IN THE MATTER of the Resource Management

Act 1991

AND

IN THE MATTER of the hearing (Stage 1) by the

Waikato District Council on the Proposed Waikato District Plan

STATEMENT OF EVIDENCE BY LUCY SMITH

Terra Firma Mining Limited

10 March 2021

1.0 INTRODUCTION

1.1 My full name is Lucy Catherine Smith and I am a Director of Terra Firma Mining Ltd (TFM), a business I own and manage with my husband Lincoln. I have a Bachelor of Technology in Biotechnology and Bioprocess Engineering from Massey University and a Post Graduate Diploma in Resources and Environmental Planning from the University of Waikato. I have had more than 15 years' experience as an Environmental Planner.

Purpose and Scope of Evidence

- 1.2 My evidence will address the following matters:
 - A brief description of activities undertaken by TFM and neighbouring businesses in the Industrial Zone;
 - The potential for reverse sensitivity effects to arise due to the proposed rezoning, and the possible consequences;
 - Proposed District Plan (PDP) provisions that address reverse sensitivity;
 - Failure of the proposed rezoning to pass the Three Lens assessment approach; and
 - Why the proposal does not meet the purpose of the Resource Management Act 1991 (RMA).

Code of Conduct

1.3 I have read the Environment Court's Code of Conduct for Expert Witnesses and agree to comply with it. My qualifications and experience as an expert are set out above. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Background to TFM

1.4 TFM is an underground and mining consulting and contracting business that has a yard at 137A Rotowaro Road, Huntly (**Figure 1**). The 6,000m² yard is leased from the Mines Rescue Trust (MRT), which owns the larger 1.5ha site (Sec 1 SO 314496 Blk XV). TMF also leases a garage and office within the main MRT building.



Figure 1: Location of Terra Firma Mining yard (marked with star)

- 1.5 TFM's site activities include an engineering workshop and mechanised firewood splitting. A number of containers used for the storage of tools, parts and consumables and other materials are stored outside on laydown pads. Mechanical equipment and heavy vehicles are also stored on site. One container houses a pilot ore-processing plant for which TFM has held resource consents (since expired). Site activities generate noise and dust and include the movement of heavy vehicles and equipment.
- 1.6 The MRT site is zoned Industrial and the remaining land in this zone is owned by Porter Group, who operate an earthmoving machinery and parts warehouse on the west of their site. The company is also developing the eastern part of their site. Tenants on the Porter Group property are Bathurst Mining Ltd, which operates the Huntly Coal Screening Plant adjacent to Rotowaro Road, and HRDC Ltd (a subsidiary of Tui Products Ltd), which undertakes wood processing, charcoal production, bagged coal and firewood operations. These activities, and the effects they generate including noise and dust, are in keeping with what might reasonably occur within an Industrial Zone.

2.0 CURRENT AND PROPOSED ZONINGS

Operative District Plan (ODP) zonings for the locality are shown in **Figure 2** below.

TFM's yard is located within the Industrial Zone (purple), and the subject site to the east has a split zoning of Rural Zone (grey) and New Residential Zone (orange).

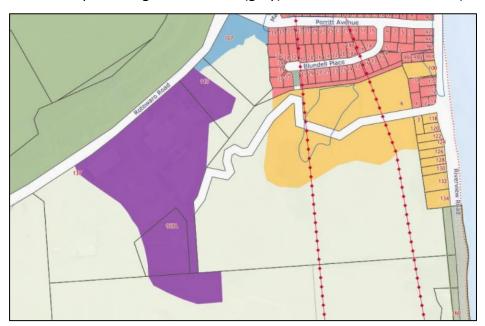


Figure 2: Operative District Plan Zoning

2.2 The PDP seeks to rezone land to the northwest of TFM's site to Residential Zone and tidy up the zoning of other properties to follow boundaries (**Figure 3**). TFM's site remains Industrial Zone.



Figure 3: Proposed District Plan Zoning (Industrial – Purple, Residential – Yellow, Business – Blue)

2.3 Eastside Heights Ltd (Submitter 699) submitted to the PDP in support of the rezoning on the site described as Lot 2 and Part Lot 1 DP 25266. TFM (Further Submitter 1285) has submitted to the PDP to oppose this submission in part.

3.0 REVERSE SENSITIVITY EFFECTS

- 3.1 TFM does not oppose residential development in Huntly *per se.* The company considers that there is an urgent need to increase housing capacity in the town and acknowledges that this site appears to be an obvious candidate for a Residential Zone.
- 3.2 TFM's primary reason for opposing the residential zoning is the potential for reverse sensitivity effects to arise and result in constraining its activities and those of other businesses within the Rotowaro Road Industrial Zone. Residential and industrial activities are not compatible neighbours due to their different amenity expectations, and it is foreseeable that this specific rezoning will create conflict between the two zones.
- 3.3 The effects of legitimate, existing industrial activities, such as noise, vibration, dust, lighting and visual effects may be a source of complaint from future residents of the subject land, who are likely to have amenity expectations of an urban environment. This may lead to complaints to both Waikato District Council (WDC) and Waikato Regional Council (WRC) and increasing pressure on businesses to reduce the magnitude of effects to a level that is more compatible with the new residential activity.
- 3.4 Both WDC and WRC are to able impose more stringent consent conditions through review of resource consents and at the time of consent renewal. New consent applications may be granted with tougher conditions than would previously applied, due to the closer proximity of residents.

- 3.5 More stringent consent conditions may result in additional costs to the business that would not otherwise apply. Such costs could arise directly from physical measures to mitigate effects (e.g. noise attenuation, scrubbers etc.) or indirectly due to operational costs (e.g. timing of vehicle movements and scheduling of site activities). Another potential indirect cost is the additional time and resources to address complaints and manage conflicts with the new residential community.
- 3.6 Additional costs and constraints impact the bottom line and in a worst case scenario might affect the viability of a business to continue to operate at the site. Industrial zoned land is in short supply in Huntly and the Waikato district generally. While it is a focus of Council to increase this land use, in my opinion it is just as important to protect the viability of existing industrial areas.
- 3.7 The potential for reverse sensitivity effects to arise exists once the subject site is developed for residential purposes. Such conflict may not arise immediately following occupation of the new subdivision, but the threat is ever-present. The proximity of the new residential zone becomes an additional factor for Council to consider at the time of industry resource consent renewals, and this may lead to a "sinking lid" approach to consent conditions, regardless of any complaints.

4.0 NOISE EFFECTS

- 4.1 To be clear, TFM does not seek to exempt its activities or those of other businesses from complying with the Industrial Zone rules. However, allowing residential development to come closer significantly raises the hurdle for rule compliance.
- 4.2 For example, Rule 20.2.3.1 of the PDP prescribes that noise measured within another site in the Industrial Zone must not exceed:
 - 75dB (LA_{eq}) 7am to 10pm; and
 - 55dB (LA_{eq}) and 85dB (LA_{max}) 10pm to 7am the following day.
- 4.3 In addition, the noise measured within any site within another, non-industrial zone must meet the permitted noise levels for that zone. In this case, industrial activities

must comply with the much more stringent noise standards that apply to the Residential Zone which are prescribed in Rule 16.2.1.1 P2 of the PDP:

- a) Noise measured within any other site in the Residential Zone must not exceed:
- (i) 50dB (LA_{eq}), 7am to 7pm, every day;
- (ii) 45dB (LA_{eq}), 7pm to 10pm, every day; and
- (iii) 40dB (LA_{eq}) and 65dB (LA_{max}), 10pm to 7am the following day.
- 4.4 By comparison, PDP Rural Zone Rule 22.2.1.1 requires that noise measured at the notional boundary on a Rural Zone site must not exceed:
 - (i) 50dB (LAeq), 7am to 7pm every day;
 - (ii) 45dB (LAeq), 7pm to 10pm every day;
 - (iii) 40dB (LAeq) and 65dB (LAmax), 10pm to 7am the following day.
- 4.5 Changing the adjoining land use from rural to residential will have major implications for the ability of industrial activities to comply with Industrial Zone noise standards.
- 4.6 TFM secured land use consents for a pilot ore processing plant on its site, comprising physical (i.e. non-chemical), water-based processes contained in a shipping container. An acoustic assessment found that the activity would comply with both the ODP and PDP noise standards. The consents have since expired and the plant is not currently in use, but could be required again in future. The presence of the proposed Residential Zone will affect TFM's ability to comply with the Industrial Zone noise rule, and may result in Council declining any future consent application.

5.0 PLANNING APPROACHES TO REVERSE SENSITIVITY

5.1 The potential for reverse sensitivity effects to arise between residential and non-compatible neighbouring land uses is well known. Population growth in cities and towns has led to urban land use encroaching into surrounding rural areas and closer to industrial activities that were once located on the city fringe. Conflicts between existing activities and new residents, both of whom have legal status, have been

challenging to address and have sometimes led to the original land use being 'squeezed out' of the area. It is much easier to avoid the potential for reverse sensitivity in the first place, through policy and practical methods, for example:

- Zoning a transitional land use in between two incompatible zones;
- Zoning land to reflect topographical or physical boundaries (e.g. a gully, State Highway) between two activities.
- Prescribing a non-residential buffer distance around an existing industrial zone or activity;
- Prescribing resource conditions that require landscaping (earth bunds, tree planting) on a subdivision boundary;
- Requiring acoustic insulation; and
- Requiring 'no complaints' covenants on new titles.
- 5.2 The PDP addresses reverse sensitivity issues in the Residential Zone through provisions including the following:
 - 4.4.1 Objective Adverse effects of land use and development
 - (a) The health and well-being of people, communities and the environment are protected from the adverse effects of land use and development.
 - 4.4.2 Policy Noise
 - (a) The adverse effects of noise on residential amenity are minimised by:
 - (i) Ensuring that the maximum sound levels are compatible with the surrounding residential environment;
 - (ii) Limiting the timing and duration of noise-generating activities, including construction and demolition activities;
 - (iii) Maintaining appropriate setback distances between high noise environments and sensitive land uses;
 - (iv) Managing the location of sensitive land uses, particularly in relation to lawfully established high noise generating activities; and

- (v) Requiring acoustic insulation where sensitive activities are located within high noise environments.
- 4.7.1 Objective Subdivision and Land Use Integration
- (a) Subdivision layout and design facilitates the land use outcomes sought for the residential, business, industrial, reserve and specific purpose zones.
- 4.7.11 Policy Reverse sensitivity
- (a) Development and subdivision design minimises reverse sensitivity effects on adjacent sites, adjacent activities, or the wider environment; and(b) Avoid potential reverse sensitivity effects of locating new dwellings in the vicinity of an intensive farming, extraction industry or industrial activity.
- 5.3 The proposed rezoning is inconsistent with this suite of provisions, and in particular Policy 4.4.2 (iv) and Policy 4.7.11 (b), as it will result in residential development immediately adjacent to the high noise environment of existing Industrial Zone activities.

6.0 THREE LENS ASSESSMENT

- 6.1 The s42A Hearing 25 Zone Extents Framework Report prepared by Dr Mark Davey proposes a 'three lens' approach for assessment of rezoning proposals, with the requirement that a proposal must pass the first two lenses (consistency with PDP growth policies and consistency with higher order documents) in order to be considered against the third lens of best practice.
- I have read the memorandum by Peter Fuller dated March 4 2021 and agree with the concerns he raises, in relation to the vires of requiring an initial assessment against the PDP growth provisions despite these not being operative. I do not consider that these issues have a major bearing on the basis for TFM's concerns about the proposed rezoning.

- Of greater concern is that the rezoning proposal has been incorporated into the PDP, despite its inconsistency with the PDP policy framework. I am concerned that this creates a presumption of validity and consistency with the other (non-growth) PDP policies, and that if the proposed rezoning is considered to be consistent with the PDP growth policies and higher order documents, the only remaining barrier is the best practice criteria of Lens 3. It is possible that the proposal may be assessed overall to pass these criteria.
- 6.4 There are eleven best practice criteria, however, in my opinion, they cannot be regarded as having equal weight. The criterion of separating incompatible activities is more significant than others, such as whether a zone has a clearly defensible boundary or is a split zone.

7.0 HIGHER ORDER DOCUMENTS

7.1 The second lens of the Three Lens assessment framework is the consideration of higher order documents, which I discuss below.

Waikato Regional Policy Statement

7.2 Waikato Regional Policy Statement provisions that are relevant to reverse sensitivity matters are set out below:

Objective 3.12 Built environment

Development of the built environment (including transport and other infrastructure) and associated land use occurs in an integrated, sustainable and planned manner which enables positive environmental, social, cultural and economic outcomes, including by:

g) minimising land use conflicts, including minimising potential for reverse sensitivity; ...

Policy 6.1 Planned and co-ordinated subdivision, use and development

Subdivision, use and development of the built environment, including transport, occurs in a planned and co-ordinated manner which:

- a) has regard to the principles in section 6A;
- b) recognises and addresses potential cumulative effects of subdivision, use and development;
- c) is based on sufficient information to allow assessment of the potential long-term effects of subdivision, use and development; and
- d) has regard to the existing built environment.

Implementation methods

6.1.1 Regional plans, district plans and development planning mechanisms

Local authorities shall have regard to the principles in section 6A when preparing,
reviewing or changing regional plans, district plans and development planning
mechanisms such as structure plans, town plans and growth strategies.

6.1.2 Reverse sensitivity

Local authorities should have particular regard to the potential for reverse sensitivity when assessing resource consent applications, preparing, reviewing or changing district or regional plans and development planning mechanisms such as structure plans and growth strategies. In particular, consideration should be given to discouraging new sensitive activities, locating near existing and planned land uses or activities that could be subject to effects including the discharge of substances, odour, smoke, noise, light spill, or dust which could affect the health of people and / or lower the amenity values of the surrounding area.

6A Development principles (General development principles)
New development should:

•••

o) not result in incompatible adjacent land uses (including those that may result in reverse sensitivity effects), such as industry, rural activities and existing or planned infrastructure;

...

- 7.3 The RPS is clear about the issue of reverse sensitivity and the need to avoid it arising as a result of new activities. Objective 3.1.2 states that minimising the potential for reverse sensitivity issues is one means to achieve positive development outcomes.

 This objective is well supported by Development Principle o) and Implementation Method 6.1.2.
- 7.4 The extent to which these provisions were considered before the proposed rezoning was incorporated in the PDP is unknown. In my opinion, they are still relevant, and the proposal is inconsistent with them.

National Policy Statement on Urban Development

- 7.5 The National Policy Statement on Urban Development 2020 (NPS-UD) puts greater onus on local authorities to improve their responsiveness and competitiveness with respect to urban development, and to open up more housing and business capacity.
- 7.6 The NPS-UD has, necessarily, a high-level focus on growth and does not consider potential conflict between new housing and business activities and existing land uses. Nor does it consider residential activities as a superior land use to business activities. In my opinion, it is implicit in the NPS-UD that an increase in housing and business capacity should not be at the expense of existing activities. The proposed rezoning has potential to result in reverse sensitivity issues that may limit existing (and future) industrial activities and on this basis I consider it to be inconsistent with the NPS-UD.

Future Proof

7.7 The subject site is located within the Huntly development area identified in Future Proof. However, as with the NPS-UD above, it is implicit in Future Proof that residential and business growth is not at the expense of existing activities.

Accordingly, I assess that the proposal is inconsistent with Future Proof.

Waikato 2070

7.8 The proposed rezoning is not identified as a growth cell for Huntly in Waikato 2070 and as such is inconsistent with that document.

8.0 OTHER CONSIDERATIONS

- 8.1 While TFM's primary concern is the potential for reverse sensitivity issues, I have concerns with other reasons that Submitter 699 uses to support the rezoning.
- 8.2 Submitter 699 considers that a Residential Zone over the full site is appropriate as it will remove the current split zone. However, the adverse effects of extending the Zone to the Industrial Zone boundary is much greater than the untidiness of a split zone. This matter can be addressed by other means such as physical markers (fences, landscaping) or subdivision and is not a sound reason for the proposed rezoning.
- 8.3 Another reason used to support the rezoning is that the current use of the site is an efficient use of urban land resource. My counter to that is that the rezoning will potentially result in an inefficient use of the existing Industrial Zone, as it may constrain existing activities to operate within that zone.
- 8.4 Submitter 699 notes that there is wastewater, water supply and stormwater servicing in close proximity to the site. This is certainly a factor to consider for future residential development, however, in this particular case, the current use of these services by legitimate industrial activities should take precedence.

9.0 PART 2 OF THE RMA

- 9.1 Submitter 699 considers the s7 matters of importance that are relevant to the proposal are (b), (c) and (f):
 - (b) the efficient use and development of natural and physical resources;
 - (c) the maintenance and enhancement of amenity values; and
 - (f) maintenance and enhancement of the quality of the environment.

- 9.2 The submitter states in paragraph 4.7 that there are no matters "that would suggest that it is not appropriate to proceed with the requested rezoning over the site".
- 9.3 I disagree with this assessment. With respect to matter (b), residential development cannot be regarded as an efficient land use without regard to the impact on neighbouring industrial uses, which may well result in constraints on those activities that lead to inefficient use the Industrial Zone.
- 9.4 The proposal will not result in the maintenance and enhancement of amenity values (matter (c)). It will bring residential activities closer to the reduced amenity value inherent to the Industrial Zone. This will inevitably lead to pressure on industrial activities to maintain and enhance the amenity values of the Residential Zone.
- 9.5 The purpose of the RMA as stated in s5 is to promote the sustainable management of natural and physical resources whilst meeting the requirements of s5(a) to (c):
 - a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.
- 9.6 The proposed rezoning will not sustain the potential of the existing Industrial Zone to meet the reasonably foreseeable needs of future generations. It is already known that such land is in short supply and the proposal impacts not only future generations but current, legitimate businesses.
- 9.7 The submitter (and Council) has not considered the possibility of reverse sensitivity effects or how these might be avoided, remedied or mitigated.
- 9.8 In my view, the proposal does not achieve the purpose of the RMA and should be rejected.

10.0 CONSULTATION

- 10.1 TFM has not been consulted by Council or any other party about the proposed rezoning at any time. This is surprising, given that implied Council-approved status of the rezoning and the very clear potential for reverse sensitivity. If TFM had been consulted prior to notification of the PDP, the company would have made it clear that the rezoning posed a direct threat to its activities.
- 10.2 I have contacted representatives of Porter Group (Mr Steve Burgess) and HRDC Ltd (Mr Peter Friar) to discuss the proposed rezoning and both have advised me that the proposal represents a significant threat to their site activities.

11.0 RELIEF SOUGHT

11.1 TFM opposes a Residential Zone on the subject site that extends beyond the area of the existing New Residential Zone shown in ODP maps. TFM seeks that the extent of the Residential Zone on the subject site is limited to the area of the New Residential Zone shown on ODP maps.