Final Plan Change 1 (Marsden Point Air Quality Strategy) Operative Text

Deletions and additions to the text of the Regional Air Quality Plan for Northland are shown by ~~strikeout~~ and <u>underscore</u> respectively.

6.17 SPECIFIC POLICIES FOR MARSDEN POINT

~~1. To give priority to the development of an air quality strategy for the Marsden Point Area.~~

~~***Explanation.*** *The presence of two major industries in this area, which are of regional significance in terms of their air discharges; the availability of a deep water port; the availability of flat land suitable for the expansion of industrial development; and the existing industrial zoning in the area mean there is significant potential for industrial development and associated air discharges in this area. The implementation of an air quality management strategy to recognise potential future demand is sound planning practice and will result in consistent and equitable decisions on future air discharge permit applications.*~~

1. <u>The Marsden Point Air Quality Strategy shall be taken into account, when making decisions on air quality in the Marsden Point Area. While acknowledging it is a non-binding and non-statutory guideline document only.</u>

   <u>***Explanation.*** *The presence of major industries in this area, which are of regional significance in terms of their air discharges; the availability of a deep water port; the availability of flat land suitable for the expansion of industrial development; and the existing industrial zoning in the area mean there is significant potential for industrial development and associated air discharges in this area. Implementing the Marsden Point Air Quality Strategy will result in the consistent and equitable decisions on future air discharge permit applications.*</u>

~~2. To investigate options for an air quality management strategy for the Marsden Point Area~~

~~***Explanation.*** *There are a number of options which require investigation. These may include:*~~

- ~~Reliance on the general policies in this Plan, in particular, Policies 6.7(1), (2), (5) and (6).~~
- ~~formulating ambient air quality standards which are able to sustain the life supporting capacity of ecosystems,~~
- ~~using zones of influence around a discharge or area which must maintain a certain quality,~~
- ~~identifying a maximum allowable discharge volume of a particular contaminant and,~~
- ~~allowing the transfer of "discharge volume allocation" between dischargers.~~

~~The solution may be a combination of these options.~~

2. Not withstanding Policy 1, Air Quality in the Marsden Point Area shall be managed in a consistent way to allow for industrial development while ensuring that:

    a. Ambient Air Quality is maintained in a state of compliance with any National Environmental Standards for Air Quality; and

    b. Air Quality is managed with regard to the 'Ambient Air Quality Guidelines for the Protection of Human Health in the Northland Region' (listed in Table 1) and the latest version of the 'New Zealand Ambient Air Quality Guidelines', published by the Ministry for the Environment.

Explanation. *This policy recognises that in most areas of Northland, existing air quality is high. It seeks to ensure that the existing high quality is not adversely affected by discharges of contaminants to air within the Marsden Point Area.*

~~3. Until an air quality strategy is developed, to adopt a precautionary approach to applications for new discharges proposed to be located in the Marsden Point Areawhilst encouraging the adoption of best practicable options in the absence of definitive information related to ambient air quality.~~

~~***Explanation.*** *Until the investigations into the air resources of the* Marsden Point Area *are complete and a preferred air quality management strategy has been determined, it is necessary to adopt a precautionary approach to any new proposals to discharge contaminants to air. It should be noted that the precautionary approach is not necessary for minor or innocuous discharges. For example, steam.*~~

~~*A precautionary approach may include granting consents for a short term or with the option to review conditions once the Plan change referred to in Method 6.18(2) is operative.*~~

~~*This policy, combined with the policies in Section 6.7, will ensure the air quality is managed conservatively in the short term.*~~

3. When considering new land use activities regard shall be had to avoiding reverse sensitivity effects from incompatible and potential sensitive land uses on any other land use, including lawfully established industries, in the area.

Explanation. *There are areas in which industrial development is allowed to occur in the District Plan. Therefore it is important that reverse sensitivity effects on any other land use, including lawfully established industries, in the area be avoided when considering applications for new incompatible and potentially sensitive land uses.*

6.18 METHODS OF IMPLEMENTATION

~~*(for Policy 1)*~~

~~1. Liaise with the Whangarei District Council with regard to District Plan development for the Marsden Point Area~~

~~2. Implement a Plan change to include the preferred air quality management strategy for the Marsden Point Area as determined by Methods 6.18(3) to (8).~~

~~*(for Policy 2)*~~

~~3. Determine the area at Marsden Point from which discharges of contaminants to air will be managed in accordance with the air quality management strategy.~~

~~4. Collate and analyse existing information on the air resource in the Marsden Point Area including emission inventories, meteorological information and air dispersion modelling, and identify any gaps in the knowledge of the air resource.~~

~~5. Prepare and implement a monitoring programme in conjunction with the existing resource consent monitoring network, to gather any additional information that may have been identified as being required in Method 6.18(4).~~

~~6. Seek advice from the Ministry for the Environment on setting air quality guidelines in the Marsden Point Area which may be different from those outlined in the national ambient air quality guidelines.~~

~~7. Establish a technical working group to investigate options and to make a recommendation to the Regional Council on the preferred option.~~

~~8. Establish a consultation group of stakeholders, including industry, community, iwi and environmental groups, with whom the working group will consult.~~

~~9. Seek financial contributions for the development of an air quality management strategy from existing and future consent holders as appropriate, and in accordance with the provisions of this Plan relating to financial contributions.~~

~~*(for Policy 3)*~~

~~10. Require applications for air discharge permits in the Marsden Point Area to be supported by a detailed assessment of the environmental effects, including cumulative, synergistic and interactive effects where technically possible.~~

(for Policy 1 and 2)

1. A Marsden Point Technical Liaison Group appointed and chaired by Northland Regional Council, and compromising optional representation from each air discharge consent holder (or their nominated expert in each case), and other relevant parties as appropriate, shall be established to co-ordinate and make available input data for a comprehensive dispersion modelling and recommend methods for making air discharge assessments, including the applicability of dispersion models and validity of input data sets.

2. An Air Quality Liaison group, appointed and chaired by Northland Regional Council, and compromising optional representation from local residents (or resident associations), local iwi, and industry (commercial and industrial) shall be established to:

    a) Discuss findings of the Marsden Point Technical Liaison Group; and

    b) Provide any other information or assistance to Northland Regional Council on air quality issues in the Marsden Point Airshed.

3. Applications for air discharge permits within the Marsden Point Airshed (refer Map 1) are required to be supported by a detailed assessment of the environmental effects, including cumulative, synergistic and interactive effects of multiple contaminants where technically practicable. A three-tiered approach (in accordance with Appendix 7) to the assessment of environmental effects shall be undertaken.

If the need for a Tier-3 assessment is triggered, particularly in regard to the effects of discharges of sulphur dioxide, inhalable particulate (smaller than 10 microns in size) or nitrogen dioxide in the Marsden Point Airshed, the applicant shall undertake air dispersion modelling.

Whenever air dispersion modelling is to be undertaken, applicants shall have regard to the modelling approaches set out in the Ministry for the Environment's Good Practice Guide for Atmospheric Dispersion Modelling, June 2004, or any updated versions of those modelling approaches.

Prior agreement from the Northland Regional Council is recommended before adopting a particular modelling approach, including model type and input data. This may assist in reducing compliance costs and the potential for the use of section 92 (request for further information) in processing discharge permit applications.

The Northland Regional Council will, in return, provide applicants with the necessary information gathered through Method 1 and 2 (above).

In this context, the use of the term "technically practicable" is not intended to result in an applicant being required to undertake an all-encompassing assessment of synergistic and interactive effects simply because it is technically possible to do so. The term is to be interpreted in accordance with the Best Practicable Option approach as defined in Section 5.3 Management Approach and Section 17 Definitions and means to apply the current state of technical knowledge and scientific investigation to successfully identify synergistic and interactive effects to inform the Assessment of Environmental Effects taking into consideration:

- The size and scale of the proposal
- The prevalence of international literature on the topic
- The atmospheric concentration of precursors
- The probability of synergistic and interactive effects occurring
- The environmental and/or human health risk if synergistic and interactive effects occur

4. In addition, applications for air discharge permits for activities outside the Marsden Point Airshed (refer Map 1) that have the potential for discharged air-borne contaminants to enter the Airshed and significantly add to the effects of discharges of sulphur dioxide, inhalable particulate (smaller than 10 microns in size) or nitrogen dioxide, shall be required to comply with Method 3 above.

   In this content 'significantly' means where the estimated contribution to air quality degradation, in terms of contaminant concentrations in ambient air, is more than 10% of the relevant guideline or standard.

5. Where it is uncertain whether the application for an air discharge permit has the potential to significantly add to the effects of discharges of sulphur dioxide, inhalable particulate (smaller than 10 microns in size) or nitrogen dioxide, a precautionary approach shall be taken. This will include requiring the applicant to undertake a Tier-3 assessment (in accordance with Appendix 7) including air dispersion modelling.

   Whenever air dispersion modelling is to be undertaken, applicants shall have regard to the modelling approaches set out in the Ministry for the Environment's Good Practice Guide for Atmospheric Dispersion Modelling, June 2004, or any updated versions of those modelling approaches.

   Prior agreement from the Northland Regional Council is recommended before adopting a particular modelling approach, including model type and input data. This may assist in reducing compliance

costs and the potential for the use of section 92 (request for further information) in processing discharge permit applications.

The Northland Regional Council will, in return, provide applicants with the necessary information gathered through Method 1 and 2 (above).

In this content 'significantly' means where the estimated contribution to air quality degradation, in terms of contaminant concentrations in ambient air, is more than 10% of the relevant guideline or standard.

6. The Northland Regional Council will make the Marsden Point Air Quality Strategy available online and at the Regional Council office for interested parties/applicants.

(for Policy 3)

7. Where necessary, make submissions on District Plans and applications for resource consents to ensure that the potential for reverse sensitivity effects on any other land use, including lawfully established industries, are known about and addressed.

11. INFORMATION REQUIREMENTS

11.2 SPECIFIC INFORMATION REQUIREMENTS FOR MARSDEN POINT AIR DISCHARGE PERMIT APPLICATIONS

In addition to the requirements set out in 11.1, applications for air discharge permits in the Marsden Point Airshed (refer Map 1) shall undertake a three- tiered approach (in accordance with Appendix 7) to the assessment of environmental effects. If the need for a tier-3 assessment is triggered in regard to the effects of discharges of sulphur dioxide, inhaleable particulate (smaller than 10 microns in size) or nitrogen dioxide, the applicant shall undertake dispersion modelling.

Whenever air dispersion modelling is to be undertaken, applicants shall have regard to the modelling approaches set out in the Ministry for the Environment's Good Practice Guide for Atmospheric Dispersion Modelling, June 2004, or any updated versions of those modelling approaches.

Prior agreement from the Northland Regional Council is recommended before adopting a particular modelling approach, including model type and input data. This may assist in reducing compliance costs and the potential for the use of section 92 (request for further information) in processing discharge permit applications.

The Northland Regional Council will, in return, provide applicants with the necessary information gathered through Method 1 and 2 (above).

In addition to the requirements set out in 11.1, applications for air discharge permits for activities located outside the Marsden Point Airshed (refer Map 1) but which:

a) have the potential for discharged air-borne contaminants to enter the Airshed; and

b) significantly add to the cumulative effects of discharges of sulphur dioxide, inhalable particulate (smaller than 10 microns in size) or nitrogen dioxide; and,

c) Trigger the need for a tier-3 assessment (in accordance with Appendix 7) in regard to the effects of discharges of sulphur dioxide, inhaleable particulate (smaller than 10 microns in size) or nitrogen dioxide;

shall undertake air dispersion modelling.

In addition the applicant shall have regard to the modelling approaches set out in the Ministry for the Environment's Good Practice Guide for Atmospheric Dispersion Modelling, June 2004, or any updated versions of those modelling approaches.

Prior agreement from the Northland Regional Council is recommended before adopting a particular modelling approach, including model type and input data. This may assist in reducing compliance costs and the potential for the use of section 92 (request for further information) in processing discharge permit applications.

The Northland Regional Council will, in return, provide applicants with the necessary information gathered through Method 1 and 2 (above).

~~11.2~~

11.3 ASSESSMENT OF ENVIRONMENTAL EFFECTS

An assessment of effects on the environment is to be included with an application for a resource consent. The assessment of effects must be in such detail as corresponds with the scale and significance of the actual or potential effects which the activity may have on the environment and must be prepared in accordance with the Fourth Schedule of the Resource Management Act.

The assessment of effects for a controlled activity or a discretionary activity over which the Northland Regional Council has restricted the exercise of its discretion, need address only those matters over which the Council has retained control or the right to exercise its discretion (as the case may be). Those matters are specified in the relevant rules of this Plan.

Applicants should note that in considering an application for a resource consent and any submissions received, the Northland Regional Council is required to have regard to any objectives, policies, rules and other provisions of this Plan. Applicants should therefore take particular note of these, in addition to the matters set out in the Fourth Schedule of the Act, when preparing an assessment of effects.

17. DEFINITIONS

Reverse sensitivity - Describes the effect that development of one kind may have on activities already occurring in an area. It usually results from the people involved in an activity that is newly established, complaining about the effects of existing activities in an area.

APPENDIX 7: THREE TIERED ASSESSMENT FOR ASSESSING DISCHARGES TO AIR FROM INDUSTRY

Introduction

1. The basis for the three-tiered assessment has been sourced from the Ministry for the Environment "Good Practice Guide on Assessing Discharges to Air from Industry" (June 2006).

2. The three-tiered approach is considered an appropriate way of assessing the effects of discharges to air within the Marsden Point Area. The intent of this approach is that the level of assessment undertaken reflects the level of effect from the proposed discharge. A three-tiered approach assists in achieving section 88 of the RMA which requires an assessment of environmental effects to be provided *"in such detail as corresponds with the scale and significance of the effects that the activity may have on the environment"*.

Brief Overview

3. The following gives a brief overview of what each tier intends to achieve:

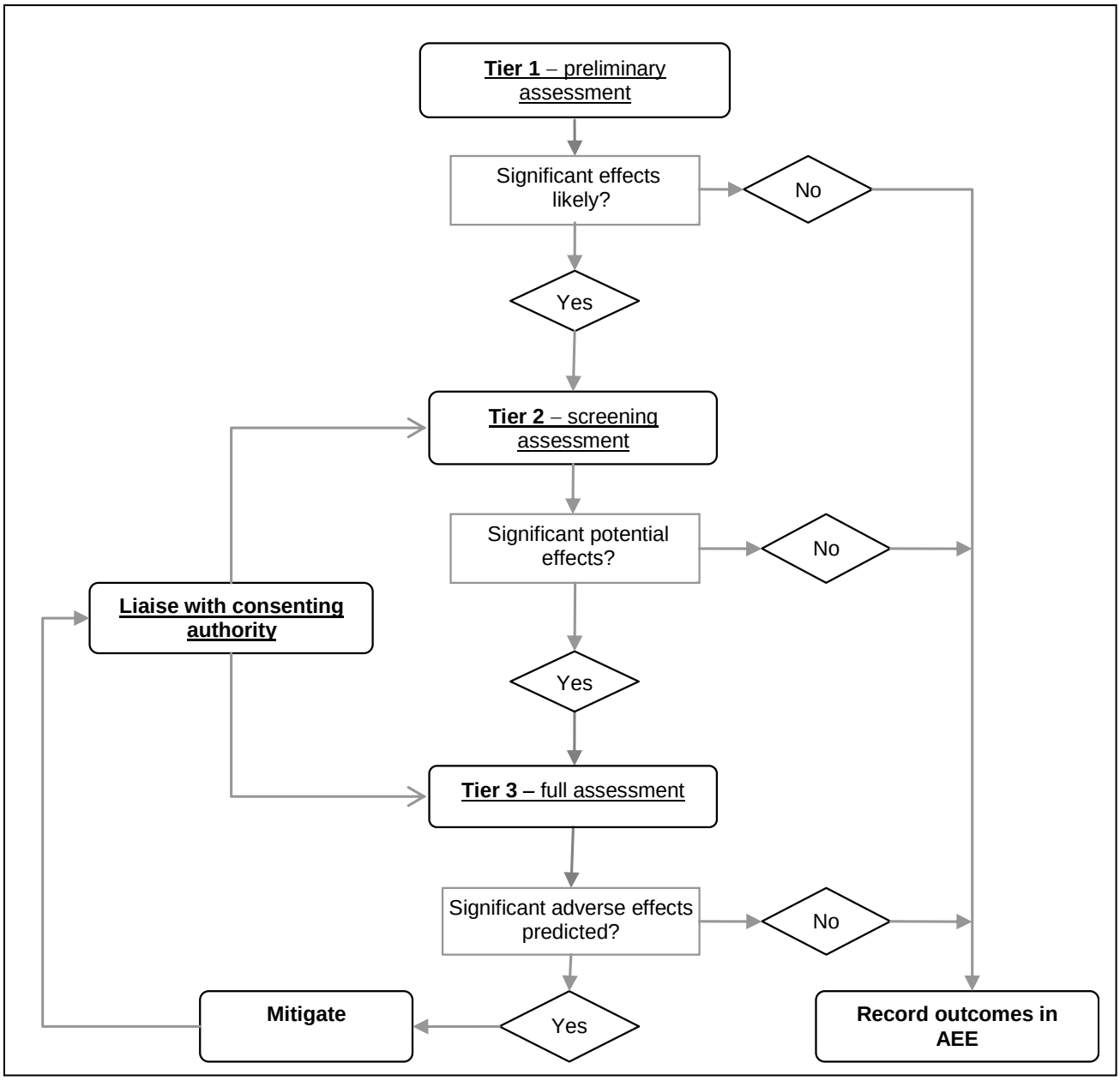
- Tier-1 is a preliminary assessment used to identify any likely significant air quality effects
- Tier-2 is a qualitative assessment with screening-level modelling
- Tier-3 is a quantitative assessment with increased complexity in modelling and site specific data.

Factors affecting the level of assessment required

4. There are a number of factors affecting the level of assessment to be undertaken, these include the:

- scale of the development
- adoption of pollution prevention measures
- complaints/compliance record
- nature of the pollutions released to air
- airshed designation under the Standards (National Environmental Standards for Air Quality)
- existing air quality
- physical geography of the receiving environment
- land use of the receiving environment
- type of consent required

Figure: 1 The air quality assessment process



Tier-1 assessment

Tier-1 is considered to be a qualitative assessment. The intention being to compile background information, identify any relevant issues, and to determine the appropriate level of assessment to be undertaken. For some proposals, this assessment may be all that is required (i.e. permitted and possibly controlled activities). However the level of detail required for this will vary depending on the proposal. The Tier-1 assessment should consider the receiving environment and the nature and scale of the proposal, focusing on the:

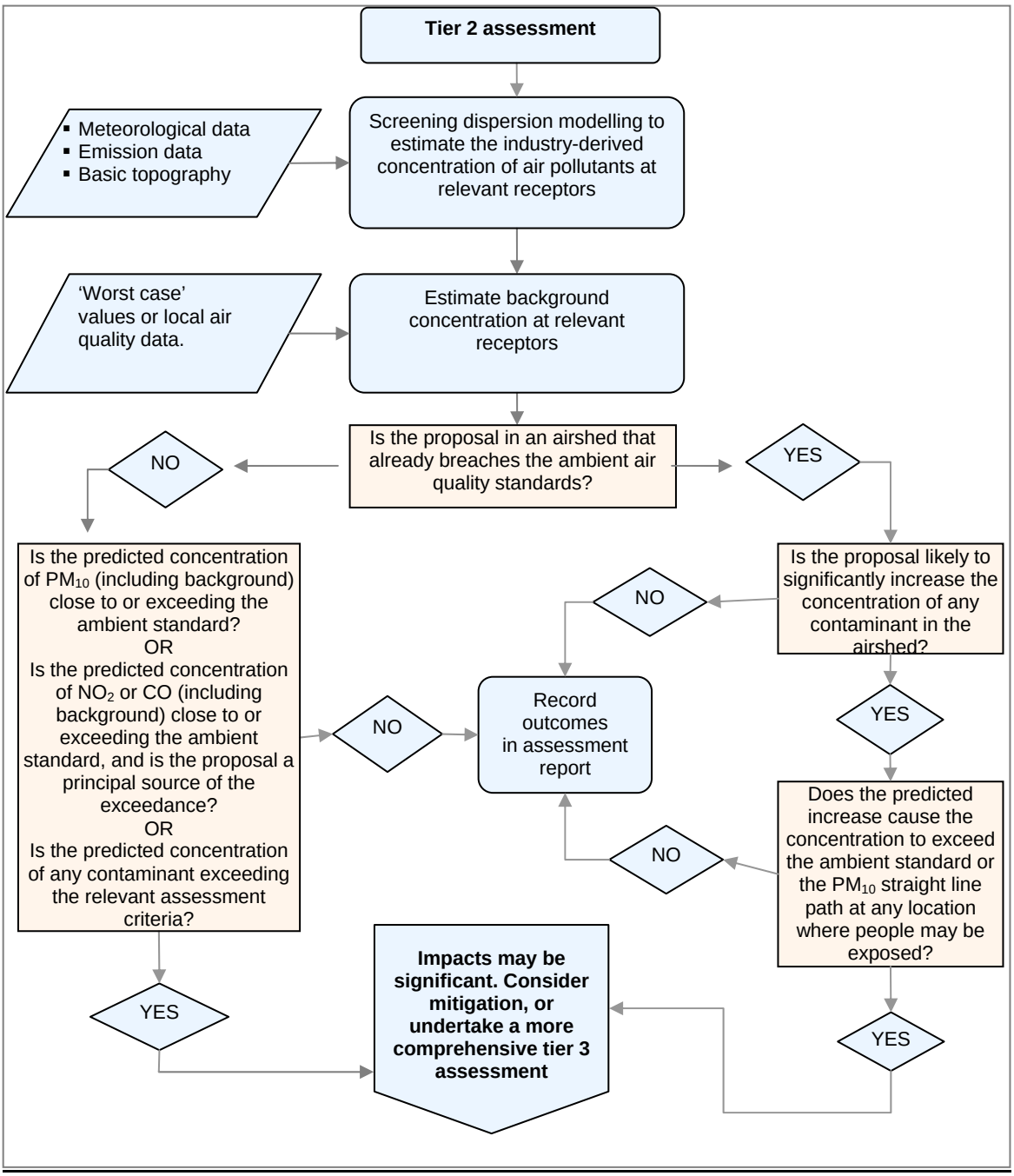
- scale of the development
- nature of the pollutants released to air
- adoption of pollution prevention measures
- alternatives

- complaints/compliance record
- existing air quality including any airshed designation under the standards
- physical geography of the receiving environment
- type of consent required
- any relevant objectives, policies or rules in the regional or district plan

Tier-2 assessment

Tier-2 focuses on a qualitative approach (but not exclusively). The design and operation of the development are taken into account. This approach also relies on a screening modelling assessment of the potential effects. If this assessment indicates the potential for adverse impacts or non-compliance with air quality criteria then a Tier-3 approach (below) may be necessary.

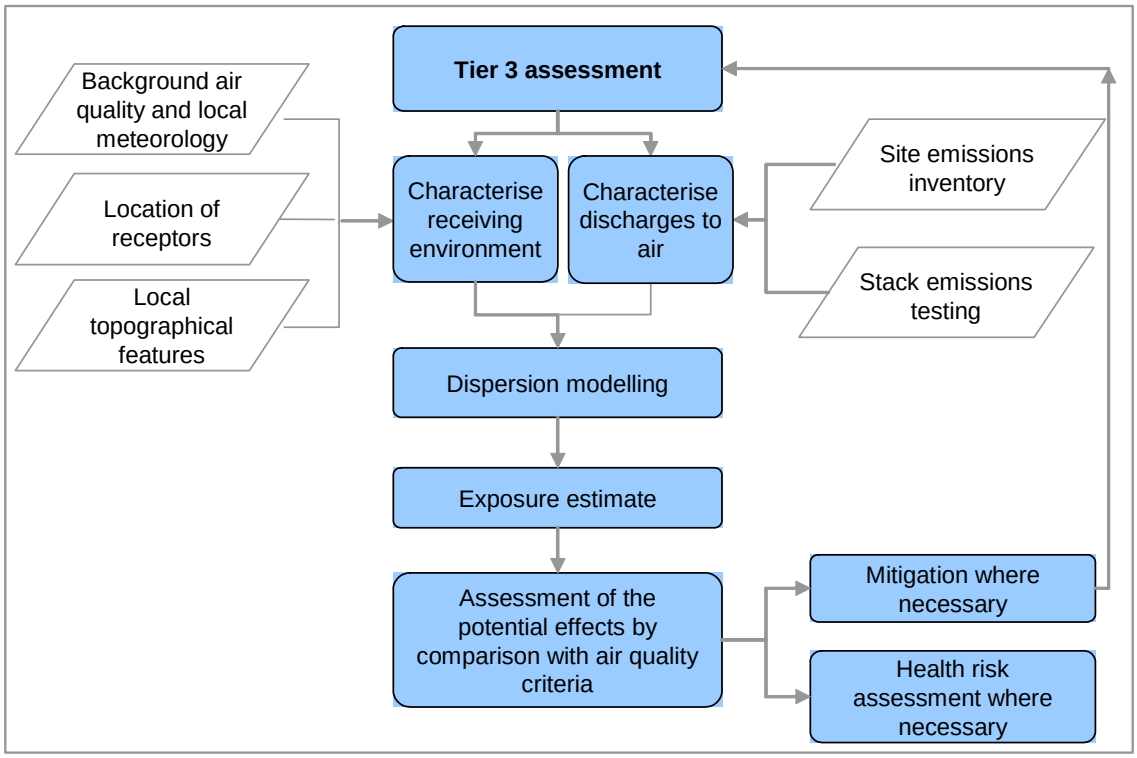
Figure 2: Tier-2 assessment process



Tier-3

Tier-3 involves a more comprehensive quantitative assessment of the potential effects on air quality. It usually requires emission testing, and dispersion modelling.

Figure 3: Tier-3 assessment process



Map 1 – Marsden Point Airshed