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Taharoa Ironsands Limited PO Box 308 Wellington 6140

Fast Track Approvals Bill Schedule 2A Application

Taharoa Ironsands Ltd – Pit 1 Mining Project

1 Adverse effects

Part 2, subpart 2, section 14(3)(e) of the Fast Track Approvals Bill requires that a description of the anticipated and known adverse effects of the project on the environment should be provided in an application to use the fast-track approval process for an eligible project.

A high level summary of the potential adverse effects of the Pit 1 Mining Project is set out below. This assessment is based on independent expert assessments that have been undertaken for TIL in respect of its application for to mine Pit 1 of the Northern Block.

Mining in Pit 1 will utilise dry mining methodology. This involves depositing the extracted ironsand into a Dry Mining Unit ("DMU") using heavy earthmoving equipment (i.e., excavators, bulldozers, loaders, and trucks). The DMU mixes the ironsand with water to form a slurry which is pumped to a treatment plant located on the southern block for extraction of the titanomagnetite. The sand will be mined from Pit 1 in a series of 'panels' and each panel takes approximately 3-4 weeks to mine. The proposed Pit 1 mining works will be undertaken over a 18-month period ie 12 months of site preparation and sand extraction and another 6 months of rehabilitation.

1.1 Ecological effects

1.1.1 Effects on terrestrial vegetation and dune formation

Disturbance from mining of Pit 1 will result in disturbance of low value vegetation within the active site area (23 ha) and removal of all low value existing vegetation and associated terrestrial habitat from the Pit 1 footprint (5 ha). The effect will be short term due to the limited timeframe of mining operations in Pit 1 (18 months from beginning of mining to completion of remediation). Given this and that the vegetation is of low ecological value¹, the magnitude of the habitat loss is assessed as less than minor. A Site Remediation Plan will be prepared for the Pit 1 area for managing indigenous biodiversity, pest plants and replanting on completion of the mining operations.

1.1.2 Effects on wetlands and Mitiwai Stream

The proposed mining of Pit 1 is not anticipated to have any direct effects on two low value² induced wetlands identified outside of, but in close proximity to, Pit 1. Regardless, a 30m buffer between the

During an ecological assessment, no threatened or at risk plant species were recorded.

² An ecological assessment has concluded that the ecological values of these two wetlands is low.

wetlands and Pit 1 mining activity will be adhered to (in accordance with recommendations as part of an ecological assessment which has been undertaken). Groundwater at the site is expected to be below the Pit 1 mining level therefore no interference is anticipated and Pit 1 is not hydrologically linked to the wetlands. As a result there will be no adverse effects on the wetland hydrology. In addition, an Erosion and Sediment Control Plan (ESCP) shall be developed and implemented during the Pit 1 works to ensure that stormwater and sediment is not discharged to the two induced wetlands to mitigate any adverse effects resulting from earthworks.

Adverse effects on the Mitiwai Stream that runs adjacent to the Pit 1 mining area will be avoided a condition requiring a 30m mining activity setback from the stream.

1.1.3 Effects on terrestrial fauna

The mining activities have the potential to result in loss or fragmentation of very high ecological value bat foraging and commuting habitat in and around Pit 1 as well as increased lighting, noise, and vibration effects. The adverse effects of the loss of vegetation and habitat in Pit 1 is assessed as negligible.

The proposed mining operations will require illumination during night works, as well as noise and vibration from machinery operation. However, given the short-term duration of the works, the potential adverse effects are assessed as minor.

The mining of Pit 1 will result in the loss of low ecological value habitat for exotic avifauna species and increased noise and light disturbance. Given that birds will be able to use neighbouring areas of vegetation and in light of the short-term duration of the works, the adverse effects on avifauna are assessed as less than minor.

No lizards were detected during either current site walkovers or previous surveys. As a result, the adverse effects on herpetofauna resulting from the proposed mining activities are assessed as less than minor.

1.2 Archaeological effects

The pre-European settlement history of the Taharoa area means that there is elevated potential for accidental discovery of koi iwi and other taonga in the dune environment of the area, notwithstanding the fact that a walkover by an archaeology expert of the Pit 1 area did not identify any recorded or unrecorded sites.

Ngāti Mahuta derived tikanga and protocols apply when discoveries of koiwi and taonga occur in the Taharoa dune environment as a result of mining activity, and that tikanga/protocol will be followed should any accidental discoveries be made during Pit 1 works. This is considered to mitigate the potential adverse effects in relation to archaeology to less than minor levels.

Defined urupā are located within the dune system where accidentally discovered koiwi are interred with appropriate tikanga being observed. The majority of these urupā are located within the Taharoa C Block and a buffer in which no mining occurs is observed around each urupā.

1.3 Acoustic effects

The mining activities have the potential to have adverse noise effects on key sensitive receptors on sites adjoining the Northern Block (1891 Taharoa Road, 1891A Taharoa Road, Te Kōraha Marae and 25 Rotopuhoe Road). However, these receptors are located at least 850m from the Pit 1 mining area and given this separation distance, the works are modelled to comply with the Waitomo District Plan daytime and nighttime noise limits. As a result, any potential adverse effects from noise on sensitive receivers is expected to be no more than minor.

1.4 Air quality effects

Dust generation and transportation from the mining activities have the potential to have adverse effects on air quality on sensitive receptors located more than 850 m from Pit 1 (Te Kura o Taharoa School, Te Kōraha Marae and three residential dwellings). TIL proposes to install dust monitors between the Pit 1 mining area and the sensitive receptors that will monitor dust particulate levels in real time. Trigger levels will be identified for when enhanced dust mitigation measures are required. The trigger levels and mitigation measures will be codified in a Dust Management Plan and will include speed limits for vehicles, dust suppression through watering of haul roads, and in extreme wind events the ceasing of mining activities. With these mitigation measures in place, potential adverse effects on sensitive receivers from the discharge of dust are assessed as less than minor.

There is not expected to be any cumulative dust effects from mining in Pit 1 and mining on the Central and Southern Blocks because mining will occur in Pit 1 for a short duration and will then be rehabilitated.

1.5 Cultural effects

In considering cultural effects, it is important to note the significant cultural benefits the ongoing operation of mining activity on the site has for Ngati Mahuta as tangata whenua.

These benefits include employment benefits, royalties, and support for the local community. Ngati Mahuta, though the Taharoa C Block Incorporation, own the land on which the mine operates and is paid significant royalties from the mine. The Mine also supports the employment and growth of Ngati Mahuta - of the 178 permanent employees, 141 of these are Ngati Mahuta. The local employment opportunity generated by the mine has allowed the local community to retain members of the community who would have otherwise moved away to seek employment elsewhere and lost their connection to the land.

The existing ownership of land and shareholding of the mine is a unique arrangement which means that Ngati Mahuta members have significant input into the management of the existing mine and any future mining areas such as Pit 1.

In terms of cultural effects, the Tasman Sea and the waterways within Taharoa are an important food source. Ngati Mahuta are the kaitiaki of Lake Taharoa and its smaller lakes, Lake Nukumiti and Lake Rotoroa, and the Wainui and Mitiwai Streams. Ngāti Mahuta have sustainably managed the eels and fish in theses lakes and streams for many generations to meet their customary requirements.

Mining activity in Pit 1 will avoid adverse effects on all of these waterbodies, will not obstruct access to the coast or to the Te Kooraha Marae and tailings placed on completion of mining will result in the site being rehabilitated to a similar land form as at present. As explained above, an accidental discovery protocol will be implemented during Pit 1 works at all times.

Overall, the potential adverse cultural effects of mining in Pit 1 are considered to be appropriately mitigated and are assessed as less than minor.

2 Consistency with National Direction

Part 2, subpart 2, section 14(3)(f) of the Fast Track Approvals Bill requires that a general assessment of the project in relation to national policy statements and national environmental standards (as those terms are defined in the Resource Management Act 1991) should be provided in an application to use the fast-track approval process for an eligible project.

A summary of T&T's assessment of the project against the applicable national direction is provided below.

2.1 New Zealand Coastal Policy Statement 2010

Although the Pit 1 mining activity itself will take place landward of Mean High Water Springs, because of its location adjacent to the coast and the characteristics of the site the Pit 1 area is considered to be within the Coastal Environment. The proposed activities are consistent with the relevant provisions (objectives 1, 2, 3 and 6 and policies 2, 4, 6, 11, 13, 14 and 15) of the New Zealand Coastal Policy Statement 2010 (NZCPS).

2.2 National Policy Statement for Freshwater Management 2020

The proposed mining activity in Pit 1 will not interact with ground or surface water therefore no assessment against the National Policy Statement for Freshwater Management 2020 (NPS-FM) is necessary.

2.3 National Policy Statement for Indigenous Biodiversity

The proposed mining in Pit 1 consistent with the relevant provisions of the National Policy Statement for Indigenous Biodiversity (NPS-IB). While no SNA's are identified by either WRC or the Proposed Waitomo District Plan in the Pit 1 area, two induced wetlands have been identified adjacent to the Pit 1 activity area. TIL does not seek to destroy or disturb these wetlands which is consistent with the "avoidance" preference that permeates the NPS-IB.

For completeness it is further noted that a consenting pathway for mineral extraction is provided in the NPS-IB by way of Clause 3.11. Taharoa C Block is also defined in the NPS-IB as "specified Māori land". As a result, clause 3.18(c) and clause 3.18(g) of the NPS-IB are relevant, which set out that biodiversity outcomes on such land may be outweighed by Māori economic development opportunities on the land. Granting consent to mine Pit 1 is consistent with these provisions.

2.4 National Environmental Standards for Freshwater Management 2020

The National Environmental Standards for Freshwater Management 2020 (NES-F) is relevant to works near wetlands areas. However, in this case the proposed Pit 1 mining activity will not result in the complete or partial drainage of the induced wetlands because the two areas are not hydrologically connected. This means that there is no additional trigger for consent under the NES-F; the proposed mining activity in Pit 1 will not affect the two induced wetlands, and no further assessment against the NES-F is required.

3 Local and Regional Planning Documents

Part 2, subpart 2, section 17(3)(j) of the Fast Track Approvals Bill requires that an assessment is provided with an application to use the fast-track approval process for an eligible project on whether the project is consistent with local or regional planning documents, including spatial strategies. The followed planning documents have been considered and a summary of the T&T's assessment is provided below. There is no relevant special strategy for the region.

3.1 Waikato Regional Policy Statement

The WRPS objectives and policies are concerned with managing effects, but also with supporting and enabling regionally significant infrastructure to operate efficiently to support the population of the Waikato Region. The issues of significance to this proposal include the state of resources (I1.1), managing the built environment (I1.4), and the relationship of tangata whenua with the

environment (I1.5). The associated objective and policies have been assessed against the proposal and are not inconsistent with the WRPS.

3.2 Waikato Regional Plan

The Waikato Regional Plan (WRP) contains policies and methods to manage the natural and physical resources of the Waikato region to give effect to the WRPS. Mining of Pit 1 in the Northern Block will involve activities that require resource consents under the WRP. These are likely to include consents for the following:

- Land Disturbance
- Mine Overburden Disposal to land

The activities involved with mining of Pit 1 in the Northern Block can be carried out in a manner that is consistent with the relevant objectives and policies of WRP through the implementation of an Accidental Discovery Protocol, a Dust Management Plan, and Erosion and Sediment Control Plan, and a Site Remediation Plan. There are no anticipated significant or cumulative effects on the relationship tāngata whenua have with water and their identified taonga. Furthermore, the works will result in positive social and economic effects through enabling the establishment of mining activities on the Northern Block.

3.3 Waitomo District Plan

The Operative Waitomo District Plan (OWDP) contains objectives, policies, and rules to manage land use and development within the Waitomo District. The district plan is currently under review and on 20 October 2022, Waitomo District Council (WDC) publicly notified the Proposed Waitomo District Plan (PWDP), however there are no relevant provisions with immediate legal effect.

The site is zoned Industrial in the OWDP and zoned Rural Production in the PWDP (hearings to begin in July 2024). The mining of ironsand is a permitted activity in both zones subject to compliance with various standards such as mining setbacks from boundaries and waterways/wetlands, noise emission levels, lighting emissions and the like. The proposed mining in Pit 1 in the Northern Block will comply with these various permitted activity standards.

Both the OWDP and PWDP contain archaeological site/sites of significance to Māori overlays that affect the site. If mining is proposed in an area containing an identified archaeological site/area of significance, then the status of the mining activity would become a discretionary activity.

Given the application to mine ironsand in Pit 1 of the Northern Block has been lodged while the OWDP is still in force (i.e. before the PWDP provisions become operative) a discretionary activity resource consent application is required. This is because of the wide extent of the archaeological site overlay on the site under the OWDP. The equivalent overlay in the PWDP is much less extensive and the Pit 1 mining area avoids all of the sites identified in the PWDP.

Given that the base status of ironsand mining of Pit 1 in the Northern Block is permitted (i.e. the activity is envisaged as appropriate for the zone), the activity is consistent with the provisions of both the OWDP and the PWDP.

The proposed works are considered to be consistent with the relevant objectives and policies of the WDP for the following reasons:

i. noise levels are anticipated to be compliant with the relevant day-time and night-time noise levels in the WDP at all surrounding sensitive receivers. As such, noise emissions are not

- expected to adversely impact on the existing amenity of the area (WDP Objective 20.3.1 and Policy 20.4.1)
- ii. as assessed by the registered archaeologists (Clough and Associates), due to the implementation of the Taharoa Accidental Discovery Protocol and the application of an Authority to Modify from Heritage New Zealand Pouhere Taonga, the anticipated adverse effects on the mapped archaeological sites within the vicinity of Pit 1 are anticipated to be less than minor (WDP Objective 21.3.2 and Policy 21.4.1)
- iii. As assessed by a specialist air quality expert (Andrew Curtis from PDP Ltd), due to the distance of sensitive receivers from the Pit 1 site, the frequency of wind, the current dust monitoring results and the likely duration of any dust discharges, as well as the implementation of a Dust Management Plan, any adverse dust effects beyond the Pit 1 site will be largely avoided and if they do occur will be less than minor (WDP Objective 18.3.1, 18.3.2, 18.3.4 and Policy 18.4.1).

3.4 Waikato-Tainui Environmental Plan

As the mine at Taharoa is within the rohe of Waikato-Tainui, it is appropriate to consider the relationship of the proposal to mine on the Northern Block to the Waikato-Tainui Environmental Plan (WTEP). The proposed Pit 1 mining works are considered to be consistent with the relevant sections of the WTEP for the following reasons:

- i. Mitigation measures will be in place throughout the duration of the mining works including the ESCP and the accidental discovery protocol (Section 8.2 of the WTEP).
- ii. The proposed mining activities will not limit access to surrounding water bodies including the coast and does not inhibit customary activities to be undertaken by mana whenua (Section 14.7 of the WTEP).
- iii. The current accidental discovery protocol for the mine will continue to be applied during mining of the Pit 1 area. The protocol reflects the tikanga of Ngāti Mahuta (Section 16 of the WTEP).

3.5 Maniapoto Environmental Management Plan

A relevant statutory acknowledgement in Schedule 11 of the RMA has been made in favour of Ngāti Maniapoto³ arising from the Maniapoto Claims Settlement Act 2022. The statutory acknowledgement area is large and includes the Mitiwai Stream and the land contained with the Northern Block.

An assessment of the proposed mining activity in Pit 1 against the provisions of the Maniapoto lwi Environmental Management ("MIEM") has identified no inconsistencies with the relevant provisions in that plan because:

- i. The access to Te Koraha Marae will not be adversely affected by the proposed mining works (MIEM Part 9.3)
- ii. The current accidental discovery protocol employed at the mine will be applied to the mining activity on the Northern Block (MIEM Part 10)
- iii. The proposed mining on the Northern Block will not result in any adverse effects on the mauri of freshwater systems on the site (MIEM Part 14)
- iv. The areas that are mined on the Northern Block will be appropriately remediated upon completion of the works to ensure the landscape is rehabilitated (MIEM Part 19.3)

³ The post-settlement governance entity on behalf of Maniapoto is called Te Nehenehenui

4 Applicability

This report has been prepared for the exclusive use of our client Taharoa Ironsands Limited, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

We understand and agree that Taharoa Ironsands Ltd will submit this report as part of an application to the Fast Track Approvals Bill and the regulatory authority will use this report for the purpose of assessing that application.

Tonkin & Taylor Ltd

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