

Annex A — K15aa Record of Baseline Integrity and Regulatory Reliance (Evidentiary Annex to Statement of Matters of Public Interest)

A1 Purpose and Scope

A1.1

This annex records matters relating to the integrity, derivation, verification, and regulatory reliance upon background sound level data associated with reference receptor K15aa, as relied upon in the noise compliance framework for the Lal Lal Wind Farm.

A1.2

The matters recorded in this annex are confined to:

- (a) the definition and mandatory characteristics of “background sound” under NZS 6808:2010;
- (b) the timing, location, and conditions under which K15aa monitoring was undertaken;
- (c) the use of K15aa data in deriving background-dependent noise limits;
- (d) the scope and limitations of environmental auditor verification in relation to that data; and
- (e) the regulatory custody and reliance upon that material as evidenced on the disclosed record.

A1.3

This annex does not assess compliance, assert breach, or draw conclusions as to legality. It records facts, document statements, and the state of the disclosed regulatory record only.

A2 Regulatory and Technical Framework

A2.1

Noise compliance for wind energy facilities is governed, relevantly, by:

- NZS 6808:2010 — Acoustics: Wind Farm Noise;
- endorsed Noise Compliance Test Plans (NCTPs);
- planning permit conditions; and
- the Environment Protection Regulations 2021.

A2.2

Under NZS 6808:2010, background-dependent noise limits are derived by reference to “background sound”, defined as the A-frequency-weighted L90 centile sound level measured prior to the installation of any wind turbines.

A2.3

The definition contains an express temporal element requiring measurement prior to installation of turbines. The standard does not expressly describe a methodology by which background sound may be retrospectively derived where measurements are influenced by installed or operating turbines.

A3 Reference Receptor K15aa — Role in Compliance Framework

A3.1

Reference receptor K15aa was nominated as the reference location for derivation of background sound regressions used to establish noise limits applicable to multiple compliance locations at the Lal Lal Wind Farm.

A3.2

As such, the integrity of background sound data at K15aa is foundational to the compliance framework relied upon for post-construction noise assessment.

A4 Timing and Conditions of K15aa Monitoring

A4.1 Material on the disclosed regulatory record indicates that monitoring at K15aa occurred in 2019 after wind turbines had been installed at the Lal Lal Wind Farm.

A4.2 Subsequent consultant material acknowledges that turbine operation occurred during part of the monitoring period and applies modelling adjustments to account for potential turbine influence within the dataset.

A4.3 The disclosed record does not identify any background sound dataset for K15aa obtained prior to turbine installation, as contemplated by the temporal element of the NZS 6808:2010 definition.

A4.4 No document on the disclosed record demonstrates how the reliance placed upon the 2019 K15aa dataset reconciles the presence of installed and operating turbines with the pre-installation requirement expressed in NZS 6808:2010.

A5 Post-hoc Adjustment and Modelling

A5.1

Consultant reports on the disclosed record apply modelling techniques described as subtractive or corrective adjustments intended to remove or account for turbine influence within the measured K15aa dataset.

A5.2

These modelling techniques are described as post-hoc adjustments applied to data collected during periods when turbines were present or operating.

A5.3

The disclosed record does not identify any provision within NZS 6808:2010 expressly describing a method by which background sound may be reconstructed or retrospectively derived where monitoring data are influenced by operating turbines.

A6 Environmental Auditor Verification — Scope and Limitations

A6.1

Environmental auditor verification material relied upon by the regulator confirms compliance with planning permit and NCTP requirements.

A6.2

The auditor verification expressly limits its scope and does not state that the auditor verified compliance with the Environment Protection Regulations 2021 or independently assessed the validity of background sound derivation under NZS 6808:2010.

A6.3

The auditor material acknowledges reliance upon consultant-provided datasets and methodologies.

A6.4

The disclosed regulatory record does not contain an auditor statement confirming that background sound regressions derived from K15aa satisfy the pre-installation requirement of NZS 6808:2010.

A7 Regulatory Custody and Reliance

A7.1

Regulatory correspondence indicates that the Environment Protection Authority has relied upon post-construction noise assessment material and accompanying auditor verification as evidencing compliance.

A7.2

Freedom of Information decisions confirm that:

- (a) the EPA does not hold a pre-construction background sound dataset for K15aa; and
- (b) no separate regulatory analysis reconciling background sound definition requirements with post-installation monitoring has been identified on the disclosed record.

A7.3

Correspondence recorded in Annex C evidences that questions concerning background sound derivation at K15aa were raised with the regulator and acknowledged, but no reconciliation document is disclosed.

A8 Public-Interest Relevance

A8.1

The matters recorded in this annex are relevant to the public interest because background-dependent noise limits are foundational to wind farm noise regulation.

A8.2

If background sound values relied upon for compliance are derived from post-installation datasets through modelling or adjustment, and the disclosed regulatory record does not demonstrate how such derivation aligns with the governing definition, a question of procedural and evidentiary transparency arises for public-interest consideration.

A8.3

This Annex does not assert that compliant background data do not exist, nor that modelling techniques are inherently impermissible. It records that, on the disclosed material presently available, the manner in which the governing definition has been satisfied is not demonstrated.

A9 Relationship to Other Annexes

A9.1

This annex should be read together with:

- Annex B — SAC-01, which addresses procedural integrity in identification of Special Audible Characteristics; and
- Annex C, which records EPA correspondence, internal review material, Freedom of Information outcomes, and the regulatory reliance posture relevant to K15aa.

A9.2

Each annex is discrete and self-contained. No annex depends on inference from another to establish its record.