



STAFF REPORT

TO: Environment & Planning Committee

FROM: Neil Jackson, Policy Planner

REFERENCE: E880

SUBJECT: **PROPOSED NATIONAL ENVIRONMENTAL STANDARDS FOR TELECOMMUNICATIONS FACILITIES - EP07/08/05** - Report Prepared for 1 August 2007 Meeting

1. PURPOSE OF REPORT

The report proposes a submission in response to an MfE discussion document on Proposed National Environmental Standards for Telecommunications Facilities.

2. BACKGROUND

A national environmental standard is a form of regulation made under section 43 of the RMA Act. The proposal in this case is to give permitted activity status for four aspects of telecommunication facilities:

- Exposure to radio-frequency field emissions from equipment
- Equipment cabinets located in road reserve
- Noise from equipment in road reserve
- Antennae and masts

(See the Executive Summary of the discussion document, attached as Appendix 1)

The discussion document has been considered by David Lewis and Neil Jackson. Staff did not attend the Ministry's workshops.

3. DISCUSSION

3.3 Radio-frequency Fields Exposure

This proposes permitted activity status for emissions that comply with NZS 2772.1: 1999.

The current PTRMP rule uses NZS 6609.1 and .2, which the discussion document says is outdated.

The document proposes that prior to emissions commencing, a report containing a prediction of whether the NZS will be complied with is to be sent to and be reviewed by the Council. It is not clear what, if anything, a council can do if it has concerns about anything in that report.

If the report predicts that “exposures will exceed 25 percent of the exposure limit set for the general public in the New Zealand Standard”, then a further report certifying compliance, based on measurements at the site, is required within three months of emissions commencing.

If measurement shows non-compliance, presumably a council will need to take enforcement action.

The discussion document claims, on page 13, that this requirement for a further report on actual exposure to emissions “provides certainty that the transmitter complies with the New Zealand Standard”. The claim of certainty is over-stated. The measurements may show non-compliance with the standard, creating a rectification/enforcement issue.

If the original report does not predict non-compliance with the standard, there is no requirement to measure actual emissions once the facility is operating. Council does not have the capability to measure emissions – it would have to engage expertise.

There is no proposal for monitoring emissions long term. The discussion document does not say whether emissions will remain at a constant level indefinitely, or whether equipment is likely to deteriorate over time and result in increased emissions.

Proposals

- a) That the Ministry obtain information about the stability of emissions levels over the life of the equipment.
- b) That the Ministry consider requiring a report on actual emissions after the commissioning or upgrading of equipment, regardless of the predictions in the initial report proposed in the standard.
- c) Depending on the information obtained in response to (a), that the Ministry consider requiring emission reports to be provided at specified intervals throughout the life of equipment.
- d) That the standard clarify the responsibility of the operator if measuring shows non-compliance with the NZS.

3.4 Equipment Cabinets in Road Reserves

The standard proposes permitted activity status for telecommunication cabinets in road reserve, within the limits in the table below.

Limitations on cabinet size and location (above ground level)	Adjacent area type
Maximum height: 1.8 m Maximum volume: 2.5 m ³ Road lay position restriction: nil Maximum number of cabinets per separate property frontage exceeding 900 mm in height: 1	Residential, open space, reserve

Maximum height: 2 m Maximum volume: 3.5 m ³ Road lay position restriction: nil	Rural, business, mixed-use
---	----------------------------

The current permitted activity rule in PTRMP does not allow an above-ground cabinet in the Open Space Zone, Landscape Priority Area, or on any identified ridgeline.

In residential areas, the 1.8 m height may be acceptable if the cabinet adjoins a fence or wall of that height or higher. Where a fence or wall height is lower, or there is none, a maximum cabinet height of 1.2 or 1.5 m may be more appropriate.

The standard does not say anything about how far a cabinet may extend into the road reserve. This could be an issue if a cabinet would reduce footpath width and there is no alternative route available for the footpath.

Proposals

- a) That in residential areas, cabinets be no higher than an adjoining fence or wall, up to a maximum height of 1.8 m, except that where there is no existing fence or wall the maximum height of a cabinet is (say) 1.2 m.
- b) That a cabinet must not reduce the width of footpath available to pedestrians, to less than 1.4 m.

3.5 Noise from equipment cabinets in road reserve

Cabinets in road reserve are likely to be located on the boundary with the adjoining property. A noise measurement point inside the property, 3 m from the boundary is proposed.

On some developed properties, that point may not be accessible. The point also needs to be near the cabinet – not 3 m inside the boundary but at the opposite end of the property road frontage. The specification could require the measurement point to be at 3 m from the cabinet, either inside the property or along the property/road boundary.

The proposed standard has different standards for:

- Residential, mixed-use, rural and open space/reserve areas; and
- Business and industrial area (and any other non-residential zones).

The standard should clarify that noise from a cabinet located in a business or industrial area should not exceed the residential limit on any adjoining residential site.

There are other classes of land use, such as hospitals or elderly persons' homes, that may warrant the "residential" noise standard, regardless of what zone they located in.

Proposals

- a) That the assessment point for measuring cabinet noise be amended to be 3 m from the cabinet, on the common boundary of the property and the road reserve if practicable, otherwise within the property.
- b) That the standard be amended to include hospitals, rest homes and schools in the 'residential' category.
- c) That the standard be amended so that noise originating from a cabinet located in a business or industrial area, must comply with the residential standard on any adjoining residential site.

3.6 Antennae and Masts

The proposal is that antennae and their support structures be a permitted activity in road reserve. The standard includes a restriction on up-grading: "whereby the new or altered structure does not exceed the maximum diameter of the structure it replaces or modifies by more than 50%".

The standard does not limit how many successive replacements of a structure can occur, each 50% larger than the previous. An upper limit on diameter should be included.

The standard gives maximum dimensions for panel antennae of: 2.3 m (l) x 450 mm (w) x 200 mm (d).

PTRMP currently does not permit an above-ground facility in the Open Space Zone, Landscape Priority Area, or on an identified ridgeline. Masts, poles and antennae must not exceed a height of 7 m in the Conservation Zone.

The Plan has a basic height limit of 10 m for any free-standing tower, line, aerial or antenna, but allows 20-25 m in the business, industrial or rural areas.

Proposal

That the standard be amended by adding: "up to a maximum of", to the provision allowing replacement of, or addition to, any existing utility structure in the road reserve.

4. RECOMMENDATION

That Council adopt the proposals in Sections 3.3 to 3.6 of this report as its submission to the Ministry for the Environment on the proposed National Environmental Standards for Telecommunications Facilities.

Neil Jackson
Policy Planner

Executive Summary

In this document the Ministry for the Environment proposes for consultation new national environmental standards for radio-frequency fields and low-impact telecommunications facilities in the road reserve.¹

A national environmental standard is a legally enforceable regulation. The exact wording of any standards will be legally drafted after government decision following this consultation. In essence, the proposed standards will say that:

- an activity (such as a mobile phone transmitter) that emits radio-frequency fields will be a permitted activity provided it complies with the existing New Zealand Standard²
- the installation of telecommunications equipment cabinets alongside roads or in the road reserve will be a permitted activity, subject to specified limitations on their size and location
- noise emitting from telecommunications equipment cabinets located alongside roads or in the road reserve will be a permitted activity, subject to specified noise limits
- the installation of masts and antennas alongside roads or in the road reserve will be a permitted activity, subject to specified limitations to height and size.

This discussion document provides more detail on the proposed standards to help people prepare formal submissions. Any person can make a submission on the proposed standards. Submissions must be received by the Ministry for the Environment no later than **5.00 pm on 10 August 2007**. Further details on making a submission are included in section 6.

¹ Please see the Glossary for definitions of 'road reserve' and other technical terms.

² NZS2772.1: 1999. *Radio-frequency Fields Part 1: Maximum Exposure Levels 3 kHz – 300 GHz*.