.

Section 72 states as follows:

> The purpose of the preparation, implementation, and administration of district plans is to assist territorial authorities to carry out their functions in order to achieve the purpose of this Act.

The following provisions of section 76 are also relevant:

> (1) A territorial authority may, for the purpose of –
>
> (a) Carrying out its functions under this Act; and
>
> (b) Achieving the objectives and policies of the plan, -
>
> include rules in a district plan.
>
> …
>
> (3) In making a rule, the territorial authority shall have regard to the actual or potential effect on the environment of activities, including, in particular, any adverse effect.

In achieving the purpose of the Act, the council must carry out an evaluation under section 32 of the RMA before publicly notifying a district plan or a plan change. Section 32(3), (3A) and (4) state as follows:

> (3) An evaluation must examine –
>
> (a) the extent to which each objective is the most appropriate way to achieve the purpose of the Act; and
>
> (b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives
>
> (3A) This subsection applies to a rule that imposes a greater prohibition or restriction on an activity to which a national environmental standard applies than any prohibition or restriction in the standard. The evaluation of such a rule must examine whether the prohibition or restriction it imposes is justified in the circumstances of the region or district.
>
> (4) For the purposes of the examination referred to in subsections (3) and (3A), an evaluation must take into account –
>
> (a) the benefits and costs of policies, rules, or other methods; and
>
> (b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

The statutory requirements, including section 32 matters, are assessed below under the following headings:

- The extent to which each objective is the most appropriate way to achieve the purpose of the Act
- Whether the policies, rules, or other methods are the most appropriate for achieving the objectives
  - Having regard to their efficiency and effectiveness
  - Taking into account the benefits and costs of policies, rules, or other methods
  - Taking into account the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

## 4.1 The extent to which each objective is the most appropriate way to achieve the purpose of the Act

### 4.1.1 The purpose of the Act

Section 5 states that the purpose of the Act is 'to promote the sustainable management of natural and physical resources'. Section 5(2) states:

> (2) In this Act, "sustainable management" means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while-
>
> (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
>
> (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
>
> (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Environment is defined in Section 2 of the RMA as including:

> (a) Ecosystems and their constituent parts, including people and communities; and
>
> (b) All natural and physical resources; and
>
> (c) Amenity values; and
>
> (d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters:

Section 6 of the RMA identifies matters of national importance, which need to be recognised and provided for in achieving the purpose of the Act. The matters of particular relevance to the current proposal are identified below:

| **Clause** | | ✓ |
|---|---|---|
| (a) | The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development | ✓ |
| (b) | The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development | |
| (c) | The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna | ✓ |
| (d) | The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers | |
| (e) | The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga | |
| (f) | The protection of historic heritage from inappropriate subdivision, use, and development | |
| (g) | The protection of recognised customary activities | |

Section 7 deals with 'other matters' which, in achieving the purpose of this Act, persons exercising functions and powers under the Act shall have particular regard to. The matters of are of particular relevance to the current proposal are identified below:

| **Clause** | | ✓ |
|---|---|---|
| (a) | Kaitiakitanga | |
| (aa) | The ethic of stewardship | |

| | | |
|---|---|---|
| (b) | The efficient use and development of natural and physical resources | |
| (ba) | The efficiency of the end use of energy | |
| (c) | The maintenance and enhancement of amenity values | ✓ |
| (d) | Intrinsic value of ecosystems | ✓ |
| (f) | Maintenance and enhancement of the quality of the environment | ✓ |
| (g) | Any finite characteristics of natural and physical resources | ✓ |
| (h) | The protection of the habitat of trout and salmon | |
| (i) | The effects of climate change | |
| (j) | The benefits to be derived from the use and development of renewable energy | |

Section 8 provides that in achieving the purpose of the Act, all persons exercising functions and powers under it, in relation to managing the use, development and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti O Waitangi).

### 4.1.2 Appropriateness in achieving the purpose of the Act

**Objective 9.3.1 Hazardous facilities**

It is not possible to completely remove the risks of adverse environmental effects associated with the operation of hazardous facilities without prohibiting these activities. However through seeking to manage the risks associated with these activities these risks may be, so far as practicable avoided, remedied or mitigated in line with section 5(2) of the Act.

In accordance with Section 7(c) particular regard has been given to the maintenance and enhancement of amenity values. Protecting the community from unacceptable risks from hazardous facilities will ensure that the erosion of amenity values will be prevented through the ability to impose controls on such facilities which are regarded as presenting a risk to the community though considering proximity to people oriented activities.

In considering the matters discussed above objective 9.3.1 " to avoid or mitigate the risks of adverse effects created by hazardous facilities on the environment" is considered necessary in order to best achieve the purpose of the Act.

**Objective 9.3.2 Contaminated land**

It is not possible to completely remove the risks of adverse environmental effects associated with the use of contaminated land while at the same time prohibiting these activities is not considered to be consistent with section 5(2) of the Act in "sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations" as prohibition would clearly prevent the potential of that land to meet the reasonably foreseeable needs of future generations.

In assessing the risk presented by a facility the sensitivity of the surrounding environment is taken into account including proximity to people oriented activities and water features including wetlands, streams etc. This is considered to be appropriate for the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development in accordance with section 6(a) of the Act.

Section 6(c) of the Act provides for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. As with the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and

lakes and rivers and their margins, the level of risk posed by a facility will to some degree be dependent on the sensitivity of the surrounding environment including the presence of significant indigenous vegetation and significant habitats of indigenous fauna.

Objective 9.3.2 "to avoid or mitigate the risk of adverse effects created by the redevelopment or remediation of contaminated and potentially contaminated land on human health and the environment", is also considered to be appropriate in relation to section 6 of the act in that it ensures that the redevelopment or remediation of contaminated land is able to take place but that appropriate controls can be imposed so as to take account of the matters addressed in section 6 of the Act.

In line with the relevant provisions in section 7 of the Act, allowing the remediation of contaminated and potentially contaminated land to be undertaken whilst ensuring that the risks of the remobilisation of contaminants, disposal of contaminated material and protection of workers and the public during remediation, particular regard to the maintenance and enhancement of amenity values has been given.

In considering the matters discussed above objective 9.3.2 "**t**o avoid or mitigate the risk of adverse effects created by the redevelopment or remediation of contaminated and potentially contaminated land on human health and the environment" is considered necessary in order to best achieve the purpose of the Act.

Territorial authorities have responsibility under Section 31 of the RMA to control any actual or potential effects of the use, development or protection of land including the prevention or mitigation of any adverse effects of the storage, use, disposal or transportation of hazardous substances and the development, subdivision, or use of contaminated land. Objectives 9.3.1 and 9.3.2 are considered the most appropriate way of carrying out these functions.

## 4.2 Whether the policies, rules, or other methods are the most appropriate for achieving the objectives

| **Objective: Hazardous Facilities** | |
|---|---|
| To avoid or mitigate the risk of adverse effects created by hazardous facilities on the environment | |
| **Policies** | |
| 1. By requiring hazardous facilities to be designed, located, constructed and operated to avoid adverse effects on people and the environment and to minimise risk to people and the environment. | Adverse effects on the environment are considered to be unacceptable consequences of the inappropriate design, location, construction or operation of a hazardous facility. In order to avoid this policy is considered to be necessary |
| 2. By controlling the location and operation of hazardous facilities to ensure that they do not give rise to levels of risk that are incompatible with the nature of surrounding land use activities. | In spite of appropriate design and location of hazardous facilities there is some level of risk to the surrounding environment which is not able to be avoided. For this reason it is necessary for the nature surrounding land use activities to be taken into consideration in considering the location and operation of hazardous facilities. |
| 3. By preventing the establishment of hazardous facilities where the risks created by the facilities cannot be adequately avoided or mitigated, having regard to the acceptable levels of risk associated with the nature of the surrounding land use activities and the sensitivity of the surrounding natural environment including the downstream environment. | Where risks can not be sufficiently avoided or mitigated, in order to protect surrounding land uses and the natural environment it is necessary that such activities are prevented from establishing. |
| 4. By requiring the preparation and operation of emergency contingency plans for hazardous facilities | Most releases of hazardous substances and the resulting risks presented by fire, explosion or toxicity |

| | |
|---|---|
| where appropriate | are not an anticipated result of the normal operations of hazardous facilities. Therefore emergency contingency plans are an important component in reducing risks presented by such facilities to a level considered to acceptable. |
| 5. By ensuring the cumulative effects of activities involving the use of hazardous substances do not pose unacceptable risks to human health and the environment | Due to the nature of hazardous facilities it is common for such facilities to be located in close proximity to one another such as in industrial land units. Where this is the case there is the potential for the risks presented by one activity to adversely effect the operation of a neighbouring activity and in so doing increase the cumulative level of risk presented. For this reason cumulative risks must be considered. |
| 6. By requiring that hazardous substances and waste be disposed of at facilities which:<br>• are specifically designed to handle the disposal of hazardous substances<br>• use techniques that avoid adverse effects on human health and the environment. | The inappropriate disposal of hazardous substances and waste presents a significant risk of contamination of land and water and adverse effects on human health and the environment. It is necessary that such substances are disposed of appropriately in order to avoid this risk. |
| 7. By promoting a cleaner production ethic appropriate to the environment of the Hauraki Gulf Islands. | A cleaner production ethic is a necessary component in avoiding the risk present by hazardous facilities by ensuring the minimisation of wastes and use of hazardous substances is considered as part of the establishment of hazardous facilities. |
| **Objective: Contaminated Land** | |
| To avoid or mitigate the risk of adverse effects created by the use, redevelopment or remediation of contaminated and potentially contaminated land on human health and the environment. | |
| **Policies** | |
| 1. By minimising and controlling the adverse effects arising from contaminated land | Contaminated land can present a risk of adverse effects to human health and the environment where these sites are not managed appropriately resulting in inappropriate use which may create exposure pathways that endanger human heath or the environment. It is therefore necessary that such land is managed in such a way where any adverse effects arising are minimised and controlled. |
| 2. By ensuring remediation of contaminated land is carried out to a level that is appropriate for the proposed development and likely future use of the land as a prerequisite to its redevelopment | Remediation of contaminated land presents a high risk of adverse effects on the environment as a result of the remobilisation of contaminants. In addition to this, where the future use of the land is not considered sufficiently in the remediation process this presents a risk to human health in that no surety is provided that the site is safe for its intended use. |
| 3. By identifying those sites that may be subject to potential contamination as a result of historical land uses | Historical land uses are the primary cause of land contamination. Without identifying land which may be at risk of contamination as a result of historical land uses, it is not possible to avoid, remedy or mitigate the adverse effects of the use of that land on the environment. |

For the reasons above, it is considered that the policies are the most appropriate way to achieve the objectives.

The following are the main options which the council has considered as a means of achieving the objectives in relation to hazardous facilities:

1. Status quo
2. Hazardous Facilities Screening Procedure (HFSP)
3. Quantity based HFCST
4. Minimum performance standards
5. Education

The following are the main options which the council has considered as a means of achieving the objectives in relation to contaminated land:

1. Status quo
2. Rules relating to contaminated and potentially contaminated land remediation and redevelopment
3. Rules relating to contaminated land remediation and redevelopment
4. Education and provision of information

### 4.2.1 Options for Hazardous Facilities

#### *4.2.1.1 Option 1: Maintain status Quo –Activity listing and rules*

The current plan provisions do not provide reference to specific substances. The provisions dealing with hazardous facilities apply irrespective of the quantities or substance being stored or used and the location of such facilities in relation to other land uses. Instead a limited number of permitted activity standards are imposed including an absolute limit on the volume of liquid petroleum products which can be used or stored on the islands except for service stations which are provided for as a specific activity.

Should it be sought by an applicant to modify any one of the performance standards the activity is to be assessed as a discretionary activity.

| **Benefits** | **Costs** |
|---|---|
| No perceived confusion over Hazardous Substance and New Organisms Act and RMA controls | Is not effects based |
| Easily comprehended by members of the public- a perception of certainty. | Cannot account for Cleaner production technologies or methodologies as controls relate to the activity only. |
| | There is no aspect of future proofing to account for activities which involves substances or processes not adequately controlled with current provisions e.g. gasses and explosives. |
| | Cannot take into account location specific consideration including the location of people oriented activities and sensitive natural environments |

### *The risk of acting or not acting*

Whilst the Hazardous Substances and New Organisms Act (HSNO) deals with hazardous substances, the focus of the HSNO legislation and regulations is on the characteristics of the substance itself regardless of the location. This includes containment, packaging, identification, tracking, competency, emergency preparedness and disposal. The HSNO Act provides the means to set conditions on the management of hazardous substances, which apply irrespective of location.

The risk of acting on this option is the possibility of activities permitted under HSNO having adverse effects on the environment as a result of a accidental release, fire or explosion. The effects of such an event will differ depending on the location of the facilities and any additional measures put in place to deal with such an incident. Reliance on HSNO controls may place an undue risk to people and the environment should such a facility be located in the vicinity of incompatible or people oriented activities and sensitive natural environments.
The permitted activity standards in place could allow for inappropriate amounts of substances being stored as a permitted activity without adequate provision to control potential adverse effects on the environment. It is also presents a risk in that some substances, particularly flammable gasses and explosives remain largely uncontrolled.

The risk of not acting on this option is that a complete lack of provisions would fail to recognise the location specific risks to the environment presented by hazardous facilities as a complete reliance on the HSNO Act would be all that would remain. This is considered to be inappropriate as it would present the potential for substances to be stored in inappropriate circumstances. E.g. explosives could technically be stored in a residential land unit assuming compliance with HNSO.

#### *4.2.1.2 Option 2: Application of Hazardous Facilities Screening procedure and rules.*

| **Benefits** | **Costs** |
|---|---|
| Allows for effects based controls of hazardous facilities | Time spent processing applications- all, except for exempt activities need to pass through the screening procedure |
| Encourages substitution of hazardous substances for less hazardous alternatives where possible, i.e. 'cleaner production' | Difficult for public to understand without technical assistance |
| Allows for recognition and protection of particularly sensitive environments from the risks of fire, explosion and toxicity. | The costs of monitoring compliance with minimum performance standards and resource consent conditions. |
| Allows for recognition of incompatible land uses | |
| Enables compliance officers to more easily take action where there is a risk to the environment or the health and safety of the community as a result of non compliance with district plan controls or non compliance with consent conditions | |
| Allows for the consideration of alterative mitigation measures where minimum performance standards cannot be achieved | |
| Ensures a high level of environmental and public health and safety protection | |
| Allows for the ongoing collection of information relating to permitted facilities and those facilities requiring consent as all hazardous facilities will need to pass through the screening procedure to determine consent status | |

### *The risk of acting or not acting*

The risk of acting on this option in that people may not refer to the plan provisions and in relying on the provisions of the HSNO Act may establish activities which are inappropriate given the natural of the surrounding environment. There is also a risk that the perceived complexity of the process which is required under this approach to determine the consent status of an activity involving hazardous substances will discourage people from determining their consent status.

The risk of not acting on this option without an alternative are the same as not acting on option one in that no location based control would be possible. Should an alternative option be provided the risk of not acting on this options is the same as the risk of acting on those alternatives.

#### *4.2.1.3 Option 3: Quantity based Hazardous Facilities Consent Status Table (HFCST):*

| Benefits | Costs |
|---|---|
| Quick and easy to determine consent status of an activity | Is not as effects based as the HFSP |
| Easily comprehended by members of the public- a perception of certainty. | The costs of monitoring compliance with minimum performance standards and resource consent conditions. |
| Allows for effects based controls of hazardous facilities | The cost of making a resource consent application should this be required |
| Encourages appropriate substitution of hazardous substances for benign alternatives 'cleaner production' | |
| Allows for recognition and protection of particularly sensitive environments | |
| Allows for recognition of incompatible land uses | |
| Enables compliance officers to more easily take action where there is a risk to the environment or the health and safety of the community as a result of non compliance with district plan controls with consent conditions | |
| Allows for the consideration of alterative mitigation measures where minimum performance standards cannot be achieved | |
| Ensures a high level of environmental and public health and safety protection | |
| Allows for the ongoing collection of information relating to permitted facilities and those facilities requiring consent as all hazardous facilities will need to pass through the screening procedure to determine their consent status | |

**The risk of acting or not acting**

The risk of acting on this option is the same as option 2, however the risk associated with people finding the process required to assess the consent status too complex is far reduced as there is no requirement to determine a hazard ratio thus removing a significant degree of complexity present in the use of the HFSP.

The risk of not acting on this option without an alternative are the same as not acting on option one in that no location based control would be possible. Should an alternative option be provided the risk of not acting on this options is the same as the risk of acting on those alternatives.

#### *4.2.1.4 Option 4: Minimum performance standards*

| Benefits | Costs |
|---|---|
| Clear requirements for all hazardous facilities enabling ease of assessment for council officers and public | Monetary costs associated with the installation of performance measures |
| Allows more activities to be permitted provided they comply with the performance standards and thus reduces application and processing costs | Possible confusion with HSNO Act controls |
| Provides a good base for assessment of land use consent applications where these performance standards cannot be met due to the specific site conditions | |
| Ensures a minimum level of environmental protection using primarily low tech systems | |

**The risk of acting or not acting**

The risk of acting on this option in isolation of a land unit based consent status regime as presented in options 4.1.2 and 4.1.3 is that meeting the performance standards do not completely eliminate the risk to the environment presented by fire explosion or toxicity. It simply provides minimum standards which must be adhered to in order to reduce the level of risk by the implementation of standard management practices such as bunding appropriate for hazardous facilities of any scale. This may still present a potential for exposure to an unacceptable level of risk to neighbouring land uses which may be more sensitive to particular types of hazard than the hazardous facility in question.

The risk of acting on this option in addition to a land unit based consent status regime presents the risk of realising the costs identified in the table above.

Not acting on this option would introduce two possible scenarios. Firstly a very permissive regulatory approach with no prescribed minimum performance standards would present a risk in allowing the establishment of activities in a way which does not take into account the unique natural character of the Hauraki Gulf islands or the effects of the activity on the land or surrounding land uses. It is acknowledged that provisions under the HSNO Act would still need to be complied with. However, as stated above, the provision of HSNO are not aimed at the effects of the use of the land on the environment, rather the safety of the operation itself.
The second option in the absence of minimum performance standards is a requirement for an application for a resource consent for all activities which use hazardous substances. This is not considered to be a practical options as the costs for both applicants and the council in administering such a regime would not be considered to be appropriate in the circumstances.

#### *4.2.1.5 Option 5: Education*

| Benefits | Costs |
|---|---|
| May enable an increased adoptions of voluntary measures through an increased understanding of the potential risks associated with the use of hazardous substances | Cost of administering and implementing the education programme |
| May increase willingness to comply with statutory regulation, through building awareness around such issues as compliance with minimum performance standards or in what circumstances a consent is required | |

| Benefits | Costs |
|---|---|
| May provide a basis for wider uptake of cleaner production practices | |

**The risk of acting or not acting**

The risk of acting on this option in isolation of a regulatory approach is that it would lack a regime for requiring the adoption of measures designed to take into account the site specific circumstances of the operations and it's effects on the environment.

The risks of not acting on this option in conjunction with a regulatory programme is that any proposed rules may not be understood, or the public may not be aware of the standards which are considered acceptable practice. This could result in an risk to property owners with respect to future compliance costs or enforcement action, neighbours and/or the environment in terms of the risks of adverse environmental effects.

### 4.2.2 Options for Contaminated Land

#### *4.2.2.1 Option 1: Status Quo- maintain existing provisions*

Current plan states that "no land use activity shall take place on a potentially contaminated site as identified in a council register" (5E.7.2.1.E). Remediation is not specified as an activity in the plan and as remediation would entail an application as a non-complying activity.

| Benefits | Costs |
|---|---|
| Simplicity- gives certainty | Provides no incentive for remediation- the land will remain contaminated or the contamination status of a site will remain unconfirmed reducing the development potential of the subject site an increasing the passive risk presented by the site |
| Prevents possibility of adverse effects as a result of the remediation of contaminated site | Is not considered to fulfil obligations under section 31(b)(iia) of the Act. |
| | Is not effects based |

**The risk of acting or not acting**

In principle this would require complete remediation rather than remediation to a level appropriate for the intended land use. Due to such an approach not being effects based and the costs involved in complete remediation where this may not be practical in certain circumstances acting on this option is considered to present an unacceptable level of risk to land owners of loss of development potential.

The risk of not acting on this approach is the same as the risks identified in acting upon the do-nothing approach presented in option two.

#### *4.2.2.2 Option 2: Do nothing*

| Benefits | Costs |
|---|---|
| Simplicity in administration | Is not consistent with S31 (b) (iia) of the Act which requires "the prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land" |
| Allows development of land which may otherwise require significant investment to be remediated to | Does not implement effects based controls |

| Benefits | Costs |
|---|---|
| a standard considered appropriate for the intended use. This would also allow the development of land which may in the past have been uneconomical to develop due to concerns related to land contamination | |
| No additional costs related with environmental protection in the redevelopment or remediation of contaminated land or investigation of potentially contaminated land | |

**The risks of acting or not acting**

The risk of acting on this option is council not fulfilling the requirement of Section 31 (b) (iia) of the Act.

The risk to human health exists should contaminated land be redeveloped without controls or knowledge of contamination or potential contamination:

- new activities located on land which has contamination levels which pose a risk to human health, this is particularly important for residential uses;
- the remobilisation of contaminants in land entering waterways and adversely effecting aquatic biodiversity having health impacts (e.g. secondary poisoning);
- the unidentified translocation of contaminated material as a result of earthworks;
- the remobilisation of contaminants to air adversely effecting the health of persons in the vicinity of the site (e.g. asbestosis); and
- health of site workers may be effected as a result of direct exposure to unsafe level of continuants.

The risks to the environment include:

- adverse effects on aquatic biodiversity as a result of remobilisation of contaminants; and
- adverse effects on terrestrial biodiversity as a result of the transportation of contaminated material between sites.

The risks of not acting on this approach are the same as the risks presented in acting upon maintaining the existing provisions as per option one.

#### *4.2.2.3 Options 3: Rules relating to contaminated and potentially contaminated land remediation and redevelopment;*

| Benefits | Costs |
|---|---|
| Consistency with Auckland city's Isthmus and Central area plans, regional and national approach to contaminated site management | Cost of consent processing for remediation and redevelopment consents |
| Provides a legitimate means of site remediation and redevelopment to approved standards. | Cost of altering contents of LIM to reflect status of land depending on site investigation or remediation. |
| Gives effect to obligations under Section 31(b) (iia) of RMA 1991 | |
| Ensures site remediation is carried appropriately so as to protect human health and the environment | |
| Implements effects based control | |

**The risk of acting or not acting**
The risk of acting surrounds the identification of land as potentially contaminated which may not be contaminated. This may represent significant cost burden to a land owner in order to show that the land is not contaminated in order to progress the redevelopment of the land. There is also a risk that in order to avoid the imposition of controls the public may be less willing to identify land which may be become contaminated as a result of historical land uses which raises the risks as presented in option 1: Do-nothing.

The risks of not acting on this approach are the same as the risks presented by maintaining the existing provisions as per option one.

#### *4.2.2.4 Option 4: Rules relating to confirmed contaminated land remediation and redevelopment*

| Benefits | Costs |
|---|---|
| Provides certainty to those land owners who's land has been identified as contaminated of the requirements prior to redevelopment or remediation. | Cost of consent processing for remediation and redevelopment consents |
| Provides a legitimate means of site remediation and redevelopment to approved standards. | Possible environmental and health costs should unidentified contaminated land be redeveloped or remediated without awareness of contamination or without requirement to undertake initial investigation |
| Gives effect to obligations under Section 31(b)(iia) of RMA 1991 | Costs to applicant in undertaking initial investigation to confirm the presence or absence of contaminants. |
| Ensures site remediation is carried appropriately so as to protect human health and the environment on land identified | |
| Implements effects based control | |

The risk of adopting an approach which deals only with land that has been confirmed as contaminated is that no surety is provided over that land which may have been at risk of contamination but for which further empirical investigation has not been carried out. In such circumstances no controls would be placed on the development or redevelopment activities which could place at risk the community, site workers and the environment should contamination be present but unidentified.

The risks of not acting on this approach are the same as the risks presented by maintaining the existing provisions as per option one.

#### *4.2.2.5 Option 5: Provision of information and education*

| Benefits | Costs |
|---|---|
| Makes developers and property owner more aware of the environmental risks associated with hazardous facilities and contaminated land. | No obligation on developers and property owners to comply with good site management or design principles contained in educational messages. |
| Involves consultation and participation with the community. Good public relations for Council. | Lack of certainty and time taken (usually years) to bring about widespread results. |
| Low level of council intervention. | Cost of producing, revising and distributing non-statutory management, site design guidelines and information sheets. |

| Benefits | Costs |
|---|---|
| | |
| May increase willingness to comply with statutory regulation, though building awareness around such issues as compliance with minimum performance standards or in what circumstances a consent is required | Cost of dealing with public concerns and complaints about the location and impacts of hazardous facilities |
| May enable the identification of contaminated or potentially contaminated land of which council was not previously aware through people being aware of the risks the present and notifying council of their presence where it may not have previously been aware. | |

**The risk of acting or not acting**

The risk of taking this approach in isolation of a regulatory approach presents the same as option two in maintaining existing provisions.

The risk of not acting on this option is that lack of awareness of provisions may lead to development taking place on land which has not already been identified by the council as contaminated or potentially contaminated. This may present a risk to people or the environment, where education could have made the persons carrying out the work aware of the potential risks of contamination presented by historical land uses.

### 4.2.3 Conclusion

The application of a Quantity based HFCST to determine the consent status of activities and appropriate rues is considered to be the most appropriate method for the control of hazardous facilities. It is both ‘effects based’ and provides the appropriate flexibility to encourage cleaner production. This approach also lessens the burden on those people wanting to investigate the establishment of a hazardous facility to seek technical assistance in the determination of consents status in comparison to the HFSP option presented in 4.2.1.2.

The application of appropriate rules for the control of the redevelopment and remediation of contaminated and potentially contaminated land (Option 3- Contaminated land) is considered the most appropriate option. This will enable a high level of environmental protection from the risks posed by contaminated land both through their redevelopment and remediation. This method also provide the necessary short term assurance which cannot be provided through the use of educational tools.

## 4.3 Whether the proposed rules assist the council to carry out its function of control of actual or potential effects of the use, development or protection of land

Taking into account the costs, benefits and risks associated with the options outlined above the proposed controls are considered appropriate in enabling council to carry out its function of control of actual and potential effects of the use development and protection of land.

## 5.0 National planning documents

### 5.1 National and NZ coastal policy statements

Section 75(3) of the RMA states:

> (3) A district plan must give effect to –
>
> (a) any national policy statement; and
>
> (b) and any New Zealand coastal policy statement; and
>
> …

The proposed provisions give effect to the New Zealand Costal Policy Statement. The assessment criteria in the plan with regard to hazardous facilities which consideration of the downstream environment of the catchment including the presence of any marine protect areas or 'significant natural area' present gives effect to policy 1.1.2 of the NZCPS (see appendix A - 'Relevant provisions from national and regional planning documents' ).

Policy 1.1.5 of the NZCPA states that it is a national priority to restore and rehabilitate the natural character of the coastal environment. This is given effect to by requiring, where appropriate, the remediation of contaminated land as a prerequisite to its redevelopment under policy 9.3.2.2.

Policy 3.2.2 of the NZCPS relates to the avoidance remedy and mitigation of adverse effects from use or development in the coastal environment.
This is given effect to under policies 9.3.1.1 - 9.3.1.3:

1. By requiring hazardous facilities to be designed, located, constructed and operated to avoid adverse effects on people and the environment and to minimise risk to people and the environment.
2. By controlling the location and operation of hazardous facilities to ensure that they do not give rise to levels of risk that are incompatible with the nature of surrounding land use activities.
3. By preventing the establishment of hazardous facilities where the risks created by the facilities cannot be adequately avoided or mitigated, having regard to the acceptable levels of risk associated with the nature of the surrounding land use activities and the sensitivity of the surrounding natural environment including the downstream environment.

Policy 3.2.4 of the NZCPS which relates to cumulative effects is given effect to through proposed policy 9.3.1.5. "by ensuring the cumulative effect of activities involving the use of hazardous substances does not pose an unacceptable risk to human health and the environment."

Policy 3.2.8 of the NZCPS is given effect to through policy 9.3.1.2 "by controlling the location and operation of hazardous facilities to ensure that they do not give rise to levels of risk that are incompatible with the nature of surrounding land use activities."

### 5.2 Hauraki Gulf Marine Park Act 2000

Section 9(3) of the Hauraki Gulf Marine Park Act 2000, requires the council to ensure that:

> … any part of a district plan that applies to the Hauraki Gulf, its islands, and catchments, does not conflict with sections 7 and 8 of this Act.

Section 7 recognises the national significance of the Hauraki Gulf and Section 8 provides management direction for the Gulf. Section 10 of the Act requires that sections 7 and 8 be treated as a New Zealand coastal policy statement under the RMA. Sections 7 and 8 are

attached as appendix A - ‘Relevant provisions from national and regional planning documents’ .

Provisions in this section of the plan take a catchment based approach where appropriate. With regard to hazardous facilities, where a consent is required the consideration of exposure pathways, the sensitivity of the down stream environment and the presence of significant natural areas including Marine Protected Areas will allow appropriate weight to be given to Section 7(1) of the HGMPA, and also in part provides for Section 7(2). Section 7(2) also gives specific reference to the economic recreational, and cultural wellbeing of people and communities and also the appropriate use of resources by the people and communities of the Gulf and New Zealand for economic activities and recreation. The provisions relating to existing hazardous facilities are considered to allow adequately for the continuation of such activities, while where these activities are significantly altered or the effects of the activities are altered, these facilities must then comply with the proposed provision or apply for resource consent.

With regard to contaminated land, by providing for the remediation and redevelopment of contaminated land as activities requiring consent, appropriate controls will be able to be put in place which recognise the potential adverse effects of remediation through the remobilisation of contaminants, while proving for the imposition of suitable controls to mitigate these potential adverse effects. Allowing for the appropriate remediation of such land, thus contributing towards and overall improvement of the soil quality of the islands.
These provisions are considered to be consistent with section 7 of the HGMPA.

The proposed provisions are considered in no way to be in conflict with the provisions of Section 8 of the HGMPA.

As stated above the provisions recognise the catchment based approach as implied through the wording of sections 7 and 8 of the HGMPA, especially with regard to the provision relating to the establishment of hazardous facilities.

Where land has been subjected to land use activities which give rise to a risk of land contamination this land is able to be remediated. This remediation is however assessed as a restricted discretionary activity allows for the ‘protection and enhancement’ of the matters in section 8 (a) (b) (c) (e) and (f) of the HGMPA and protects the natural environment and the health and safety of the community from the potential adverse effects of remediation.

The hazardous facilities provisions relate primarily to the protection of the matters outlined in section 8, though enhancement is also provided for through the promotion of a cleaner production ethic (see policy 9.3.1.7).

# 6.0 Regional planning documents

## 6.1 Regional policy statement

Section 75(3) of the RMA states:

> (3) A district plan must give effect to –
>
> …
>
> (c) any regional policy statement.

The relevant chapters of the Auckland Regional Policy Statement (ARPS) are Chapter 15- Waste, Chapter 16- Hazardous Substances and Chapter 17- Contaminated Sites as the relevant parts are attached in Appendix A - 'Relevant provisions from national and regional planning documents' .

**Chapter 15- Waste**

Of particular relevance is policy 15.4.1 (3) of the ARPS

"The principles of cleaner production and the waste management hierarchy including:

(i) reduction of waste material being generated;
(ii) reuse of waste material;
(iii) recycling of waste material;
(iv) recovery of waste materials(e.g. waste to energy);
(v) residual waste disposal in an environmentally acceptable and cost-effective manner;

- shall be promoted for application throughout the region."

and to some degree method 15.4.2 (2):

"[Territorial Authorities] will develop and implement appropriate policies which will incorporate waste minimisation and cleaner production strategies and methods, such as domestic waste surveys, according to the [Waste Analysis Protocol], that will enable local and regional waste reduction targets"

Proposed policy 9.3.1.7 of the proposed district plan (HGI section) "By promoting a cleaner production ethic appropriate to the environment of the district" gives effect to gives effect to Policy 15.4.1 (3) and to some degree 15.4.2 (2) of the ARPS through promoting cleaner production.

Cleaner production means applying a strategies to make the most efficient use of resources including raw materials, water, energy, time and money whilst preventing pollution and minimising your impact on the environment. This can include the reduction of the use of hazardous substances which may be substituted for less toxic or eco toxic substances and reducing the level of hazardous waste produced as a result of the manufacturing or production process which are present risks to the environment and the health and safety of the community and are expensive to dispose of. The promotion of a cleaner production ethic also promotes the appropriate disposal of residual waste in an environmentally acceptable and cost effective manner.

**Chapter 16- Hazardous Substances**

Of particular relevance is Policy 16.4 (1)-(5) and methods16.4.2 (1), (3):

| | |
|---|---|
| **16.3 Objective**<br>*To prevent or mitigate risks to the health and safety of people and communities, and to prevent or mitigate adverse effects on the natural and physical environment from activities using, storing, disposing or transporting hazardous substances.*<br><br>**16.4.1 Policies**<br>*1. The responsibility for developing objectives, policies, and rules relating to the control of the* | The application of the quantity based HFCST incorporates an assessment of three different aspects of risk including the risk to human health, fire and explosion and environmental as the values in the table are derived using a process not dissimilar to the HFSP. All activities with some exceptions such as regular household usage of hazardous substances such as household cleaners and retail outlets of such products, all activities storing, disposing or transporting hazardous substances are within the definition of hazardous facilities and are addressed by the proposed plan provisions. |

| | |
|---|---|
| *use of land for the prevention and mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances shall be:*<br>*(i) The ARC's for:*<br>*(a) the co-ordination of the management of hazardous substances for the purpose of integrated management in the Auckland Region;*<br>*(b) activities which use, store, dispose, or transport hazardous substances in the CMA.*<br>*(ii) The TAs' for:*<br>*(a) all other activities which use, store, dispose, or transport hazardous substances not in the CMA, including the assessment of land use consents.* | The proposed provisions apply objectives policies and rules to control the use of land for the prevention and mitigation of any adverse effects of the storage use, disposal or transportation of hazardous substances. Through consultation with the Auckland Regional Council, effort has been made to reduce overlap in plan provisions in the Regional and District Plans, while the HFCST allows site specific considerations to be taken into account as apposed to the substance specific provisions provided for under the HSNO Act 1996 and related regulations. |
| *2. The assessment of any land use consent application required for the storage, use, disposal, or transportation of hazardous substances shall include consideration of the manner in which any potential adverse effects of the hazardous substances on the environment will be prevented or mitigated.* | Any application for a resource consent will be assessed based on the assessment of and methods and procedures employed to ensure:<br>• that potential hazards and exposure pathways arising from the proposed facility have been adequately identified and provided for;<br>• that adequate procedures are in place to deal with fire, accidental spillage, deterioration of plant and machinery and changes in environmental condition; as well as<br>• the risks arising from cumulative and synergistic effects and risk,<br>as matters of discretion (See 9.5.6). |
| *3. The use of land in proximity to existing hazardous facilities shall be controlled:*<br>*(i) to prevent proposed new activities presenting significant risks to public health and safety;*<br>*(ii) to prevent new activities imposing significant limitations on existing facilities.* | The management of land in proximity to existing hazardous facilities is not considered to be a significant issue in the Hauraki Gulf Islands where typical existing hazardous facilities present a low risk in terms or the primary risks to public health of fire and explosions and human health. Existing facilities will be required to apply for land use consent should the conditions of section 10 (2) and (3) of the Act be met, in that existing use rights would no longer apply. |
| *4. Proposed facilities for the use, storage, disposal of transportation of hazardous substances shall be designed, developed, and managed so as to prevent ,as far as practicable, and where not practicable mitigate the contamination of land, water or air.* | Minimum performance standards proposed in relation to hazardous facilities and the requirement for a resource consent where these standards can not be met or are not appropriate to the activity will ensures consistency the ARC RPS 16.4 (4). |
| *5. Routes that are preferred for the transportation of hazardous substances shall be identified and promoted within the Auckland Region.* | As a matter of discretion 9.5.6.2 includes the safety of the routes to be used for transporting hazardous substances on to and off the sire where this form a significant part of the operations. |
| **16.4.2 Methods**<br>*1. In considering any land use consent for the use, storage, disposal or transportation of hazardous substances, the consent authority shall have regard to the following matters in addition to any other matters which it is required by the RM Act to have regard to:* | It is anticipated that by including as matters of discretion the characteristics of the surrounding natural, human and physical environment. and separation distances provided |

| | |
|---|---|
| *(i) The reasons for choosing the location, with particular regard to the compatibility of the activity for which consent is sought, with existing and likely future activities in the vicinity, in terms of safety, prevention or mitigation of adverse effects, and, where it is likely that the activity will result in any significant adverse effect on the environment, any feasible alternatives for the location of the activity.* | gives effect to method 16.4.2 (i) of the ARC RPS. Assessment criteria for discretionary activities consider whether other alternatives have been considered adequately. Additional controls relating reverse sensitivity and future locations of development has been carried out as part of the review of the land units undertaken as part of this plan review. |
| *(ii) Details of, and justification for, transport routes proposed to feed to and from those routes identified in the district plan, with particular regard to population density, peak traffic flows and the ease of access for emergency vehicles, areas of significant environmental value (including water supply catchments and aquifers), and taking into account the transport safety equipment or systems proposed to be used.* | As a matter of discretion 9.5.6.2 includes the safety of the routes to be used for transporting hazardous substances on to and off the sire where this form a significant part of the operations. |
| *(iii) Any current circulars or guidelines published by the ARC, MfE, Department of Labour, or other governmental agencies, relating to the development of activities using hazardous substances.* | Reference has been given to MfE documents and other related standards and guidelines including, where appropriate, non statutory guidelines and codes of practice |
| *(iv) Current codes of practice adopted by industry which are relevant to the activity being assessed.* | These matters are dealt with through the application of the quantity based HFCST. Once consent status is determined further assessment is required to be carried out. Council is confident that all matters (v)(a)-(h) of 16.4.2- Methods of the ARPS are adequately addressed through this process. |
| *(v) The following matters as part of the assessment of environmental effects:*<br>*(a) identification of all hazards associated with the operation of the proposed potentially hazardous development;*<br>*(b) analysis of such hazards in terms of their consequences to people, property and the natural environment including water supplies from surface waters and aquifers, and their likelihood of occurrence;*<br>*(c) assessment of risks from the operation of the potentially hazardous development in terms of location and implications for land uses in the vicinity;*<br>*(d) the nature and quantities of hazardous substances used and stored on the site and transported to and from the site;*<br>*(e) the type of plant and equipment in use;*<br>*(f) the adequacy of proposed technical and site management safety systems;*<br>*(g) the surrounding land uses or likely future land uses;*<br>*(h) the interactions of the above matters.* | Proposed Plan provisions include Objectives, policies methods and rules for the prevention or mitigation of any adverse effects of the storage, use, disposal or transportation of hazardous substances. These include the preparation of spill contingency and emergency planning for all restricted discretionary and discretionary activities. |
| *3. TAs will:*<br>*(i) Include within district plans, objectives,* | |

| | |
|---|---|
| *policies and methods of implementation, including consent procedures, relating to the control of the use of land for the prevention or mitigation of any adverse effects of the storage, use, disposal or transportation of hazardous substances. Conditions and criteria for site protection and emergency planning will be included.*<br><br>*(ii) Identify and promote routes within their districts that are preferred for the transportation of hazardous substances in liaison with the ARC, adjoining TAs and other parties as appropriate. The identification of such routes will take into account the following factors:*<br>*(a) the avoidance (so far as practicable) of areas of high population density and/or which would be unable to be evacuated quickly in the event of an accident;*<br>*(b) the avoidance (so far as practicable) of areas of significant environmental value;*<br>*(c) peak traffic flows and the ease of access for emergency service vehicles.*<br><br>*(iii) Advocate methods to reduce adverse effects on the environment.* | The following approach taken in the proposed provisions:<br>• case by case assessment where a hazardous facility requires a consent<br>• facilities requiring consent must demonstrate that safe routes have been selected and will be utilised for the transport of hazardous substances on and off-land. |

## Chapter 17- Contaminated Lands

| | |
|---|---|
| ***17.3- Objectives***<br>*1. To remedy or mitigate any adverse effects of existing contaminated sites.*<br>*2. To ensure that appropriate remediation standards are achieved for contaminated sites.*<br>*3. To avoid sites becoming contaminated in the future.* | The proposed objectives of the Plan are considered to be consistent with those of 17.3 of the ARPS |
| ***17.4.1- Policies***<br>*1. All confirmed contaminated sites in the Auckland Region shall be identified and classified on a register.* | Through requiring a resource consent for all remediation or redevelopment of contaminated and potentially contaminated land the council will contribute to the collection of this information |
| *2. Remediation of a contaminated site shall be required where the level of contamination renders the site unsuitable for its existing or likely future use, or the site has an actual or likely adverse effect on the wider environment.* | In accordance with proposed Policy 9.3.2.2 where appropriate, the remediation of contaminated land is a prerequisite to its redevelopment. |
| *3. Remediation standards for a contaminated site shall be consistent with the existing and likely future use of the site and shall consider the risk to the environment posed by the site.* | Remediation must be carried out to a level which suitable for the intended use of the land in accordance with proposed policy 9.3.2.2 |
| *4. Awareness of the issues relating to existing contaminated sites and the avoidance of future contaminated sites shall be promoted.* | Proposed policy 9.3.1.7 promoting a cleaner production ethic appropriate to the environment of the district addresses 17.4.1 (4) of the ARPS |
| ***17.4.2- Methods*** | |
| *6. The ARC and TAs will require offending parties or* | Proposed policy 9.3.2.2 ensures that where |

| | |
|---|---|
| *landowner/occupier to conduct investigation and remediation of a contaminated site. Transport and disposal of contaminated material should be conducted in accordance with policies in Chapter16 – Hazardous Substances and Chapter 15 – Waste.* | appropriate, any residual land contamination levels are appropriate for any proposed redevelopment or likely future use. This will result in a requirement to conduct investigation and remediation of contaminated lands as appropriate and in an appropriate manner. |
| *8. The ARC and TAs will encourage or require the adoption of codes of practice that have been developed in conjunction with industry groups.* | As appropriate codes of practice and industry standards have been given weight within the proposed plan provisions. |

## 6.2 Regional plan

Section 75 (4) of the RMA states:

> (4) A district plan must not be inconsistent with –
>
> …
>
> (c) a regional plan for any matter specified in section 30(1).

Consultation has been carried out with officers of the Auckland Regional Council to eliminate inconstancies and overlap of jurisdiction between the proposed provisions of the proposed plan and the relevant provisions of the Auckland Regional Council's Proposed Air Land Water Plan (PALWP) as at 15/12/2005. (See appendix A - 'Relevant provisions from national and regional planning documents' for relevant sections of the PALWP).

With particular regard to hazardous facilities, hazardous waste disposal facilities including septic tank sludge disposal facilities have been exempt from these provision of the plan. However storage of high BOD substances (substances with a high biological oxygen demand) including septic tank sludge have not been excluded in order to enable location specific controls to be put in place while not overlapping with the provisions in the PALWP which officers consider to be adequate in controlling adverse effects on the environment including amenity such as odour.

With regard to contaminated land the proposed plan provisions are considered to be consistent with the approach advocated through policies 5.4.34 - 5.4.38 of the PALWP in the use of the MfEs Contaminated Land Management Guidelines where land is identified as part of proposed redevelopment or remediation of this land and requirements for remediation to be carried to approved standards. It also provides for residual levels of contaminants to remain in the soil where appropriate, consistent with 5.4.38 of the PALWP.

## 7.0 Procedures for monitoring

The council will monitor the effectiveness of the proposed provisions as a means of achieving the objectives and policies by:

- Monitoring resource consents including the number of applications granted consent, compliance with consent conditions, and the effectiveness of those conditions
- Monitoring complaints and enforcement actions
- Undertaking surveys eg user satisfaction surveys, land use surveys, ecological surveys
- Monitoring trends through analysing statistics (eg census, accident statistics, building consents)
- Scientific measurement eg of air or water quality

- Maintaining a register of hazardous facilities, contaminated and potentially contaminated land

## 8.0 Conclusions

The proposed plan provisions are considered necessary and appropriate in avoiding, remedying and mitigating the risks of adverse effects on the environment presented by hazardous facilities and contaminated land.

The proposed provisions adopt a precautionary approach in achieving effects based management. The objective policies and rules balance the potential complexities of controls, especially those relating to hazardous facilities, with a need to be clear, transparent and able to be understood and applied by members of the general public.

The proposed provisions are considered to represent an example of national and international best practice, while giving particular weight to the special circumstances which exist within the context of the Hauraki Gulf Islands.

## Appendix A: Relevant provisions from national and regional planning documents

### New Zealand Coastal Policy Statement

***Policy 1.1.2***
*It is a national priority for the preservation of the natural character of the coastal environment to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna in that environment by:*

*(a) avoiding any actual or potential adverse effects of activities on the following areas or habitats:*
  *(i) areas and habitats important to the continued survival of any indigenous species; and*
  *(ii) areas containing nationally vulnerable species or nationally outstanding examples of indigenous community types;*
*(b) avoiding or remedying any actual or potential adverse effects of activities on the following areas:*
  *(i) outstanding or rare indigenous community types within an ecological region or ecological district;*
  *(ii) habitat important to regionally endangered or nationally rare species and ecological corridors connecting such areas; and*
  *(iii) areas important to migratory species, and to vulnerable stages of common indigenous species, in particular wetlands and estuaries;*
*(c) protecting ecosystems which are unique to the coastal environment and vulnerable to modification including estuaries, coastal wetlands, mangroves and dunes and their margins; and*
*(d) recognising that any other areas of predominantly indigenous vegetation or habitats of significant indigenous fauna should be disturbed only to the extent reasonably necessary to carry out approved activities.*

***Policy 1.1.5***
*It is a national priority to restore and rehabilitate the natural character of the coastal environment where appropriate.*

***Policy 3.2.2***
*Adverse effects of subdivision, use or development in the coastal environment should as far as practicable be avoided. Where complete avoidance is not practicable, the adverse effects should be mitigated and provision made for remedying those effects, to the extent practicable.*

***Policy 3.2.4***
*Provision should be made to ensure that the cumulative effects of activities, collectively, in the coastal environment are not adverse to a significant degree.*

***Policy 3.2.8***
*Provision should be made for the protection of the habitats (in the coastal marine area) of species which are important for commercial, recreational, traditional or cultural purposes.*

### Hauraki Gulf Marine Park Act

*7.Recognition of national significance of Hauraki Gulf—*

*(1) The interrelationship between the Hauraki Gulf, its islands, and catchments and the ability of that interrelationship to sustain the life-supporting capacity of the environment of the Hauraki Gulf and its islands are matters of national significance.*
*(2) The life-supporting capacity of the environment of the Gulf and its islands includes the capacity—*
  *(a) to provide for—*
    *(i) the historic, traditional, cultural, and spiritual relationship of the tangata whenua of the Gulf with the Gulf and its islands; and*

*(ii) the social, economic, recreational, and cultural well-being of people and communities:*

*(b) to use the resources of the Gulf by the people and communities of the Gulf and New ` Zealand for economic activities and recreation:*

*(c) to maintain the soil, air, water, and ecosystems of the Gulf.*

*8.Management of Hauraki Gulf—*

*To recognise the national significance of the Hauraki Gulf, its islands, and catchments, the objectives of the management of the Hauraki Gulf, its islands, and catchments are—*

*(a) the protection and, where appropriate, the enhancement of the life-supporting capacity of the environment of the Hauraki Gulf, its islands, and catchments:*

*(b) the protection and, where appropriate, the enhancement of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments:*

*(c) the protection and, where appropriate, the enhancement of those natural, historic, and physical resources (including kaimoana) of the Hauraki Gulf, its islands, and catchments with which tangata whenua have an historic, traditional, cultural, and spiritual relationship:*

*(d) the protection of the cultural and historic associations of people and communities in and around the Hauraki Gulf with its natural, historic, and physical resources:*

*(e) the maintenance and, where appropriate, the enhancement of the contribution of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments to the social and economic well-being of the people and communities of the Hauraki Gulf and New Zealand:*

*(f) the maintenance and, where appropriate, the enhancement of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments, which contribute to the recreation and enjoyment of the Hauraki Gulf for the people and communities of the Hauraki Gulf and New Zealand.*

## Regional Policy Statement

### 16.3 Objective

*To prevent or mitigate risks to the health and safety of people and communities, and to prevent or mitigate adverse effects on the natural and physical environment from activities using, storing, disposing or transporting hazardous substances.*

### 16.4.1 Policies

*1. The responsibility for developing objectives,,policies and rules relating to the control of the use of land for the prevention and mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances shall be:*

*(i) The ARC's for:*

*(a) the co-ordination of the management of hazardous substances for the purpose of integrated management in the AucklandRegion;*

*(b) activities which use, store, dispose, or transport hazardous substances in the CMA.*

*(ii) The TAs' for:*

*(a) all other activities which use, store, dispose, or transport hazardous substances not in the CMA, including the assessment of land use consents.*

*2. The assessment of any land use consent application required for the storage, use, disposal, or transportation of hazardous substances shall include consideration of the manner in which any potential adverse effects of the hazardous substances on the environment will be prevented or mitigated.*

*3. The use of land in proximity to existing hazardous facilities shall be controlled:*

*(i) to prevent proposed new activities presenting significant risks to public health and safety;*

*(ii) to prevent new activities imposing significant limitations on existing facilities.*

*4. Proposed facilities for the use, storage, disposal of transportation of hazardous substances shall be designed, developed, and managed so as to prevent ,as far as practicable, and where not practicable mitigate the contamination of land, water or air.*

*5. Routes that are preferred for the transportation of hazardous substances shall be identified and promoted within the Auckland Region.*

### 16.4.2 Methods

*1. In considering any land use consent for the use, storage, disposal or transportation of hazardous substances, the consent authority shall have regard to the following matters in addition to any other matters which it is required by the RM Act to have regard to:*

*(i) The reasons for choosing the location, with particular regard to the compatibility of the activity for which consent is sought, with existing and likely future activities in the vicinity, in terms of safety, prevention or mitigation of adverse effects, and, where it is likely that the activity will result in any significant adverse effect on the environment, any feasible alternatives for the location of the activity.*

*(ii) Details of, and justification for, transport routes proposed to feed to and from those routes identified in the district plan, with particular regard to population density, peak traffic flows and the ease of access for emergency vehicles, areas of significant environmental value (including water supply catchments and aquifers), and taking into account the transport safety equipment or systems proposed to be used.*

*(iii) Any current circulars or guidelines published by the ARC, MfE, Department of Labour, or other governmental agencies, relating to the development of activities using hazardous substances.*

*(iv) Current codes of practice adopted by industry which are relevant to the activity being assessed.*
*(v) The following matters as part of the assessment of environmental effects:*
*(a) identification of all hazards associated with the operation of the proposed potentially hazardous development;*
*(b) analysis of such hazards in terms of their consequences to people, property and the natural environment including water supplies from surface waters and aquifers, and their likelihood of occurrence;*
*(c) assessment of risks from the operation of the potentially hazardous development in terms of location and implications for land uses in the vicinity;*
*(d) the nature and quantities of hazardous substances used and stored on the site and transported to and from the site;*
*(e) the type of plant and equipment in use;*
*(f) the adequacy of proposed technical and site management safety systems;*
*(g) the surrounding land uses or likely future land uses;*
*(h) the interactions of the above matters.*

*3. TAs will:*
*(i) Include within district plans, objectives, policies and methods of implementation, including consent procedures, relating to the control of the use of land for the prevention or mitigation of any adverse effects of the storage, use, disposal or transportation of hazardous substances. Conditions and criteria for site protection and emergency planning will be included.*

*(ii) Identify and promote routes within their districts that are preferred for the transportation of hazardous substances in liaison with the ARC, adjoining TAs and other parties as appropriate. The identification of such routes will take into account the following factors:*
*(a) the avoidance (so far as practicable) of areas of high population density and/or which would be unable to be evacuated quickly in the event of an accident;*
*(b) the avoidance (so far as practicable) of areas of significant environmental value;*
*(c) peak traffic flows and the ease of access for emergency service vehicles.*

*(iii) Advocate methods to reduce adverse effects on the environment.*

## Proposed Regional Plan: Air, Land and Water

***5.4.34*** *To encourage the owners or occupiers of land, where activities listed as high risk in the 'Contaminated Land Management Guidelines No.3 Risk Screening System' (MfE February 2004) have been undertaken, to complete a contaminated site assessment when appropriate throughout the cycle of use, redevelopment or sale of the land.*
*(This Policy relates to Objectives 5.3.1, 5.3.15 and 5.3.16)*

***5.4.35*** *To encourage TA's to seek contaminated site assessments prior to allowing a*

*change in land use, subdivision or redevelopment where the land has been used for any activity listed in the 'Contaminated Land Management Guideline No. 3 Risk Screening System' (MfE February 2004).*
*(This Policy relates to Objectives 5.3.1, 5.3.15 and 5.3.16)*

***5.4.36*** *To promote the remediation of contaminated land where the level of contamination has, or has the potential to have, a significant adverse effect on the environment or public health and renders the land unsuitable for its existing zoned land use.*
*(This Policy relates to Objectives 5.3.1, 5.3.15 and 5.3.16)*

***5.4.37*** *To promote the management of contaminated land to ensure that there are no significant adverse effects on the environment or public health.*

***5.4.38*** *The management of contaminated land may allow contaminants to remain in the ground on the site where it can be demonstrated that:*

*(a) The extent and nature of the contamination will not pose a potential adverse effect to the environment or to public health;*

*(b) The current zoned land use will not be adversely affected;*

*(c) Groundwater, surface water resources and air quality are not at risk from contamination; and*

*Ongoing monitoring and management, commensurate with the scale and significance of the potential effects of contamination of the site, is undertaken to ensure that (a), (b) and (c) above are achieved.*