

**APPENDIX III
RURAL INDUSTRIAL ZONE SITE SPECIFIC
NOISE STANDARDS**

SITE: Lowe Corporation Ltd and Richmond Ltd (formerly known as Lowe Walker Limited)

PLANNING MAP: Rural Industrial Map (RIM) 1

For: Part Lots 14 – 16 DP 2985, Part Lot 1 DP 3805, Lots 1 to 4 DP 4149, Lots 7 – 9 DP 5392, Lot 1 DP 5529, Part Lot 1 DP 8342, Part Lots 1 & 2 DP 10315, Sections 740 & 743 Blk VI Hawera Survey District, Part 2, Part Lots 1 & 3 DP 2590 Whareroa Native Reserve, Part Sub 4 DP 1092, Koromatuara Pt 4, Part Lot 2 DP 3291 Blk VI Hawera Survey District.

Noise

No noise shall be created by a permitted use, which causes a nuisance beyond the site. In determining whether a nuisance has been created the following standards shall be applied.

The noise level measured on the boundary of any residential zone or the notional boundary of a rural dwelling shall not exceed the following limits.

Any Day	L10	L95
6.30 am to 8.30 pm	55dBA	50dBA
8.30 pm to 6.30 am	45dBA	40dBA

SITE: Fonterra Co-operative Group Ltd, Whareroa Site (formerly known as Kiwi Co-operative Dairies, Hawera site)

PLANNING MAPS: Rural Industrial zone RIM2 and the Fonterra Co-operative Group Ltd, Whareroa Site formerly (Kiwi Co-operative Dairies Limited) Noise Area Boundary Plan (Fig 1)

FOR: Lot 1, DP 12929, Lots 1 and 2, DP 13689, Lot 1, DP 17308, Lot 1, DP 17686 being part section 234, Block X, Patea District.

Lot 2, DP 2777, part section 235, 236, 237, Patea District comprised in CT E4/214.

Lot 4, DP 15874, being part of sections 228 and 229, Patea District.

Lot 1, DP 13241 comprised in CT F1/896, Lot 3, DP 19882 comprised in CT K4/545 and Lot 1 to Lot 4, DP 15784, Patea District.

NOISE: The noise level from Fonterra Co-operative Group Ltd, Whareroa Site (formerly known as Kiwi Co-operative Dairies Limited) shall not exceed 45 dBA L₁₀ when measured at or beyond the Noise Area Boundary as shown on Fig 1.

The noise contour has been based on there being no positive or negative meteorological effects ("zero met") to the propagation of sound from the Fonterra Co-operative Group Ltd, Whareroa Site's (Kiwi) plant. Monitoring shall be undertaken in accordance with the requirements of section 5.3 of NZS 6801:1991 Measurement of Sound such as to determine the sound levels standardised to zero met conditions.

Any occupied dwelling unit existing at 31 December 1997 and within the 45 dBA contour as shown on Fig 1, shall be upgraded if required by the owner at the Fonterra Co-operative Group Ltd Whareroa Site's (formerly known as Kiwi Co-operative Dairies) expense, to achieve an internal design level of 35 dBA L₁₀ in all habitable rooms with windows closed.

(Note 1: Any new dwelling unit located within the 45 dBA Noise Area Boundary, as shown in Fig 1, shall be constructed to achieve an internal design level of 35 dBA L₁₀ in all habitable rooms with the windows closed – refer to Rule 10.02.01.)

SITE: Natural Gas Corporation, Kapuni

PLANNING MAP: RIM 4

The decision areas to which the below noise levels relate are shown approximately on the Plan identifying the 1984 and 1997 decision areas in this Appendix.

1968 Decision Area

Activities:

- production station and gas treatment plant
- the collecting and separating of natural gas and oil together with any necessary ancillary services and the gathering, processing, storage and pumping of Natural Gas and Oil together with building necessary to house equipment, and/or provide ancillary services or facilities for the personnel so employed.

Noise Standards

No specific noise standards were applied in the 1968 decision. Reliance shall be placed on the Section 16 requirements of the Act.

1984 and 1991 Decision Areas

Activities:

- gas conditioning and flaring, the truck load out of hydrocarbons, fire water storage and the construction of buildings, plant and services associated with such uses
- the storage of LPG in holding tanks of up to 100 tonnes capacity
- the loading of road vehicles with LPG
- accessory facilities for staff involved with liquid petroleum gas storage and loadout facility
- the storage of water for fire fighting and any operation necessary for the safety of the plant, its operators and the public.

Noise Standards

(a) **Operational Noise Levels**

The Grantee shall use and operate the plant and related and ancillary activities on the site in such a manner as to ensure that at any notional boundary, the corrected noise level emanating from the uses the subject of this consent based on measurements made at the locations specified on 'Plan A' attached hereto and at such other locations as may become necessary, shall not exceed the following:

7.00 pm to 7.00 am	43 dBA L ₁₀
7.00 am to 7.00 pm	45 dBA L ₁₀

(b) **Noise Report**

The Grantee shall forward to the Council not later than three months after commissioning of the plant a noise report from an acoustic consultant accepted by the Council. This report shall detail noise levels measured at the monitoring locations shown on 'Plan A' attached hereto.

(c) **Noise Monitoring**

Weather permitting, the Grantee shall monitor at the times specified below the noise levels generated by its operations.

This monitoring shall be at intervals of not more than seven days for the first three months after commissioning of the plant or until the provisions of this condition are satisfied, whichever is the longer and thereafter at intervals not greater than 26 weeks.

All information obtained from such monitoring shall be made available to the Council on request. Monitoring of noise levels shall be conducted at the points marked 'A', 'B' and 'C' on 'Plan A' attached hereto.

(d) **Measurements**

The noise levels referred to in this condition shall be measured and assessed in accordance with the requirements of New Zealand standards:

- 6801: 1977 'Methods of Measuring Noise' and
6802: 1977 'Assessment of Noise in the Environment'

The noise shall be measured with a sound level meter complying at least with the international standard IEC651 Sound Level Meter Type 1.

All evaluations of the noise of the plant during the first three months shall be based upon the average of L10 levels assessed in accordance with the said New Zealand Standard 6801:1977.

(e) **Definition of Notional Boundary (for the purpose of the 1984 & 1991 Decision Areas)**

'Notional Boundary' means a line 20 metres from any wall of any occupied residence not owned by the Grantee, and 20 metres from the position of any wall of the residences marked on 'Plan A' attached hereto irrespective of ownership, occupancy, or continued existence of those residences as so marked.

1997 Decision Area

Activities:

- Construction, operation and maintenance of a co-generation facility and ancillary structures, including the relocation of an existing entranceway and CNG facility at the Natural Gas Corporation of New Zealand Limited's existing gas treatment plant on Palmer Road, Kapuni (Pt. Lot 1 DP 5227)

Noise Standards

1. The consent holder shall provide to the South Taranaki District Council prior to the installation of the co-generation plant, a noise management plan prepared by a suitably qualified and experienced person.

This plan shall detail the measures to be implemented to ensure that noise from the co-generation facility does not exceed the limits specified in condition 3 and fulfils the duty under section 16 of the Act to adopt the best practicable option. This plan shall indicate the means by which noise emissions through all potential noise transmission paths on the co-generation facility will be treated, as far as they can be ascertained.

2. The consent holder shall measure noise levels excluding traffic noise at, or as close as reasonably practicable to the notional boundary (as defined in NZS 6801:1991) of Mr Jack Smith's existing Palmer Road dwelling located on Pt. Section 13, Block XV Kaupokonui Survey District. Noise level measurements shall, as far as practicable, be undertaken two times per week on separate days and shall be undertaken using four consecutive fifteen minutes periods for each measurement. All measurements shall be undertaken and recorded in accordance with NZS 6801:1991, shall include L_{max}, L_{eq}, L₁₀, L₅₀ and L₉₅ measurements and shall be provided to the South Taranaki District Council on request or otherwise at three monthly intervals. The monitoring required by this condition shall only be undertaken with the consent of the owner (s) and/or occupiers of Pt. Section 13, Block XV Kaupokonui Survey District and shall cease on the due date for the South Taranaki District Council's review of these conditions in accordance with condition 8 regardless of whether any review occurs.

In the event that in the reasonable opinion of the South Taranaki District Council's Director of Environmental Services, the owner (s) and/or occupiers of Part Section 13, Block XV Kaupokonui Survey District will not permit the consent holder reasonable access to carry out the noise level measurements required by this condition, the South Taranaki District Council's Director of Environmental Services shall specify a new location of an equivalent distance from the Natural Gas site as Pt. Section 13 Block XV Kaupokonui Survey District, and that this new location be agreed to by the consent holder.

3. The consent holder shall provide to the South Taranaki District Council after the construction of the facility but within three (3) months of the commencement of co-generation operations, a report prepared by a suitably qualified and experienced person. This report shall advise that the specific sound power level 105dBA for the co-generation facility has been met and that the logarithmic average of two measured sound pressure levels from noise emissions from the co-generation facility or the co-generation facility and the three remaining boilers measured at points prescribed in condition 4, does not exceed:
 - 70dBA Leq (15 mins) for the operation of the co-generation facility alone; or
 - 75dBA Leq (15 mins) for the simultaneous operation of the co-generation facility and the three remaining boilers.

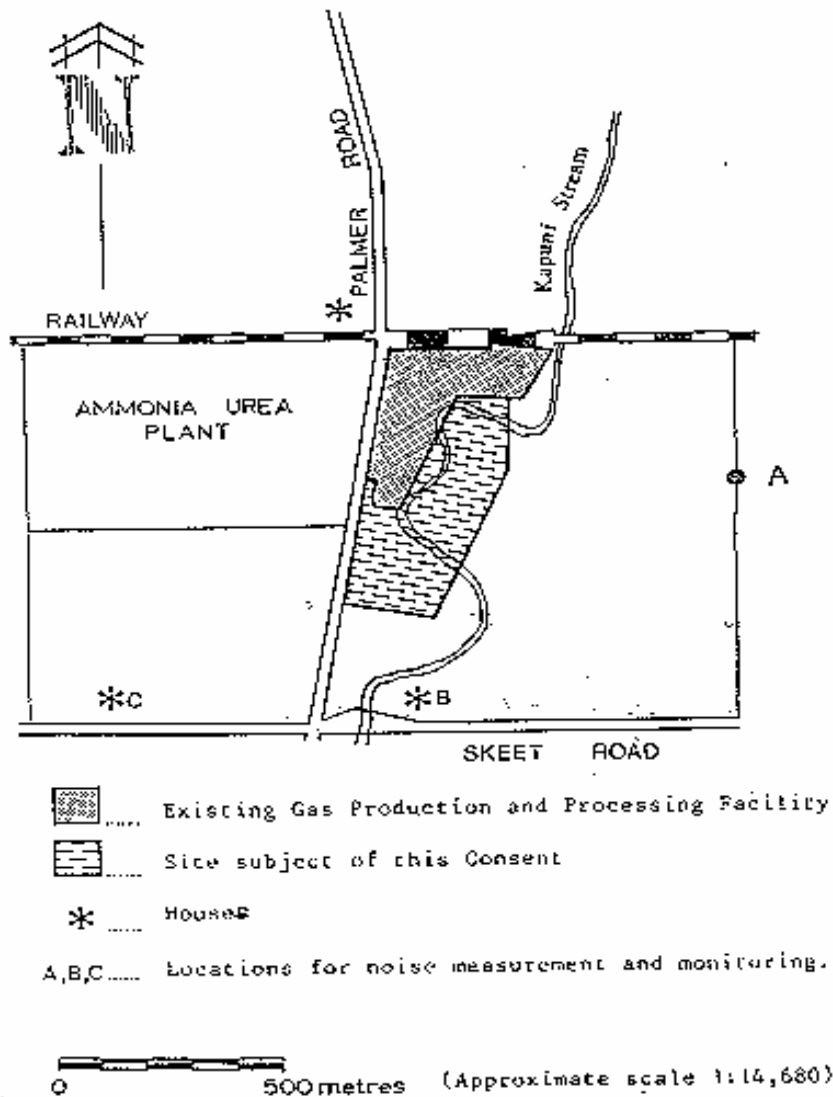
Noise from all other sources shall be excluded from the measurement as far as is practicably possible.

4. The two measurement points chosen shall be those deemed by a suitably qualified and experienced person to accurately represent noise from the co-generation facility or the co-generation facility and the three remaining boilers within the constraints of the measurement location line. The measurement location line shall be as shown in the attached plan marked "Plan A – Measurement Location Line" (ie. on an imaginary line one metre west of, and parallel to, the consent holder's Palmer Road boundary which line shall commence 35 metres south of the north-western corner of the consent holder's boundary with the Shell Todd Oil Services Production Station, and terminate 55 metres south of that corner.)

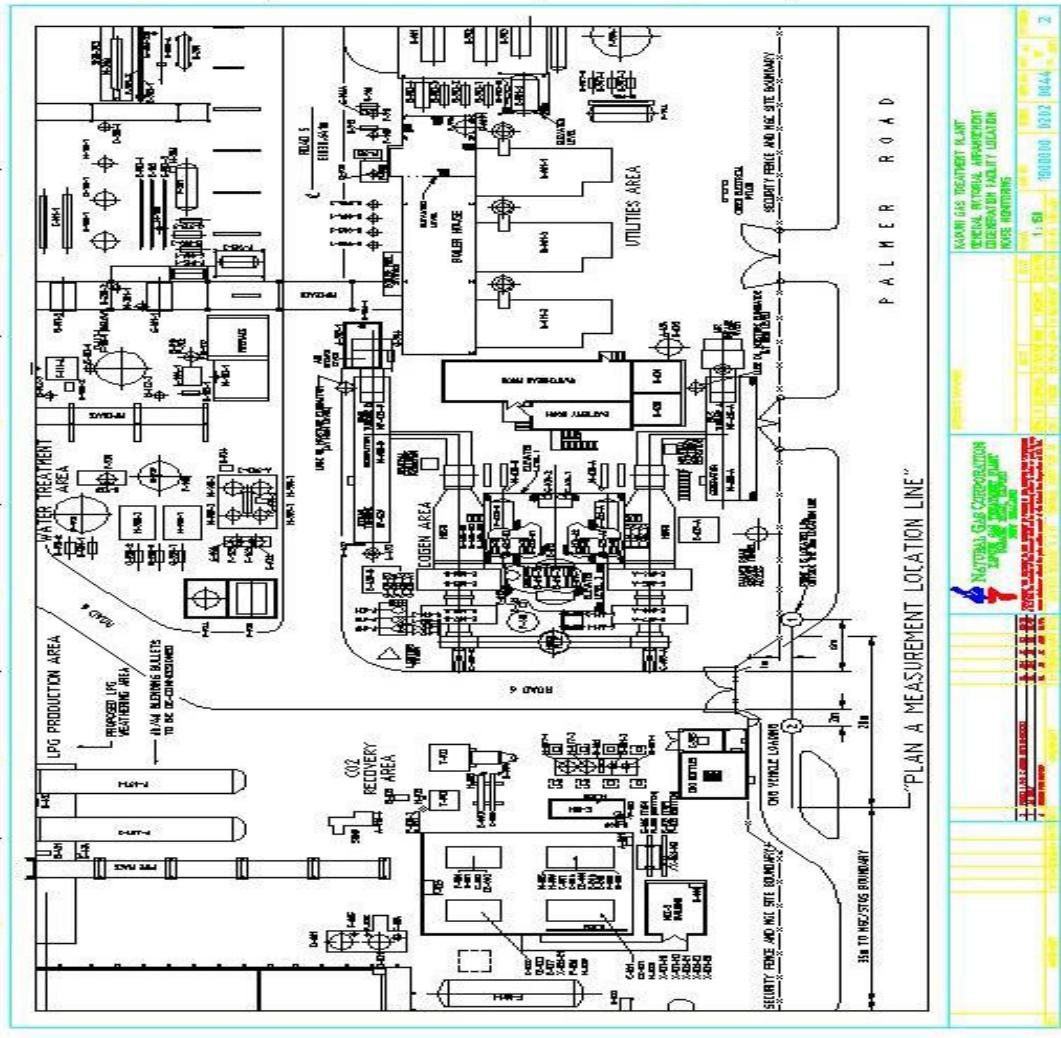
The two measurement points shall be no closer than five metres to each other and shall be 1.5 metres above the ground.

5. After initial measurements have been undertaken in accordance with conditions 3 and 4 those measurements shall be repeated at six monthly intervals as an additional component of the six monthly noise monitoring programme for the 1984 decision area. The first such ongoing measurements shall be timed to coincide with measurements undertaken as part of the existing six monthly noise monitoring programme for the 1994 decision area. Noise measurements shall be provided to the South Taranaki District Council.

Plan 'A' referred to in Condition 5 of Planning Consent granted by Eltham County Council on -20 November 1984.



SITE: Ballance Agri-Nutrients Kapuni Limited (formerly known as the Petrochem Ammonia-Urea Plant)



PLANNING MAP: RIM 5

Noise Levels

The level of noise emanating from the zone shall not exceed the following level at a distance in any direction of 1,000 metres from the intersection of coordinates 66.1950 metres north and 29.4625 metres east:

43 dBA at all times

The Council accepted that the noise levels set out in the paragraph above will be exceeded on certain occasions due to the type of plant and the method and nature of operation carried on the site. These occasions are as follows:

- (a) Plant start up following routine shut downs, maximum duration of 3-5 days per year.
- (b) Abnormal operations, maximum of six times per year for a duration of 12 hours each.

Provided that on these occasions the noise levels shall not exceed 48dBA and no one measuring point shall exceed this level by more than 5dBA at the stated measuring points.

Measurement of Noise

Measurements shall be taken at four points where the circle having a radius of 1,000 metres from the intersection of the said coordinates 66.1950 metres north and 19.4625 metres east meets the centre lines of Palmer Road (both north and south of the railway), Skeet Road (west of Palmer Road), and the railway (east of Palmer Road) or from points as near as conveniently practicable thereto, the line between each such point and the substantial bulk of the ammonia/urea complex being unobstructed by ground or buildings other than fences.

The precise points from which measurements are to be made under paragraph (a) of this ordinance shall be chosen by Council and the owner of the ammonia/urea plant and thereafter all measurements shall be made from the same points so long as they continue to satisfy the requirements then some other point shall be chosen by the Council and the owner of the ammonia/urea plant as close as practicable to the point previously used.

Where measurements are taken at points which are to a greater or lesser distance from the said intersection than 1,000 metres the level measured shall be converted to the equivalent level at a distance of 1,000 metres according to the recognised methods of noise measurement.

All measurements shall be made with a non-directional microphone so oriented as to accept sounds from both the Ammonia and Urea Plant and from the natural gas treatment facilities except that measurement will only be taken when wind speeds are less than two (2) metres per second.

Adjustment of Noise Levels

The noise levels so measured shall be adjusted by excluding the averaged measured ambient background noise which for this purpose shall be assumed to be 38 dBA.

The Council or the owner of the Ammonia/Urea Plant may at any time when the plant is not operating and the natural gas treatment facilities are fully loaded with all components operating, cause measurements to be made by an independent acoustic consultant.

The measured levels as so adjusted shall then be averaged but excluding for this purpose any measurement made at a time when noise from a source outside the control of the occupiers of the zone or of the natural gas treatment facilities shall be at a level likely to significantly effect the measurement.

A timed and dated record shall be kept of all measurements and shall include a note of wind conditions and air temperature and relative humidity.

In measurement of noise there shall be excluded there from noise emanating from the railway line or railway siding if the operations thereon shall not be or be capable of being under the control of the occupiers of the zone.