

1 Waikato Regional Policy Statement: Objectives and Policies

| Objectives | Policies | Comment |
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| IM -Integrated Management | | |
| <p>IM-O1 – Integrated management</p> <p><i>Natural and physical resources are managed in a way that recognises:</i></p> <ol style="list-style-type: none"> 1. <i>the inter-relationships within and values of water body catchments, riparian areas and wetlands, the coastal environment, the Hauraki Gulf and the Waikato River;</i> 2. <i>natural processes that inherently occur without human management or interference;</i> 3. <i>the complex interactions between air, water, land, and all living things;</i> 4. <i>the needs of current and future generations;</i> 5. <i>The relationships between environmental, social, economic, and cultural well-being;</i> 6. <i>the need to work with agencies, landowners, resource users, and communities; and</i> 7. <i>The interrelationship of natural resources with the built environment.</i> | <p>IM-P1 – Integrated approach</p> <p><i>An integrated approach to resource management will be adopted that:</i></p> <ol style="list-style-type: none"> 1. <i>recognises the inter-connected nature of natural and physical resources (including spatially and temporally) and the benefits of aligning the decisions of relevant management agencies across boundaries;</i> 2. <i>maximises the benefits and efficiencies of working together;</i> 3. <i>recognises the multiple values of natural and physical resources, including ecosystem services;</i> 4. <i>responds to the nature and values of the resource and the diversity of effects (including cumulative effects) that can occur;</i> 5. <i>maximises opportunities to achieve multiple objectives;</i> 6. <i>takes a long-term strategic approach which recognises the changing environment and changing resource use pressures and trends;</i> 7. <i>applies consistent and best practice standards and processes to decision making; and</i> | <p>The Green Steel project has been meticulously planned in conjunction with the design for the proposed site development, ensuring that natural processes within the site are carefully considered. The selected location for the development lacks significant natural features, such as wetlands, significant biodiversity habitats, or notable terrestrial ecology. It possesses a varied topography and, while it is capable of being farmed, it is not regarded as a highly productive agricultural area. The site is well aligned spatially with other large-scale landuse in the immediate Hampton Downs area and has a well-established connection to State Highway One.</p> <p>The design for the project gives consideration to a large-scale industrial site development within the catchment of the Waikato River. Appropriate management of the construction phase and bulk earthworks, which form part of the proposed site development, has been proposed to minimise effects during construction.</p> <p>The project involves the introduction of substantial impervious surfaces. A stormwater design has been provided to manage stormwater onsite effectively. It includes provisions for treating and reusing a portion of the stormwater through rainwater harvesting to offset the site's water demand during its operation. Green Steel will also implement a monitoring regime to ensure there are no adverse effects on water quality resulting from the steel processing facility.</p> <p>The development of the project has considered the effects of the industrial process in relation to the site and the receiving context. Overall, the site is well suited to the project, and effects of the activities can be appropriately avoided or mitigated as outlined within this substantive application.</p> |
| <p>IM-O2 – Resource use and development</p> <p><i>Recognise and provide for the role of sustainable resource use and development and its benefits in enabling people and communities to provide for their economic, social, and cultural wellbeing, including by maintaining and, where appropriate, enhancing:</i></p> <ol style="list-style-type: none"> 1. <i>Access to natural and physical resources to provide for regionally significant industry and</i> | | |



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| <p><i>primary production activities that support such industry;</i></p> <ol style="list-style-type: none"> <i>The life-supporting capacity of soils, water, and ecosystems to support primary production activities;</i> <i>The availability of energy resources for electricity generation and for electricity generation activities to locate where the energy resource exists;</i> <i>access to the significant mineral resources of the region; and</i> <i>The availability of water for municipal and domestic supply to people and communities.</i> | <ol style="list-style-type: none"> <i>Establishes, where appropriate, a planning framework which sets clear limits and thresholds for resource use.</i> <p>IM-P4 – Regionally significant industry and primary production</p> <p><i>The management of natural and physical resources provides for the continued operation and development of regionally significant industry and primary production activities by:</i></p> <ol style="list-style-type: none"> <i>recognising the value and long-term benefits of regionally significant industry to economic, social, and cultural wellbeing;</i> <i>recognising the value and long-term benefits of primary production activities which support regionally significant industry;</i> <i>ensuring the adverse effects of regionally significant industry and primary production are avoided, remedied, or mitigated;</i> <i>Coordinating infrastructure and service provision at a scale appropriate to the activities likely to be undertaken;</i> <i>maintaining and, where appropriate, enhancing access to natural and physical resources, while balancing the competing demand for these resources;</i> <i>avoiding or minimising the potential for reverse sensitivity; and</i> <i>Promoting positive environmental outcomes.</i> | <p>Once developed, the large-scale industrial facility will be considered a regionally significant industry.</p> <p>The Green Steel project, as an FTAA project, will have a high level of importance nationally for its key role in providing a circular economy outcome for waste management/minimisation using recycled steel, and the production of steel within New Zealand.</p> <p>The project will result in significant national economic benefits associated with the local production of steel at the site, which currently occurs offshore by other countries. The project also provides a significant reduction in the transportation and shipping of the scrap steel offshore.</p> <p>The steel production is proposed to be undertaken in a highly sustainable way, which is considered more energy efficient. Using Electric Arc Furnace (EAF) technology results in a significant improvement in CO₂ emissions per tonne of steel produced (when compared to other alternatives and global production of steel).</p> <p>The steel mill will also be a significant local employer in the North Waikato Region.</p> |
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| <p>IM-O4 – Health and well-being of the Waikato River</p> <p><i>The health and wellbeing of the Waikato River is restored and protected, and Te Ture Whaimana o Te Awa o Waikato (the Vision and Strategy for the Waikato River) is achieved.</i></p> | <p>LF-P5 – Waikato River catchment</p> <p><i>Recognise Te Ture Whaimana o Te Awa o Waikato – the Vision and Strategy for the Waikato River – as the primary direction-setting document for the Waikato River and develop an integrated, holistic and coordinated approach to implementation.</i></p> | <p>The project recognises Te ture Whaimana and is consistent with the protection and restoration of the Waikato River, both in the construction and operational phases of the project.</p> |
| <p>IM-O7 – Relationship of tangata whenua with the environment</p> <p><i>The relationship of tangata whenua with the environment is recognised and provided for, including:</i></p> <ol style="list-style-type: none"> <i>1. The use and enjoyment of natural and physical resources by tikanga Māori, including mātauranga Māori; and</i> <i>2. The role of tangata whenua as kaitiaki.</i> | <p>IM-P3 – Tangata whenua</p> <p><i>Tangata whenua are provided with appropriate opportunities to express, maintain, and enhance the relationship with their rohe through resource management and other local authority processes.</i></p> | <p>Green Steel from the project inception has engaged with mana whenua via Ngā Muka Development Trust. Ngā Muka Development Trust has prepared a Cultural Impact Assessment for the project and are supportive of the project.</p> <p>Green Steel is committed to continuing to work together with mana whenua and Ngā Muka as the project develops, with an enduring commitment through the construction phase and into monitoring of its operations. Monitoring will include mātauranga māori monitoring for the project.</p> |
| <p>IM-O8 – Sustainable and efficient use of resources</p> <p><i>Use and development of natural and physical resources, excluding minerals, occurs in a way and at a sustainable rate, and where the use and development of all natural and physical resources is efficient and minimises the generation of waste.</i></p> | | <p>The nature of the proposal for which consents are sought is the recycling of steel into new structural steel products. This is a sustainable and efficient use of a resource. The Green Steel project relies upon the use of efficient technologies to significantly reduce emissions from the process.</p> |
| <p>IM-O9 – Amenity</p> <ol style="list-style-type: none"> <i>1. The qualities and characteristics of areas and features valued for their contribution to amenity are maintained or enhanced. and</i> <i>2. Where intensification occurs in urban environments, built development results in attractive, healthy, safe and high-quality urban form which responds positively to local context whilst recognising that amenity values change over time in response to the changing needs of people, communities and future generations, and such</i> | <p>IM-P5 – Maintain and enhance areas of amenity value</p> <p><i>Areas of amenity value are identified, and those values are maintained and enhanced. These may include:</i></p> <ol style="list-style-type: none"> <i>1. areas within the coastal environment and along inland water bodies;</i> <i>2. scenic, scientific, recreational or historic areas;</i> <i>3. areas of spiritual or cultural significance;</i> <i>4. other landscapes or seascapes, or natural features; and</i> | <p>There are no outstanding or significant natural landscapes in the immediate area of the proposed site. The project is also inland and does not affect the coastal environment. There is no significant indigenous vegetation affected by the project.</p> <p>The proposal is a greenfield development within the Rural Zone. The large-scale industrial use proposed by the project will result in a significant localised degree of change and will result in the intensification of the area.</p> <p>The project will also result in a moderate visual effect when considered in relation to the rural context and rural amenity; however, the receiving environment near the site is considered to be a heavily modified area with a number of intensified land uses which have significantly altered</p> |



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| changes are not, of themselves, an adverse effect. | 5. areas adjacent to outstanding natural landscapes and features that are visible from a road or other public place. | the amenity and natural character of the area. The topography of the site and the surroundings do assist with the visual absorption of the facility into the landscape. Additional mitigation has also been proposed, internalising the processing functions within buildings as far as practicable and the amenity planting of the site, including the area associated with the horseshoe ridge line. |
| AIR - Air | | |
| <p>AIR-O1 – Air quality</p> <p><i>Air quality is managed in a way that:</i></p> <ol style="list-style-type: none"> 1. ensures that where air quality is better than national environmental standards and guidelines for ambient air, any degradation is as low as reasonably achievable; 2. avoids unacceptable risks to human health and ecosystems, with high priority placed on achieving compliance with national environmental standards and guidelines for ambient air; and 3. avoids, where practicable, adverse effects on local amenity values and people's wellbeing, including from discharges of particulate matter, smoke, odour, dust and agrichemicals, recognising that it is appropriate that some areas will have a different amenity level to others. | <p>AIR-P2 – Manage discharges to air</p> <p><i>Manage discharges to air (other than from home heating or transport) to ensure any resulting degradation avoids unacceptable risks to human health, and is as low as reasonably achievable. In determining whether any degradation is as low as reasonably achievable, the following will be taken into account:</i></p> <ol style="list-style-type: none"> 1. existing air quality; 2. the age of and ability to upgrade existing infrastructure; 3. any alternative modes/methods of discharge; 4. Applicable emission control techniques; 5. The extent to which it is possible to apply the best practicable option; 6. The relative effects on the environment of the options; 7. Economic and social factors; 8. Managing discharges to air where there is high or good air quality; 9. National environmental standards and guidelines for ambient air; and 10. The duration of the discharge and whether the discharge is temporary or short-term. <p>AIR-P3 – Manage adverse effects on amenity</p> | <p>A comprehensive assessment of the air discharges has been undertaken for the project by Air Quality NZ Limited.</p> <p>This identifies five primary sources for discharges to the air:</p> <p>Steel Melt Shop – Air from the EAF, Ladle Furnace, and material handling systems are collected and pass through water-cooled ducts and dust storage silos before being discharged via a baghouse with a 55 m high stack - The primary emissions include: PM10 and PM2.5, oxides of nitrogen (NOx), sulphur dioxide (SO2), and carbon monoxide (CO). Although this source has the potential to emit metals such as lead and zinc, these emissions are expected to be minimal.</p> <p>Rolling Mill – Discharges to air from within the Rolling Mill building are exclusively related to the Reheating Furnace, which will combust gas (LPG or CNG) to heat the billets so they can be formed into structural steel sections and bars. The primary discharges from this source will be particulate matter (PM10 and PM2.5), NOx, CO and SO2.</p> <p>Oxygen Plant – The Air Separation Unit (ASU) in the Oxygen Plant supplies oxygen, nitrogen, and argon for steelmaking. The ASU processes include air compression, purification, and cooling, with minor emissions limited to potential nitrogen venting and minimal leaks of inert gases.</p> <p>Scrap steel processing – The process of shredding scrap steel will primarily result in the discharge of particulate matter (PM10 and PM2.5).</p> <p>Construction of the Green Steel Mill – The construction of the Green Steel Mill will involve significant earthworks, which have the potential to generate air discharges, primarily in the form of nuisance dust.</p> <p>This technical report considers that the site will follow the limits of relevant air</p> |



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| | <p><i>Ensure discharges to air are managed so as to avoid, remedy or mitigate objectionable effects beyond the property boundary.</i></p> | <p>quality guidelines for both particulates and pollutants in relation to air discharges from the site, which are sufficient to protect against health effects, provided off-site concentrations remain within these limits.</p> <p>Emissions from the Steel Melt Shop will be managed through several control measures, including the high-efficiency bag filters, water coolers and dust collection systems, which significantly reduce particulate and gaseous emissions. Additionally, Green Steel will control emissions through strategies such as furnace temperature management, limiting sulphur content in raw materials, optimising oxygen injection, and implementing advanced control systems.</p> <p>In addition to the emission controls identified in the technical assessment, the stack has been designed, based on a series of atmospheric dispersion modelling studies, to discharge any remaining pollutants at a height of 55 and 56 metres respectively for the two stacks. This ensures effective dispersion considering the surrounding terrain and minimises downwash from nearby buildings.</p> <p>Greenhouse gas (GHG) emissions, primarily carbon dioxide (CO₂), however, to a lesser extent, methane (CH₄) and nitrous oxide (N₂O), will be produced as a result of burning either LPG or CNG in the Reheating Furnace. When released into the atmosphere, these gases contribute to the 'greenhouse effect,' leading to climate warming. However, the primary goal of the proposal is to produce Green Steel, which generates significantly lower GHG emissions compared to traditional steelmaking. In line with this objective, Green Steel is making a concerted effort to reduce GHG emissions wherever possible and is also adopting a BPO within the process to further reduce emissions.</p> |
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EIT – Energy, Infrastructure and Transport

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| <p><i>EIT-O1 – Energy</i></p> <p><i>Energy use is managed, and electricity generation and transmission are operated, maintained, developed and upgraded in a way that:</i></p> <ol style="list-style-type: none"> <i>1. increases efficiency;</i> <i>2. recognises any increasing demand for energy;</i> <i>3. seeks opportunities to minimise demand for energy;</i> | <p><i>EIT-P1 – Significant infrastructure and energy resources</i></p> <p><i>Management of the built environment ensures particular regard is given to:</i></p> <ol style="list-style-type: none"> <i>1. that the effectiveness and efficiency of existing and planned regionally significant infrastructure is protected;</i> | <p>The proposal is a key consumer of Electricity (55MW). The proposal includes a large electric arc furnace as its primary technology within the steel melt shop. Which plays a critical role in the reduction of emissions and greenhouse gases associated with combustion for heat.</p> <p>The use of electricity from the national grid will allow the use of renewable energy supplied to the grid, and Green Steel have advanced discussions with WEL Networks in relation to the potential supply to the site.</p> |
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| <ol style="list-style-type: none"> 4. <i>recognises and provides for the national significance of electricity transmission and renewable electricity generation activities;</i> 5. <i>recognises and provides for the national, regional and local benefits of electricity transmission and renewable electricity generation;</i> 6. <i>reduces reliance on fossil fuels over time;</i> 7. <i>addresses adverse effects on natural and physical resources;</i> 8. <i>recognises the technical and operational constraints of the electricity transmission network and electricity generation activities; and</i> 9. <i>recognises the contribution of existing and future electricity transmission and electricity generation activities to regional and national energy needs and security of supply.</i> | <ol style="list-style-type: none"> 2. <i>the benefits that can be gained from the development and use of regionally significant infrastructure and energy resources, recognising and providing for the particular benefits of renewable electricity generation, electricity transmission, and municipal water supply; and</i> 3. <i>The locational and technical practicalities associated with renewable electricity generation and the technical and operational requirements of the electricity transmission network.</i> | <p>Initially, the project did contemplate the inclusion of a solar farm with the proposed development; however, due to the utilisation of the site for the proposed activity project, the remaining areas are not considered viable for this aspect in this location. Further, the large amounts, and continuous supply of electricity needed cannot be provided by solar generation alone.</p> |
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LF – Land and Freshwater

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| <p>LF-O1 – Mauri and values of freshwater bodies</p> <p><i>Maintain or enhance the mauri and identified values of fresh water bodies, including by:</i></p> <ol style="list-style-type: none"> 1. <i>Maintaining or enhancing the overall quality of freshwater within the region;</i> 2. <i>Safeguarding ecosystem processes and indigenous species habitats;</i> 3. <i>Safeguarding the outstanding values of identified outstanding freshwater bodies and the significant values of wetlands;</i> 4. <i>Safeguarding and improving the life-supporting capacity of freshwater bodies where they have been degraded as a result of human activities, with demonstrable progress made by 2030;</i> 5. <i>Establishing objectives, limits and targets for freshwater bodies that will</i> | <p>LF-P1 – Approach to identifying freshwater body values and managing freshwater bodies</p> <p><i>Waikato Regional Council will facilitate a process that will involve regional communities to identify values and establish subsequent freshwater objectives, limits and targets for freshwater bodies. The value setting process will:</i></p> <ol style="list-style-type: none"> 1. <i>Provide for variability in catchment management response;</i> 2. <i>Assist in ensuring that the adverse effects of activities on the identified values of water bodies are managed in an integrated manner;</i> 3. <i>determine any outstanding freshwater bodies and significant values of wetlands; and</i> | <p>The proposal recognises the mauri of the waterways in the area and the importance of these as tributaries and interconnectivity of ground water aquifers in the immediate area to the Waikato River.</p> <p>Specific consideration has been given to the ongoing protection for the Waipapa Stream (which runs adjacent to the site). This has been achieved through separation and maintaining a suitable buffer during construction and as part of the site layout and design.</p> <p>The quality of water from the discharges associated with the site will be effectively managed with isolation of hazardous substance areas, removal of any gross pollutants and the treatment and collection of surface water within the processing site. Collectively, these will prevent any off-site effects and further degradation of the waterways in the immediate area. The site also proposes to reuse stormwater collected within the cooling system associated with the factory.</p> <p>The designs for the site have also given specific attention to mechanisms to isolate and capture any leachate from the</p> |
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| <p><i>determine how they will be managed;</i></p> <ol style="list-style-type: none"> 6. <i>enabling people to provide for their social, economic and cultural wellbeing and their health and safety;</i> 7. <i>recognising that there will be variable management responses required for different catchments of the region; and</i> 8. <i>Recognising the interrelationship between land use, water quality and water quantity.</i> | <ol style="list-style-type: none"> 4. <i>recognise that where a freshwater body is currently used for renewable electricity generation or domestic or municipal supply, those uses are recognised as being values associated with that water body.</i> | <p>proposed monofill to avoid adverse effects on water quality.</p> <p>Ongoing monitoring of the project is also proposed concerning the operation of the site.</p> |
| <p>LF-O2 – Allocation and use of fresh water</p> <p><i>The allocation and use of fresh water is managed to achieve freshwater objectives (derived from identified values) by:</i></p> <ol style="list-style-type: none"> 1. <i>Avoiding any new over-allocation of ground and surface waters;</i> 2. <i>seeking to phase out any existing over-allocation of ground and surface water bodies by 31 December 2030;</i> 3. <i>increasing efficiency in the allocation and use of water; and</i> 4. <i>recognising the social, economic and cultural benefits of water takes and uses.</i> | <p>LF-P7 – Efficient use of fresh water</p> <p><i>Ensure that the allocated water resource is used efficiently.</i></p> | <p>The project's largest consumptive aspect is water for cooling within the factory processes. The process recycles and reuses water, but additional water will be needed.</p> <p>To manage water demand, an approach has been adopted which includes:</p> <ul style="list-style-type: none"> - Water from a local water supply scheme with existing allocation capacity (from an approved surface water abstraction from the Waikato River as described in in section 4 of the application) - Proposed abstraction from 4 production bores onsite and, - Rainwater harvesting via a large capacity pond to be constructed onsite as part of the development to manage the site's stormwater. <p>Through this coordinated approach, the reliance on surface water and groundwater is split and can be managed effectively. The proposal is considered an efficient use of the water.</p> <p>The abstraction can be at a rate that is sustainable without significant drawdown effects associated with the aquifer, which may affect surrounding bore supplies and the interaction with surface waters.</p> |



2 Waikato District Plan – Operative in Part: Objectives and Policies

2.1 Energy, Infrastructure and Transport

| Objectives | Policies | Comment |
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| AINF – All Infrastructure | | |
| AINF-O1 - Development, operation and maintenance of infrastructure. <i>Infrastructure is developed, operated, maintained and upgraded to enhance social, economic, cultural and environmental well-being.</i> | AINF-P1 - Development, operation and maintenance. 1) <i>Provide for the development, operation, maintenance, repair, replacement, upgrading and removal of infrastructure throughout the district by recognising:</i> <ol style="list-style-type: none"> <i>Functional and operational needs;</i> <i>Location, route and design needs and constraints;</i> <i>Locational constraints related to the need to access suitable resources or sites;</i> <i>The benefits of infrastructure to people and communities;</i> <i>The need to quickly restore disrupted services; and</i> <i>Its role in servicing existing consented and planned development;</i> <i>The need for physical access to infrastructure.</i> | <p>The proposal is consistent with these objectives and the associated policy. The site requires significant grid-tied electricity to operate the EAF and the steel processing plant. Given the high voltage, a portion of the substation infrastructure and switching gear will likely remain with the lines company WEL Networks and be co-located on the subject site. Provision has been made within the site to accommodate this on the MRSS platform.</p> <p>Green Steel has initiated supply discussions with WEL Networks, which will be confirmed following the FTAA process with a supply agreement.</p> <p>The community will benefit economically and socially from the provision of the infrastructure to the site with the significant employment to be created by the project.</p> |

2.2 Hazards and Risks

| Objectives | Policies | Comment |
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| Hazardous substances | | |
| HAZS-O1 - Manufacture, use and storage of hazardous substances. <i>To protect the community and natural environment from the adverse effects associated with the manufacture, use and storage of hazardous substances.</i> | HAZS-P2 - Significant hazardous facilities. <i>Ensure that significant hazardous facilities are appropriately sited and managed in order to reduce risks to the environment and community to acceptable levels.</i> | <p>The use and storage of Hazardous Substances is a key aspect of the site and includes:</p> <ul style="list-style-type: none"> - Bulk diesel for the refuelling of onsite mobile machinery used in the handling of steel. This will be stored in an above-ground skid-mounted tank of 2,000 L capacity, with appropriate secondary containment. - LPG for use as a fuel in the steel melt shop. This will be stored in a bulk LPG storage vessel of 50,000 L water capacity (equivalent to 25,500 kg of LPG). - Bulk oxygen storage: two buffer tanks, each of 50 m3, storing oxygen in gas form and one bulk |
| HAZS-O2 - Use of hazardous substances. <i>To enable activities to utilise hazardous substances where necessary for their</i> | | |



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| <p>operations, in appropriate locations.</p> | | <p>liquid oxygen storage tank of 20,000 L water capacity (equivalent to approximately 16,000 m3 of gaseous oxygen)</p> <p>The storage of these has been considered by Williamson Water & Land Advisory Ltd, which considers the best practice installation of the facilities to ensure that there are no adverse effects. The assessment also considers a risk assessment against Rule HAZS-R2 OiPDP</p> <p>Containment will be provided for all liquid bulk hazardous substances, as follows: -</p> <ul style="list-style-type: none"> - Bulk tanks will either be self-bunded (double-skinned) or within bunded areas. – - Bunds will be constructed of concrete or steel and will be lined with chemically resistant coating where necessary. - Intermediate Bulk Containers (IBCs), if stored outside, will be stored in covered and bunded areas, and if inside, will either be bunded or on drip trays that drain to an area where spills can be recovered. These are most likely to be required for the wastewater treatment plant. <p>Stormwater generated in areas where hazardous substances are stored or used will be collected and diverted for treatment through the onsite wastewater treatment process, with disposal of treated wastewater to the ground within the site.</p> <p>The hazardous substance facilities within the site are well separated from the boundaries of the site and from the stream. Post-installation documentation includes compliance with HAZNO location certificates.</p> <p>The risks for the site have been considered by Williamson Water and Land Advisory, and safety for the surrounding area and environment is able to be achieved.</p> <p>Overall, the project is consistent with these objectives and policies relating to Hazardous substances.</p> |
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2.3 General District-Wide Matters

| Objectives | Policies | Comment |
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| EW – Earthworks | | |
| <p>EW-O1 - Earthworks in all zones except the MRZ</p> <p>1) Medium density residential zone 1 and MRZ2 - Medium density residential zone 2.</p> <p>2) Earthworks facilitate subdivision, use and development.</p> | <p>EW-P2 - Earthworks in the GRUZ - General rural zone, FUZ - Future urban zone, CORZ - Corrections zone or TTZ - TaTa Valley zone.</p> <p>1) Enable earthworks associated with rural or conservation activities, including:</p> <p>a) Ancillary rural earthworks;</p> <p>b) Farm quarries;</p> <p>c) The importation of controlled cleanfill material to a site; and</p> <p>d) Indigenous biodiversity restoration.</p> <p>2) Manage earthworks to ensure that:</p> <p>a) Erosion and sediment loss are avoided or mitigated;</p> <p>b) The ground is geotechnically sound and remains safe and stable for the duration of the intended land use;</p> <p>c) Changes to natural water flows and established drainage paths are avoided or mitigated;</p> <p>d) Adjoining properties and infrastructure are protected;</p> <p>e) Historic heritage and cultural values are recognised and protected; and</p> <p>f) Ecosystem protection, restoration, rehabilitation or enhancement works are encouraged.</p> | <p>The project involves a substantial earthworks programme across approximately 44.7 hectares of the 53.7 ha site. The purpose is to reshape the land to accommodate the steel mill, monofill areas, and associated infrastructure.</p> <p>Key Earthworks Metrics:</p> <ul style="list-style-type: none"> - Cut volume: ~1.9 million m³ (including 0.5 million m³ for monofills) - Fill volume: ~1.9 million m³ - Total earthworks footprint: ~48.7 ha <p>Main platform level: RL 14m</p> <p>Secondary MRSS platform: RL 19m</p> <p>Earthworks are divided into three main stages to manage environmental effects and construction logistics:</p> <p>The site is considered to be geotechnically suitable to accommodate the development, and the design makes suitable accommodation for the diversion of water flows across the site, which will be diverted to a large capacity onsite stormwater pond.</p> <p>The Earthworks Management Plan and ESCP prepared for the project are comprehensive and align with Waikato Regional Council guidelines, ensuring minimal environmental impact.</p> <p>All cut slopes will be stabilised, and the large area of the horseshoe ridge will be replanted following the landscape planting plan.</p> |
| LIGHT – Light | | |
| | <p>In the GRUZ - General rural zone, FUZ - Future urban zone, COR - Corrections zone and TTZ - TaTa Valley zone:</p> <p>a) Enable the use of artificial outdoor lighting for night-time work while minimising to the extent practicable the effects on neighbouring sites.</p> <p>b) Ensure glare and light spill from permanently fixed artificial</p> | <p>While the actual detail of outdoor lighting is yet to be confirmed, lighting will not compromise the amenity of the surrounding area.</p> |



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| | <i>lighting does not compromise the amenity of adjacent sites.</i> | |
| | <p>LIGHT-O2 - Artificial outdoor lighting in all zones.</p> <p><i>Ensure artificial outdoor lighting is installed and operated so that light spill does not compromise the safe operation of the transport network.</i></p> | <p>Light is included within the suite of resource consent triggers with light spill at the intersections of the proposed internal access roads and the local road which may not be able to comply with the 10lux criteria however will be necessary to provide for safe ingress and egress from the site as the operation of the site's facilities will require night shifts. This is intended as a safety enhancement both for the site and the immediate traffic network.</p> |
| NOISE – Noise | | |
| | <p>NOISE-P3 - Noise and vibration in the GRUZ - General rural zone.</p> <p>1) <i>Manage the adverse effects of noise and vibration by:</i></p> <ul style="list-style-type: none"> a) <i>Ensuring that noise and vibration levels do not compromise rural amenity;</i> b) <i>Limiting the timing and duration of noise-generating activities to the extent practicable and appropriate;</i> c) <i>Maintaining appropriate separation between high noise environments and noise sensitive activities;</i> d) <i>Ensuring frost fans are located and operated to minimise, to the extent practicable, noise effects on other sites;</i> e) <i>Managing the location of sensitive land uses, particularly in relation to lawfully established activities;</i> f) <i>Requiring acoustic insulation where sensitive land uses are located within high noise environments, including the Airport Noise Outer Control Boundary, Huntly Power Station, and the Gun Club Noise Control Boundary;</i> g) <i>Managing the adverse effects of vibration from quarrying activities by limiting the timing and duration of blasting activities and maintaining sufficient setback distances from residential units or identified building platforms on another site; and</i> h) <i>Managing noise to minimise as far as practicable the effects on existing noise-sensitive activities.</i> | <p>An acoustic assessment has been undertaken by Hegley Acoustics concerning the project. This report provides an assessment of the noise generation associated with the project and how this relates to the surrounding areas and any sensitive receiving environments. In addition, Hegley have also provided an updated assessment with additional mitigation in response to issues raised by Corrections, the adjacent neighbour to the west of the Green Steel site.</p> <p>Vibration effects are negligible.</p> <p>The site is well separated from receiving environments.</p> <p>Construction is expected to take up to two construction seasons, and noise associated with the construction activities is compliant with district plan limits for the GRUZ.</p> <p>With operational noise, the activity is considered to have multiple noise sources associated with the operation of the site and steel process equipment. Noise mitigation is proposed within the site, which will be incorporated into the design. The mitigation includes a combination of acoustic insulation, bunding and construction of a 6m high noise barrier to reduce impacts upon Corrections land. Work at the site will occur 24/7, with steel shredding 12 hours a day 6 days per week. At other times maintenance, cleaning will occur, much quieter activities, well within the noise limits.</p> <p>Minor exceedances of the permitted activity noise standards will still occur around the site. However the exceedance are generally considered acceptable</p> <p>Based on the Hegley assessment, I am of the view that the project is not inconsistent</p> |



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| | | with this objective and policy and with the mitigation proposed, the noise from the project has been appropriately quantified and is considered acceptable. |
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Area-specific matters

| Objectives | Policies | Comment |
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| GRUZ – General Rural Zone | | |
| GRUZ-O1 - Purpose of the zone. <ul style="list-style-type: none"> a) <i>Enable farming activities;</i> b) <i>Protect high-class soils for farming activities;</i> c) <i>Provide for rural industry, infrastructure, rural commercial, conservation activities, community facilities, and extractive activities;</i> d) <i>Maintain rural character and amenity;</i> e) <i>Limit development to activities that have a functional need to locate in the zone.</i> | GRUZ-P2 - Effects of subdivision and development on soils. <p><i>Subdivision, use and development minimise the fragmentation of productive rural land, particularly where high-class soils are located.</i></p> | <p>The subject site does not contain high-quality soils and is considered rolling to steeply rolling.</p> <p>Utilisation of rural land for industrial activities has been considered as part of this assessment.</p> <p>The size and scale of the development is a significant change to the Rural Zone; however, in the context of this site not considered an inappropriate use based on the assessment of effects. The Application is considered a new greenfield site, and consideration has been given to the absorption capacity of both the site and the surrounding receiving context. Overall, the level of effect in terms of rural character and visual effects are considered to be minor based on technical assessments and considering the high levels of development in the wider environment.</p> <p>The site is a large-format building that is not well provided for in more intensive industrial zones, which are developed to reflect smaller average lot sizes.</p> <p>Concerning the functional need, the activity proposed is industrial rather than rural industrial and does not have a direct relationship to the rural land. However, the productive capacity of the land to which the project relates is considered to be low.</p> |
| GRUZ-O3 - Rural character and amenity. <ul style="list-style-type: none"> 1) <i>Maintain rural character and amenity.</i> 2) <i>The attributes of areas and features valued for their contribution to landscape values and</i> | GRUZ-P3 - Contributing elements to rural character and amenity values. <p><i>Recognise that rural character and amenity values vary across the zone as a result of the natural and physical resources present and the scale and extent of land use activities.</i></p> | <p>A Landscape and Visual Assessment has been undertaken by Greenwood Associates and is attached to the application, which considers the effects of the proposal on the receiving rural environment.</p> <p>The assessment considers that a moderate level of effect is likely given the scale of the proposed building and the</p> |



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| <p><i>visual amenity are maintained or enhanced.</i></p> | | <p>degree of change for the site. A shift from the current rural amenity of the site will occur.; however, in the context of the development in the surrounding area, the effects are considered relatively low. The wider location to which the project relates has been previously modified by several large-scale landuse activities, including Hampton Downs Motorsport Park, SpringHill corrections facility and the Hampton Downs landfill.</p> <p>An industrial/commercial precinct adjacent to the motorsport part is also nearing occupancy, with a framework for the development of this area provided by the P OP.</p> |
| | <p>GRUZ-P4 - Productive rural activities.</p> <p>1. <i>Enable the ongoing use of the rural environment zone as a productive working environment by:</i></p> <ul style="list-style-type: none"> a) <i>Recognising that buildings and structures associated with farming and forestry, and other operational structures for productive rural activities, contribute to rural character and amenity values;</i> b) <i>Ensuring productive rural activities are supported by appropriate rural industries and services;</i> c) <i>Providing for lawfully-established rural activities and protecting them from sensitive land uses and reverse sensitivity effects; and</i> d) <i>Recognising the economic, social and cultural benefits that result from the use and development of rural resources.</i> | <p>The productive rural use at this site was primary grazing of dry stock and considered to be of moderate to low intensity, as limited by the topography of the site. Some rotational cropping, such as maize, also occurred on the lower portions of the site.</p> <p>Given the proposed development of the site, the rural uses for this particular site will be superseded by this project as an industrial activity.</p> <p>The project will not restrict rural land use on surrounding properties.</p> |
| | <p>GRUZ-P6 - Industrial and commercial activities.</p> <p>1) <i>Provide for rural industry and rural commercial activities, provided they are either dependent on the rural soil resource or have a functional or operational need for a rural location.</i></p> <p>2) <i>Such activities are to be managed to ensure that:</i></p> <ul style="list-style-type: none"> a) <i>Their scale, intensity, and built form maintain rural character;</i> b) <i>They maintain an appropriate level of amenity for neighbouring sites; and</i> c) <i>They minimise reverse sensitivity effects on existing productive rural, intensive</i> | <p>This application relates to an industrial activity which does not have a functional connection beyond the need for a larger site. Therefore, it cannot be considered fully in line with this policy; however, on balance, it is considered appropriate in the context of the site and its location.</p> |



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| | <p><i>farming, quarrying, or rural industrial activities.</i></p> <p>3) <i>Avoid locating industrial and commercial activities in rural areas that do not have a genuine functional connection with the rural land or soil resource.</i></p> | |
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3 Operative Waikato District Plan

| Objectives | Policies | Comment |
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| Solid Waste | | |
| <p>Objective 10.2.1</p> <p><i>Solid waste volumes are reduced.</i></p> | <p>Policy 10.2.2</p> <p><i>Practices that reduce the volume of solid waste generated and disposed of in the district should be promoted.</i></p> <p>Policy 10.2.3</p> <p><i>Waste should be minimised where possible, or reused or recycled.</i></p> <p>Policy 10.2.4</p> <p><i>The producers of waste should be responsible for its disposal.</i></p> | <p>The project champions waste minimisation and the movement towards a circular economy and involves the processing of recycled steel and End of Life Vehicles (ELVs) as an input to the production of structural steel. Currently, there is no such facility in New Zealand, with shredded recycled steel currently being exported to other countries for processing and refinement.</p> <p>The project also promotes the onsite storage of industrial floc, which is to be placed in two lined fill areas. This material may be able to be recycled and reused in the future, depending on the development of a suitable market. By restricting the material to singular source materials being floc (synthetic foams and vinyls) from the dismantled cars, the mixed contamination associated with landfills is avoided and the opportunising for future recycling preserved. The project is consistent with these objectives and policies.</p> |
| <p>Objective 10.2.8</p> <p><i>Effects of solid waste collection, recycling, recovery, transfer, treatment and disposal operations are minimised.</i></p> | <p>Policy 10.2.9</p> <p><i>Solid waste collection, recycling, recovery, storage, treatment and disposal activities should be sited, designed and managed to avoid, remedy or mitigate adverse effects on the environment, amenity values and in particular on amenity values, health and safety, high-quality soils, landscapes, and ecologically and culturally sensitive areas.</i></p> | <p>The site has been designed to provide a dedicated area for the recycling, pre-shredding and shredding activities associated with the handling, sorting and processing of scrap steel. While these functions are outdoor storage activities, appropriate designs and mitigation have been developed to provide containment and noise reduction.</p> <p>As the floc being placed in the monofill is not contaminated with wet material such as organic material as in municipal solid waste landfills, the floc will be dryer and create less leachate. Because the fills will be single material fills, there is also the potential to reuse the floc once a viable alternate use for it is found.</p> |



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| | | Processing activities can be undertaken which avoid actual and potential adverse effects. |
| Amenity Values | | |
| <p>Objective 13.2.1</p> <p><i>Adverse effects of activities on amenity values are managed so that the qualities and character of the surrounding environment are not unreasonably compromised.</i></p> | <p>13.2.2</p> <p><i>Adverse effects associated with lighting, litter, electromagnetic radiation, vermin, traffic, spray drift, and noise should be contained within the site where they are generated.</i></p> <p>13.2.3</p> <p><i>Adverse effects associated with offensive or objectionable dust, smoke and odour should be contained within the site where they are generated.</i></p> <p>13.2.4</p> <p><i>Adverse effects that cannot be contained on the site where they are generated must be remedied or mitigated.</i></p> <p>13.2.5</p> <p><i>Amenity values, health and safety should be protected from adverse traffic effects, including:</i></p> <p><i>(a) noise, vibration, dust, lighting and glare</i></p> <p><i>(b) vehicle emissions</i></p> <p><i>(c) Accelerated or contaminated stormwater runoff</i></p> <p><i>(d) Visual effects of parking and loading areas</i></p> <p><i>(e) Traffic safety and congestion.</i></p> | <p>The existing amenity values are already significantly compromised by the existence of several intensified developments – landfill, corrections facility, raceway. In this context the proposal will have minimal effects on the character of the environment.</p> <p>The site has been designed to internalise a significant portion of the processing and has been designed to integrate into an area of higher topography on the southern side.</p> <p>Consideration has been given to adverse effects associated with discharges from the site, and the relevant technical assessments have assessed these as being less than minor.</p> <p>Suitable mitigation is proposed for Air Quality, Noise, and Stormwater Quality associated with the site. An EAF furnace is proposed for the site, which avoids significant combustion discharges and lowers greenhouse gas emissions associated with the burning of fuel for processing heat. The use of LPG is proposed in a part of the manufacturing process; however, in significantly reduced quantities than would otherwise be necessary and further reductions as part of the BPO are also proposed.</p> <p>Traffic effects from the site are not anticipated to be significant and can be accommodated by the surrounding network, which has a direct connection via grade separation to State Highway 1. Currently, due to the presence of other surrounding land uses, a higher traffic volume and percentage of HCVs is noted to service the landfill, prison and motorsport facilities.</p> <p>In addition, the proposal will not generate any vermin, litter, or dust.</p> <p>Overall, amenity values will not be significantly affected and the qualities and character of the surrounding environment not unreasonably compromised.</p> |



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| <p>Objective 13.2.6</p> <p><i>Amenity values of localities are maintained and enhanced.</i></p> | <p>13.2.7</p> <p><i>Scale, intensity, timing and duration of effects of activities should be managed to be compatible with the amenity and character of the locality.</i></p> <p>13.2.8</p> <p><i>Activities with similar effects or a similar expectation of amenity should be located together.</i></p> <p>13.2.9</p> <p><i>Activities sensitive to noise, dust, smoke, odour, spray drift, lighting, litter, electromagnetic radiation, vermin or traffic should be located in areas where local amenity values are not already compromised by those effects.</i></p> <p>13.2.10</p> <p><i>Activities with dissimilar effects or a dissimilar expectation of amenity should be separated where possible.</i></p> <p>13.2.11</p> <p><i>The district should be divided into zones for resource management.</i></p> | <p>The project relates to a semi-enclosed property which is zoned Rural under the ODP and General Rural under the WDP -OP and adjoins a section of the Corrections Zone to the west.</p> <p>Due to the topography of the site and the immediately surrounding area, the site is well separated from other rural dwellings.</p> <p>The area of the project is considered highly modified, and the scale and intensity of the project, whilst large, are considered appropriate in this particular area.</p> <p>The wider amenity of the locality is not typically rural, given the operation of surrounding land uses. These existing activities form part of the receiving context and have aspects of their operations that create differing expectations as to amenity, including traffic, noise and visual aspects.</p> |
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| Hazardous Substances | | |
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| <p>Objective 14.2.1</p> <p><i>Environment, people and property are protected from the adverse effects of hazardous substances.</i></p> | <p>Policy 14.2.2</p> <p><i>Activities that use, store, transport, and dispose of hazardous substances should avoid risk to the environment, human health, safety and property by:</i></p> <ul style="list-style-type: none"> <i>(a) being separated from sensitive natural environments, schools, recreational venues and residential areas</i> <i>(b) being located away from incompatible activities</i> <i>(c) being designed and constructed to contain any hazardous substances that may be accidentally released</i> <i>(d) disposing of hazardous substances in an environmentally safe manner</i> <i>(e) not causing contamination of land, its soil resource, or bio-accumulation of toxic substances in plants, animals and ecosystems</i> <i>(f) containing all accidental or uncontrolled releases of hazardous substances on-site</i> <i>(g) Having procedures for storing and handling hazardous substances</i> | <p>Please refer above commentary in relation to Hazardous Substances, as the approach is similar across both plans, with weighting now afforded to the operative in part provisions.</p> |



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| | <p>(h) Having a hazardous substances management plan to deal with accidental or uncontrolled releases</p> <p>(i) using non-hazardous substances and technologies where possible.</p> | |
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4 Waikato Regional Plan Objectives and Policies

| Objectives | Policies | Comment |
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| 3.5 Discharges | | |
| <p>Objective 3.5.2</p> <p><i>Discharges of contaminants to water are undertaken in a manner that:</i></p> <ul style="list-style-type: none"> a. <i>does not have adverse effects that are inconsistent with the water management objectives in Section 3.1.2</i> b. <i>does not have adverse effects that are inconsistent with the discharges onto or into land objectives in Section 5.2.2</i> c. <i>Ensures that decisions regarding the discharge of contaminants to water do not reduce the contaminant assimilative capacity of the water body to the extent that allocable flows as provided for in Chapter 3.3 are unable to be utilised for out-of-stream uses.</i> | <p>Policy 3.5.3.1: Enabling Discharges to Water that will have only Minor Adverse Effects</p> <p><i>Enable through permitted and controlled activity rules, discharges to water that, due to their nature, scale and location, will:</i></p> <ul style="list-style-type: none"> a. <i>Avoid adverse effects on surface water bodies that are inconsistent with policies in Section 3.2.3 of this Plan</i> b. <i>not increase the adverse effects of flooding or erosion on neighbouring properties</i> c. <i>ensure that any adverse effects of sediment on aquatic habitats are confined to a small area relative to the habitat as a whole or are temporary, and the area will naturally re-establish habitat values comparable with those prevailing before commencement of the activity</i> d. <i>not result in significant effects on the Coastal Marine Area as identified in the Waikato Regional Coastal Plan, wetlands¹⁸, which are areas of significant indigenous vegetation and/or significant habitats of indigenous fauna, cave ecosystems or lakes</i> e. <i>not have adverse effects that are inconsistent with the policies for air quality provided in Section 6.1.3 of this Plan.</i> | <p>All potential discharges and sources of contamination have been considered as part of the project, as per the following aspects.</p> <p>These are considered to be consistent with the objectives and policies and not result in adverse effects.</p> <p>The management of stormwater is addressed in this substantive report, and the various supporting technical assessments have been prepared for the site to minimise any effects from the discharge from a high-risk facility.</p> <ul style="list-style-type: none"> - Site preparation activities and bulk earthworks will be undertaken by a site-specific erosion and sediment control plan. The draft ESCP identifies the necessary environmental controls, staging of the physical works and use of appropriate |



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| | | <p>sub-catchments</p> <ul style="list-style-type: none"> - Adherence to this plan during construction will minimise the risk of any sediment losses to water during the physical works. - High-risk areas, such as the storage areas for hazardous substances, will be appropriately bunded and stormwater from these areas managed and treated. - Stormwater and roof water will be managed onsite, including treatment and attenuation in a large stormwater pond, which will reduce the volume of runoff from the site. - The reuse of rainwater harvesting is proposed for the site. - All leachate from the proposed monofill areas will be captured and removed off-site. - All stormwater from the scrap yard will be captured and treated using membrane filtration to remove heavy metals |
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| | <p>Policy 3.5.3.4: Discharges to Land</p> <p><i>Ensure that the discharge of contaminants onto or into land maximises the reuse of nutrients and water contained in the discharge.</i></p> | <p>A site-specific wastewater disposal system will be provided, which has sufficient capacity to treat the wastewater from staff amenities onsite prior to discharging via dripper lines.</p> <p>The feasibility of this system has been considered by Ormiston Associates Limited, and their technical assessment is attached to the substantive application. This system will avoid adverse effects associated with the discharge of wastewater and is consistent with this policy.</p> |
| | <p>Policy 3.5.3.5: Ground Water</p> <p><i>Minimise the adverse effects of discharges onto or into land on groundwater quality by ensuring that they:</i></p> <ul style="list-style-type: none"> a. <i>Do not compromise existing or reasonably foreseeable uses of groundwater</i> b. <i>avoid adverse effects on surface water bodies that are inconsistent with the policies in Section 3.2.3 of this Plan as far as practicable and otherwise, remedy or mitigate those effects</i> c. <i>are not inconsistent with the policies in Section 3.8.3 that manage the effects of drilling and discharges associated with drilling on groundwater quality.</i> | <p>Discharges to groundwater are limited via the proposed design for the site, with specific management proposed for the processing areas associated with the industrial use and monofill sites.</p> <p>No contamination of groundwater is expected, and monitoring of groundwater under the monofills will be undertaken.</p> |
| | <p>Policy 3.5.3.6: Tangata Whenua Uses and Values</p> <p><i>Ensure that the relationship of tangata whenua as Kaitiaki with water is recognised and provided for to avoid significant adverse effects and remedy or mitigate cumulative adverse effects on:</i></p> <ul style="list-style-type: none"> a. <i>the mauri of water</i> b. <i>waahi tapu sites</i> c. <i>other identified taonga.</i> | <p>Details of the project have been provided to and assessed by Ngā Muka</p> |



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| | <p>Policy 3.5.3.7: Stormwater Discharges</p> <p><i>Encourage at-source management and treatment of stormwater discharges to reduce water quality and water quantity effects of discharges on receiving waters.</i></p> | <p>Stormwater management for the site has been considered in the technical assessment prepared by Airey, as attached to the application.</p> <p>This assessment outlines that stormwater discharges have been minimised using a stormwater pond. The pond has been sized and designed to capture all stormwater runoff produced by the impervious areas within the site. The stormwater pond is sized to provide peak flow attenuation in the case of a 1% AEP storm event, which also provides for flood protection.</p> <p>Before the discharge of stormwater from the site, it will pass through an onsite treatment system including proprietary gross pollutant traps on the stormwater pipe network, this will provide an additional level of treatment to any runoff collected from paved areas before discharging to the pond, use of vegetated swales and membrane filtration from the area of the scrap yard is also proposed. These aspects should ensure that the quality of stormwater is effectively managed at the source without any adverse effects.</p> <p>The stormwater from within the pond will be reused on site for cooling, reducing the level of discharge from the site. The proposed design is such that peak stormwater flows will be discharged at</p> |
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| | | predevelopment levels. |
| 5.2 Discharges Onto or Into Land | | |
| <p>Objective 5.2.2</p> <p><i>Discharges of wastes and hazardous substances onto or into land undertaken in a manner that:</i></p> <ul style="list-style-type: none"> a. <i>does not contaminate soil to levels that present significant risks to human health or the wider environment</i> b. <i>does not have adverse effects on aquatic habitats, surface water quality or ground water quality that are inconsistent with the Water Management objectives in Section 3.1.2</i> c. <i>does not have adverse effects related to particulate matter, odour or hazardous substances that are inconsistent with the Air Quality objectives in Section 6.1.2</i> d. <i>is not inconsistent with the objectives in Section 5.1.2</i> e. <i>avoids significant adverse effects on the relationship that tangata whenua as Kaitiaki have with their taonga, such as ancestral lands, water and waahi tapu</i> f. <i>remedies or mitigates cumulative adverse effects on the relationship that tangata whenua as Kaitiaki have with their identified taonga, such as ancestral lands, water and waahi tapu.</i> | <p>Policy 5.2.3.1: Low Risk Discharges Onto or Into Land</p> <p><i>Enable, through permitted activity rules and non-regulatory methods, the discharge of contaminants onto or into land where:</i></p> <ul style="list-style-type: none"> a. <i>hazardous substances present in the discharge, or produced as a consequence of the breakdown of the contaminants from the discharge:</i> <ul style="list-style-type: none"> i. <i>are not environmentally persistent</i> ii. <i>will not bioaccumulate to a level that has acute or chronic toxic (carcinogenic, teratogenic or mutagenic) effects on humans or other non-target species</i> b. <i>The discharge of these contaminants onto or into land will not result in pathogens accumulating in soil or pasture to levels that would render the soil unsafe for agricultural or domestic use</i> c. <i>The discharge is not inconsistent with policies in Section 5.1.3</i> d. <i>The discharge will not result in any effect on water quality or aquatic ecosystems that is inconsistent with the purpose of the Water Management Classes as identified by the policies in Section 3.2.3</i> e. <i>The discharge will not result in any effect on air quality that is inconsistent with policies in Section 6.1.3</i> f. <i>The discharge will not damage archaeological sites, waahi tapu or other identified sites of importance to tangata whenua as Kaitiaki.</i> <p>Policy 5.2.3.2: Other Discharges Onto or Into Land</p> <p><i>Manage discharges of contaminants onto or into land not enabled by Policy 1, in a manner that avoids, where practicable, the following adverse effects and remedies or</i></p> | <p>No discharge of hazardous substances is proposed by the application, which may result in effects on human health. The proposed land use does propose the use of two monofill sites where floc material will be stored for potential reuse.</p> <p>The monofill sites will be fully lined and treated as a single source landfill activity. As part of the Earthtech design for these areas, as attached to this report, the appropriate containment and drainage will be designed to capture and remove any leachate proposed. An assessment of the leachate production has also been provided within the Earthtech Monofill monitoring and management plan.</p> <p>No objectionable odours or persistent dust discharges during operations are anticipated from the site. Dust and discharges during the construction phases will be appropriately managed as part of the construction activities, with suppression and stabilisation methods adopted during construction.</p> <p>Stormwater from the areas considered higher risk, associated with the processing of scrap steel or due to their containing storage for hazardous</p> |



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| | <p><i>mitigates those effects that cannot be avoided:</i></p> <ul style="list-style-type: none"> <i>a. contamination of soils with hazardous substances or pathogens to levels that present a significant risk to human health or the wider environment</i> <i>b. The discharge is not inconsistent with policies in Section 5.1.3</i> <i>c. any effect on water quality or aquatic ecosystems that is inconsistent with the purpose of the Water Management Classes as identified by the policies in Section 3.2.3</i> <i>d. the adverse effects outlined in the policies and rules for air quality in Chapters 6.1 and 6.2, particularly for odour and particulate deposition</i> <i>e. damage to archaeological sites, waahi tapu or other identified sites of importance to tangata whenua as Kaitiaki.</i> | <p>substances onsite, will be appropriately managed and treated before being discharged.</p> <p>All discharges to land associated with the site are not expected to be inconsistent with this objective and associated policies and will be appropriately managed during operation of the site.</p> <p>These aspects have been considered in the preliminary designs for the site and will be minimised and mitigated through the detailed designs for the site to avoid adverse effects. This will also be reinforced by a suitable monitoring regime for the site, which forms part of the likely consenting framework as proposed conditions.</p> |
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6.1 Regional and Local Air Management

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| <p>Objective 6.1.2.1</p> <p><i>Significant characteristics of air quality as identified in Table 6-1 are:</i></p> <ul style="list-style-type: none"> <i>a. protected where they are high</i> <i>b. enhanced where they are degraded</i> <i>c. otherwise maintained.</i> <p>Objective 6.1.2.2</p> <p><i>No significant adverse effects from individual site sources on the characteristics of air quality beyond the property boundary.</i></p> | <p>Policy 6.1.3.1: Low Risk Discharges to Air Enabled</p> <p><i>Enable the discharge of contaminants into air through permitted and controlled activity rules where:</i></p> <ul style="list-style-type: none"> <i>a. There are no significant adverse effects on human health and the health of flora and fauna from discharges of hazardous air pollutants.</i> <i>b. No odour is objectionable to the extent that it causes an adverse effect beyond the property boundary,</i> <i>c. Suspended or deposited particulate matter is not objectionable to the extent that it causes adverse effects beyond the property boundary,</i> <i>d. Significant adverse effects on, or changes to, visibility beyond the property boundary are avoided or remedied,</i> | <p>As outlined by Air Quality NZ in their assessment of emissions from the site, and particularly the emissions from the Steel Melt Shop, emissions will be managed through several control measures, including the high-efficiency bag filters, water coolers and dust collection systems, which significantly reduce particulate and gaseous emissions. Additionally, Green Steel will control emissions through strategies such as furnace temperature management, limiting sulphur content in raw materials, optimising oxygen injection, and implementing advanced control systems.</p> |
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| | <p>e. <i>Air quality beyond the property boundary does not cause accelerated corrosion or accelerated deterioration.</i></p> | <p>In addition to these emission controls, the stack has been designed, based on a series of atmospheric dispersion modelling studies, to discharge any remaining pollutants at a height of 55 metres. Effective dispersion will be achieved by taking into consideration the surrounding terrain and minimising downwash from nearby buildings.</p> <p>Combustion emissions from the reheating furnace will be discharged via a 56 m high stack designed with sufficient height and efflux velocity to adequately disperse the emissions.</p> <p>AQCNZ has undertaken an atmospheric dispersion modelling assessment by the Ministry for the Environment's Good Practice Guide for Assessing Discharges to Air from Industry (2016) and the Good Practice Guide for Atmospheric Dispersion Modelling (2008) to assess the potential for air discharges from the proposed Green Steel Mill to result in adverse effects.</p> <p>The atmospheric dispersion model predicted ground-level pollutant concentrations for a range of air pollutants, including PM10, PM2.5, NO2, CO, and SO2.</p> <p>The dispersion modelling results show that concentrations of the above pollutants are below the relevant health-based assessment criteria at off-site locations</p> |
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| | | where people could be exposed and well below the criteria at the nearest sensitive receptor locations. |
| | <p>Policy 6.1.3.2: Managing Effects of Other Discharges</p> <p><i>Manage other discharges of contaminants to air through controlled and discretionary activity rules, having particular regard to the effects of the discharge on:</i></p> <ul style="list-style-type: none"> a. <i>Ambient air quality compared to the Regional Ambient Air Quality Guidelines (RAAQG) levels provided in Chapter 6.3,</i> b. <i>ambient air quality compared to internationally accepted air quality guidelines or standards for managing and understanding the effects of contaminants on human health, the health of flora and fauna and amenity values,</i> c. <i>ambient odour and particulate matter levels compared to the guidelines for assessment provided in Chapter 6.4 of the Plan for odour and particulate matter</i> d. <i>adverse effects from contaminants that are hazardous in ambient air, particularly concerning human health,</i> e. <i>the significant characteristics of air quality within an area,</i> f. <i>significant adverse effects of the discharge on the identified values of tangata whenua as Kaitiaki,</i> g. <i>the sensitivity of the receiving environment,</i> h. <i>existing ambient air quality and any cumulative effects as a result of the discharge on the receiving environment,</i> i. <i>nationally accepted codes of practice for the relevant activity.</i> | The proposal is anticipated to be consistent with these objectives and policies as detailed above. |
| <p>Objective 6.1.2.3</p> <p><i>The cumulative effects of discharges on ambient air quality do not:</i></p> <ul style="list-style-type: none"> a. <i>present more than a minor threat to the health of humans, flora and fauna</i> | <p>Policy 6.1.3.5: Positive Benefits of Resource Use</p> <p><i>Recognise the positive benefits to people and communities arising from activities that affect air quality by enabling a range of activities to use the air (including existing activities) whilst ensuring that:</i></p> | The activity is classified as a high-risk site under the WRP due to its industrial nature and |



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| <p><i>b. cause odour that is objectionable to the extent that it causes an adverse effect</i></p> <p><i>c. result in levels of suspended or deposited particulate matter that are objectionable to the extent that they cause adverse effects</i></p> <p><i>d. have a significant adverse effect on visibility</i></p> <p><i>e. cause accelerated corrosion of structures</i></p> <p><i>f. cause significant adverse effects on the relationship tangata whenua as Kaitiaki have with their identified taonga, such as air, ancestral lands, water and waahi tapu.</i></p> | <p><i>a. High-quality air resources are protected,</i></p> <p><i>b. degraded air quality is enhanced,</i></p> <p><i>c. adverse effects on air quality are avoided, remedied or mitigated.</i></p> | <p>function as a steel processing plant.</p> <p>Air Quality NZ has evaluated the anticipated discharges to the air. Their technical assessment based on appropriate modelling concludes that the emissions from combustion activities, including particulates and stack emissions, are not expected to have adverse effects on the environment within the context of the site. There are no cumulative effects of particular note in relation to air quality.</p> <p>Ongoing monitoring in relation to the air discharge will be necessary as part of the operation of the site.</p> |
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