

6. Guidelines for Assessing New Sources

This section summarises methods that will be used to assess new industrial discharges proposing to come into the Marsden Point airshed. It is intended that the following wording could form part of a guide to be published by NRC, or incorporated as an appendix to the strategy with minor changes to wording.

Section 11 of the RAQP sets out the information, which is required to accompany applications for air discharge permits. Section 12 of the Plan sets out the matters that the NRC will take into account when making decisions on resource consent applications. The matters set out in this strategy are in addition to the matters set out in the RAQP and are specific to the Marsden Point area.

In general, whenever atmospheric dispersion modelling is to be undertaken, it is advisable that applicants use CALPUFF dispersion modelling system (version 5.7 or later versions), with emissions files and CALMET meteorological data that is maintained by the NRC. The NRC may accept another modelling approach if there are specific circumstances justifying an alternative approach or the emission source is relatively small and/or with little potential for cumulative effects. Any alternative approach must be in accordance with the Ministry for the Environment's *Good Practice Guide for Atmospheric Dispersion Modelling*, June 2004. Prior agreement from the NRC should be obtained before undertaking any alternative modelling approaches.

The potential cumulative effects should be considered in all circumstances, but are likely to be particularly important if the proposal includes SO₂, NO_x or PM₁₀ when:

- The discharge rate of SO₂ or NO_x is more than 10 kilograms per hour (roughly equivalent to a 10MW coal-fired boiler for example); or
- The discharge of PM₁₀ is more than 5kg/hr; or
- The site is located within 3 kilometres of Marsden Point, Taurikura or Urquharts Bay.

When assessing cumulative effects in the airshed, applications will need to consider:

- Existing sources; and
- Sources that have a resource consent but are not yet built; and
- Proposed sources i.e. those that have submitted an application that has been publicly notified; and
- Potential future sources, which may include applications subject to s92 requests.

It is imperative that applicants consider the existing (consented) activities, and ensures these are factored into an assessment. Proposed activities should also be considered depending on timing and particular circumstances, for example, if an application has been notified or if applicants are interested in emissions trading.

The NRC will maintain an emissions database for input into the model. In this way cumulative effects assessment will be handled with consistent assumptions. However, the onus will be on applicants to ensure that all cumulative discharges are properly considered. It will be necessary to communicate closely with NRC and other developers particularly as

developments and consent applications progress. The need for expert advice will also remain essential.

Where there is more than one application at one time and there is a potential for overlapping effects, the NRC may make a Section 92 request for further information for the applicant/s to consider the combined effect of the new discharges if not already assessed. However, applicants cannot be forced to consider other proposals where applications have yet to be lodged. In this context, the notification data is a critical milestone, at least for those activities where notification is necessary. Again, communication with NRC and other developers is crucial in these circumstances.

If the modelling tool predicts that peak downwind concentrations overlap to the point where they exceed the NES or other relevant guidelines, then further mitigation will be necessary or the proposal will need to be revised. Alternatively, an emission offset will need to be obtained from an existing discharger as discussed in Section 5. The effects of this offset will also need to be assessed using the available tools.