Appendix F: Assessment of objectives and policies

Auckland Unitary Plan (Operative in Part) - Assessment of objectives and policies

This table sets out a full assessment of all objectives and policies of the RPS, regional plan and district plan components of the AUP. In assessing these objectives and policies, attention is drawn to section B1 of the AUP, which states that objectives and policies at a higher level are given effect at every lower level.

For the purposes of these provisions, the Auckland Regional Landfill is a "municipal landfill" and therefore falls within the AUP's definition of "Infrastructure".

A number of the objectives and policies, particularly at the RPS level, are directed towards the promulgation of regional and district plans (including matters to which Auckland Council must give particular regard), and accordingly those matters are not relevant to this resource consent application. Failure to list and respond to those matters is simply a reflection of that fact.

Table 1: Chapter B Regional Policy Statement

	Reference	RPS Objective/Policy	Commentary
	B2. Tāhuhu whakaruruhau ā-taone - Urban growth and form **B2.2. Urban growth and form**		
1.	Objective B2.2.1 (1)	A quality compact urban form that enables all of the following: (a) a higher-quality urban environment; (b) greater productivity and economic growth; (c) better use of existing infrastructure and efficient provision of new infrastructure; (d) improved and more effective public transport; (e) greater social and cultural vitality; (f) better maintenance of rural character and rural productivity; and (g) reduced adverse environmental effects.	The Auckland Regional Landfill will help achieve, and is therefore consistent with, this objective because it will enable: "a higher quality urban environment", the "efficient provision of new infrastructure" and "reduced adverse environmental effects" through a single consolidated regional landfill constructed, operated, monitored and maintained using New Zealand industry best practise, rather than multiple smaller landfills each with their own effects. It will also achieve "greater productivity and economic growth" because residents and businesses need long term access to affordable,

	Reference	RPS Objective/Policy	Commentary
			safe and secure solid waste disposal infrastructure.
	B2. Tāhuhu whakaruruhau ā-taone - Urban growth and form **B2.3. A quality built environment**		
2.	Objective B2.3.1 (2)	Innovative design to address environmental effects is encouraged.	WMNZ will apply a best practice approach to managing adverse environmental effects during the development of the Auckland Regional Landfill. This approach has been taken on the basis that, because these approaches have been tested and proven, they provide certainty around minimising the level of adverse effects as far as practicable. The project is consistent with this objective.
3.	Objective B2.3.1 (3)	The health and safety of people and communities are promoted.	Landfills are essential in the everyday functioning of a city, contributing to the health, safety and wellbeing of people and communities. The Auckland Regional Landfill will be designed and constructed to ensure that residual solid waste is appropriately disposed of in a safe and sanitary manner: • No public access to the landfill, with only trained operators working within the landfill. • Access to and from the site: The proposed roundabout will provide safe access to and from State Highway 1, without compromising the safety of other users of the State Highway. • Systems to capture and treat leachate, LFG and sediment – this will manage discharges from the operation so they do not cause adverse effects on the health and safety of people. The project is consistent with this objective.

	Reference	RPS Objective/Policy	Commentary
	B3. Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy **B3.2 Infrastructure**		
4.	Policy B3.3.2 (2)	Encourage subdivision, use and development to be designed to promote the health, safety and well-being of people and communities by all of the following: (a) providing access for people of all ages and abilities; (b) enabling walking, cycling and public transport and minimising vehicle movements; and (c) minimising the adverse effects of discharges of contaminants from land use activities (including transport effects) and subdivision.	In respect of Policy B3.3.2(2)(c) the Auckland Regional Landfill in the proposed location, and with the proposed operational regime, will minimise vehicle movements and minimise the contaminants from the transport of waste to the landfill. This is because: the location to the north of Auckland will prevent the need for that waste to be transported to either Whitford or to Hampton Downs in the Waikato Region; the ability to access directly onto SH1 with a private access road will avoid waste trucks travelling on the local road networks; and the proposed bin exchange area will allow waste trucks to travel on the State highway network outside of peak hours, thereby reducing congestion and resulting transportation-related emissions. The adverse effects of discharges of contaminants from the construction and operation of the facility will be minimised as set out in section 9 of the AEE. As part of the project, walking/mountain biking tracks are proposed in the broader landholdings, outside of the operational landfill area. The project is consistent with Policy B3.3.2(2).
5.	Objective B3.2.1 (1)	Infrastructure is resilient, efficient and effective	The development and operation of the Auckland Regional Landfill will meet this objective. It will be effective – within 10 years it will replace Redvale as Auckland's primary landfill. It will provide resilience for Auckland's waste infrastructure by providing long term capacity for the disposal of waste. Any failure to develop an alternative substantial landfill in Auckland will

	Reference	RPS Objective/Policy	Commentary
			mean that Auckland would be left without a disposal facility for its solid waste within the region. The Auckland Regional Landfill will be efficient – it will allow off peak transport of waste in large vehicles, with direct access to SH1. It will be close enough to the North Auckland urban areas to minimise transport costs, but far enough away that it can provide sufficient buffer around its operations. It will be sufficiently large as to generate economies of scale in terms of its operational costs, and it will be able to develop and maintain a rigorous environmental monitoring regime.
6.	Objective B3.2.1 (2)	The benefits of infrastructure are recognised, including: (a) providing essential services for the functioning of communities, businesses and industries within and beyond Auckland; (b) enabling economic growth; (c) contributing to the economy of Auckland and New Zealand; (d) providing for public health, safety and the well-being of people and communities; (e) protecting the quality of the natural environment; and (f) enabling interaction and communication, including national and international links for trade and tourism	The Auckland Regional Landfill will result in benefits including: (a) forming part of the essential waste management services required for the functioning of communities, businesses and industries in the Auckland Region. (b) enabling economic growth within the region by providing a facility for residual waste from households, businesses and construction sites. (c) both the construction and operational phase of the Landfill will likely provide employment opportunities within the Rodney area as detailed in the Economics Assessment contained in Technical Report I, Volume 2 and is expected during the operational phase to inject approximately between $4.5 to $7.5 million per annum in additional wages and salaries, $3 to $6 million per annum in additional expenditure with local businesses and provide 68 to 105 FTE additional jobs for local Rodney residents.

	Reference	RPS Objective/Policy	Commentary
			(d) provide for the public health, safety and wellbeing of people and communities in Auckland by ensuring that residual solid waste is appropriately disposed of in a safe and sanitary manner, and (e) landfills help to protect the natural environment by providing for an appropriately designed location for the community to deposit solid waste. This consent application process should recognise those benefits, consistent with Objective B3.2.1.(2)
7.	Objective B3.2.1 (3) Policy B3.2.2 (1)	Development, operation, maintenance and upgrading of infrastructure is enabled, while managing adverse effects on: (a) The quality of the environment, and in particular natural and physical resources that that been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character; (b) The health and safety of communities and amenity values. Enable the efficient development, operation, maintenance and upgrading of infrastructure	This objective expressly recognises that infrastructure is essential to Auckland and that it must be enabled. It also recognises that infrastructure may have unavoidable adverse effects on the quality of the environment, on scheduled natural and physical resources (eg SEAs), and on a community's health and safety and amenity. Recognising the unavoidable nature of some of these effects by requiring effects to be managed, rather than these effects being required to be avoided, remedied or mitigated is an important distinction. The Auckland Regional Landfill will be entirely consistent with this objective. The project design has almost entirely avoided effects on any scheduled areas of natural and physical resources, it will avoid effects on the health and safety of communities through its proposed liner system and suite of environmental controls, and nearly all effects on amenity values have been

	Reference	RPS Objective/Policy	Commentary
			managed through a combination of operational controls and the large buffer distance provided by land owned by WMNZ. There will be unavoidable effects on other, non-scheduled, natural resources (in particular the proposed reclamation of streams within the proposed landfill footprint), and these effects have been mitigated or offset as far as practicable through, amongst other measures, an extensive ecological enhancement and offset program and fauna relocation plan. Accordingly, while there are some residual adverse effects, those effects are anticipated by the objective, given the nature of infrastructure projects, including because infrastructure's functional and operational requirements (discussed below). The effects of infrastructure simply need to be managed, and this has been achieved by the project. The project is therefore consistent with Objective B3.2.1 (3).
8.	Objective B3.2.1 (4) Policy B3.2.2 (3)	The functional and operational needs of infrastructure are recognised. Provide for the locational requirements of infrastructure by recognising that it can have a functional or operational need to be located in areas with natural and physical resources that	This objective recognises that the functional and operational needs of some infrastructure means that it may need to establish in certain locations, despite the potentially significant adverse effects from doing so. The Auckland Regional Landfill has functional and operational needs which means that potential landfill sites are significantly limited. These are detailed in the Site Selection Report, (Appendix D

	Reference	RPS Objective/Policy	Commentary
	Policy B3.2.2 (6)	have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character. Enable the development, operation, maintenance and upgrading of infrastructure in areas with natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character while ensuring that the adverse effects on the values of such areas are avoided where practicable or otherwise remedied or mitigated.	of the AEE, Volume 1), but of particular relevance is the fact that a large valley site was required in the north Auckland area close to SH1. The effect of these constraints has meant that the Auckland Regional Landfill will inevitably involve the permanent reclamation of a long length of permanent and intermittent streams. It is only by doing so will there be able to be a void of sufficient size to accommodate the proposed landfill. While WMNZ has proposed a very significant offset program, it will not be possible to fully offset the effects of this stream reclamation. Any assessment of this resource consent application should give particular attention to the need to recognise the functional and operational needs of the Auckland Regional Landfill, and in particular the unavoidable need to reclaim lengths of natural streams. This objective will need to be considered together with those objectives relating to natural resources, particularly those objectives in B7 that seek to avoid effects of natural streams.
9.	Objective B3.2.1 (8) Policy B3.2.2 (8)	The adverse effects of infrastructure are avoided, remedied or mitigated.	Adverse effects of the Auckland Regional Landfill have been carefully considered and will be avoided, remedied, mitigated or offset as set out in Section 9 of the AEE. This includes a set of conditions governing the construction of the landfill, its operation (including through a Landfill Management Plan), detailed controls on potential discharges and other effects and a

	Reference	RPS Objective/Policy	Commentary
			comprehensive monitoring regime set out in the proposed conditions of consent. This objective needs to be read in conjunction with Objective B3.2.1(3), which requires that effects of infrastructure be "managed". The project is consistent with this policy.
10.	Policy B3.2.2 (9)	Ensure where there is a functional or operational need for infrastructure to locate in areas subject to natural hazards: (a) that buildings accommodating people are located and/or designed to minimise risk from natural hazards; and (b) that risk that cannot be avoided by location or design should be mitigated to the extent practicable.	The Auckland Regional Landfill has been located in an area well separated (more than 70 km) from any known faults. The site of the landfill footprint itself is outside of any flood prone areas. The bin exchange area is proposed to be located within an area that may be subject to effects of flooding. There were very limited possible sites for this area, given the desire to avoid SEAs and limit the use of rural, local roads, and because of benefits of locating this area close to SH1. The possible effects of flooding to this project component have been mitigated to the extent practicable by raising the ground level well above a conservative estimate of a 1 in 100 year ARI flooding event. The project is consistent with this policy.
	B3. Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy **B3.3 Transport**		
11.	**Objective B3.3.1 (4)**	Effective, efficient and safe transport that: (a) supports the movement of people, goods and services;	The Auckland Regional Landfill project has two main transportation components: the construction and operation of the proposed roundabout on SH1 that provides a dedicated access to the site; and truck and vehicle

	Reference	RPS Objective/Policy	Commentary
		(b) integrates with and supports a quality compact urban form; (c) enables growth; (d) avoids, remedies or mitigates adverse effects on the quality of the environment and amenity values and the health and safety of people and communities; and (e) facilitates transport choices, recognises different trip characteristics and enables accessibility and mobility for all sectors of the community.	movements to and from the site over the life of the landfill and the effect of those movements on the broader network. In respect of the roundabout, this roundabout will: provide a dedicated site access that will improve safety on this section of SH1 (by reducing speed of vehicles); be subject to safety audits and will be designed and constructed to the satisfaction of NZTA; be consistent with the broader Dome Valley SH1 safety improvement programme commenced by NZTA; and not cause any material impact on the performance of SH1. Providing a direct access off SH1 will avoid effects of traffic on the local environment (that would result from the use of local roads), and avoid associated amenity and health and safety effects of using the rural road network to access the site. The effects of the project's traffic movements on the SH1 network will be able to be accommodated, especially given the role of the State highway network which has a national strategic purpose of moving people and goods nationwide. If in the future the proposed Warkworth to Wellsford SH1 diversion is constructed, then the transportation effects of this project will be further reduced. Further details are in section 5 of the AEE, Volume 1 and Technical Report M, Volume 2 [Integrated Transport Assessment].

	Reference	RPS Objective/Policy	Commentary
			Overall, the Auckland Regional Landfill project is consistent with this objective.
12.	B3.3.2. Policy (2)	Enable the movement of people, goods and services and ensure accessibility to sites.	Refer row 11 above. The proposed roundabout will give direct effect to this policy.
13.	Policy B3.3.2 (4)	Ensure that transport infrastructure is designed, located and managed to: (a) integrate with adjacent land uses, taking into account their current and planned use, intensity, scale, character and amenity; and (b) provide effective pedestrian and cycle connections.	Refer row 11 above. The proposed roundabout has been designed to be of a sufficient capacity to provide a long term, safe access to the Auckland Regional Landfill. In this location, there is no need for there to be any pedestrian or cycling connections associated with the roading or SH1, although there will be walking and mountain biking opportunities provided on the broader WMNZ landholdings. The Auckland Regional Landfill project will give effect to this policy.
14.	Policy B3.3.2 (7)	Avoid, remedy or mitigate the adverse effects associated with the construction or operation of transport infrastructure on the environment and on community health and safety.	Refer row 11 above. The adverse effects associated with the construction or operation of transport infrastructure will be avoided, remedied or mitigated as set out in Section 9 of the AEE, Volume 1 and Technical Report M, Volume 2. The Auckland Regional Landfill project will give effect to this policy.
	B3. Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy B3.4 Energy		
15.	Objective B3.4.1 (1)	Existing and new renewable electricity generation is provided for.	The waste within the landfill is “biomass” which is recognised as a source of renewable electricity generation by the National Policy Statement for Renewable Electricity Generation 2011.
16.	Objective B3.4.1 (2)	Energy efficiency and conservation is promoted.	
17.	Policy B3.4.2 (1)	Recognise the national, regional and local benefits to be derived from maintaining or	

	Reference	RPS Objective/Policy	Commentary
		increasing the level of electricity generated from renewable energy sources.	The Auckland Regional Landfill project proposes to collect landfill gas (LFG) and use this to generate electricity which is then fed into the National Grid. These generators will produce approximately 12MW of energy and the installation of generators will build up over time as the waste mass builds. This is sufficient electricity to power 12,000 homes. The project is therefore consistent and gives effect to these policies, particularly the requirement to provide for new renewable electricity generation, to recognise the benefits of increasing the level of electricity generated from renewable sources, and the requirement to provide for renewable electricity generation at a different scale and from different sources.
18.	**Policy B3.4.2 (2)**	Provide for renewable electricity generation activities to occur at different scales and from different sources to reduce reliance on non-renewable energy sources.	
19.	Policy B3.4.2 (3)	Recognise the locational constraints in the development of large-scale renewable electricity generation activities.	
	B6. Mana Whenua **B6.2 Recognition of the Treaty of Waitangi/Te Tiriti o Waitangi partnerships and participation**		
20.	B6.2.1 Objective (1) B6.2.1 Objective (2)	The principles of the Treaty of Waitangi/Te Tiriti o Waitangi are recognised and provided for in the sustainable management of natural and physical resources including ancestral lands, water, air, coastal sites, wāhi tapu and other taonga. The principles of the Treaty of Waitangi/Te Tiriti o Waitangi are recognised through Mana Whenua participation in resource management processes.	WMNZ have a longstanding partnership with iwi at Redvale Landfill, where open lines of communication are maintained with local iwi who have an interest in the site and surrounding area. Iwi groups were consulted before the opening of Redvale and prior to applications to renew its consents. Ngāti Whātua blessed Redvale's new administration building for the day when Ngāti Whātua and WMNZ jointly hosted a meeting with Ngāi Tahu (when Ngāi Tahu were considering the consent application for Kate Valley Landfill in the South Island). Both parties together took part in the presentation to Ngāi Tahu of a table carved locally from ancient kauri uncovered at Redvale.

	Reference	RPS Objective/Policy	Commentary
			WMNZ believe in the principles of partnership and engagement with Iwi. WMNZ have engaged with Mana Whenua with an interest in the site. This has included a broad engagement in different forms that will continue throughout the processing of this application. This has included meetings and hui with Ngāti Manuhiri, Ngāti Whātua and Ngāti Rongo. Ngāti Manuhiri have prepared a Cultural Values Assessment, which is addressed and discussed in section 9 of the AEE. This assessment sets out the relationship of Ngāti Manuhiri to the area, the important values and what measures should be considered by WMNZ to recognise and provide for these values.
21.	B6.2.2. Policy (1)	Provide opportunities for Mana Whenua to actively participate in the sustainable management of natural and physical resources including ancestral lands, water, sites, wāhi tapu and other taonga in a way that does all of the following: (a) recognises the role of Mana Whenua as kaitiaki and provides for the practical expression of kaitiakitanga; (b) builds and maintains partnerships and relationships with iwi authorities; (c) provides for timely, effective and meaningful engagement with Mana Whenua at appropriate stages in the resource management process, including development of resource management policies and plans;	WMNZ has provided and will continue to provide opportunities for Mana Whenua to actively participate in this resource consent process. In recognition of their particular and historical knowledge of the area, this has included consulting with iwi and hapū in order to better understand their concerns, and how those concerns might be responded to. This will be an ongoing process that will recognise the role of Mana Whenua as kaitiaki and will provide opportunities for kaitiakitanga.

	Reference	RPS Objective/Policy	Commentary
		(d) recognises the role of kaumātua and pūkenga; (e) recognises Mana Whenua as specialists in the tikanga of their hapū or iwi and as being best placed to convey their relationship with their ancestral lands, water, sites, wāhi tapu and other taonga; (f) acknowledges historical circumstances and impacts on resource needs; (g) recognises and provides for mātauranga and tikanga; and (h) recognises the role and rights of whānau and hapū to speak and act on matters that affect them.	
	B6. Mana Whenua **B6.3. Recognising Mana Whenua values**		
22.	B6.3.1 Objective (1)	Mana Whenua values, mātauranga and tikanga are properly reflected and accorded sufficient weight in resource management decision-making.	To the extent that this objective relates to the assessment of effects, rather than the resource consent decision process, it is considered that this objective is met as set out in section 9 of the AEE, Volume 1. The planning documents and the archaeological assessment have not identified any registered sites of cultural significance within the project footprint. Within the CVA report a number of significant features have been identified within the locality, with the project footprint not directly covering these areas. In order to appropriately address discharges to freshwater, the design of the Landfill and supporting infrastructure has gone beyond BPO to enable the use of innovative solutions.
23.	B6.3.1 Objective (2)	The mauri of, and the relationship of Mana Whenua with, natural and physical resources including freshwater, geothermal resources, land, air and coastal resources are enhanced overall.	
24.	B6.3.2 Policy (2)	Integrate Mana Whenua values, mātauranga and tikanga: (a) in the management of natural and physical resources within the ancestral rohe of Mana Whenua, including: (i) ancestral lands, water, sites, wāhi tapu and other taonga; (ii) biodiversity; and (iii) historic heritage places and areas.	

	Reference	RPS Objective/Policy	Commentary
		(b) in the management of freshwater and coastal resources, such as the use of rāhui to enhance ecosystem health; (c) in the development of innovative solutions to remedy the long-term adverse effects on historical, cultural and spiritual values from discharges to freshwater and coastal water; and (d) in resource management processes and decisions relating to freshwater, geothermal, land, air and coastal resources.	Effects on water have been addressed through the implementation of design measures and mitigation solutions. These are outlined in the Technical Reports contained in Volume 2.
25.	B6.3.2 Policy (3)	Ensure that any assessment of environmental effects for an activity that may affect Mana Whenua values includes an appropriate assessment of adverse effects on those values.	Effects on Mana Whenua values is contained in Section 9 of the AEE. The CVA provided by Ngāti Manuhiri contains information on matters of importance to the Iwi. Some of the values and items for consideration by WMNZ have been summarised in section 9 of the AEE, Volume 1. To the extent that effects are on physical resources, these are assessed within the AEE, Volume 1.
26.	B6.3.2 Policy (4)	Provide opportunities for Mana Whenua to be involved in the integrated management of natural and physical resources in ways that do all of the following: (a) recognise the holistic nature of the Mana Whenua world view; (b) recognise any protected customary right in accordance with the Marine and Coastal Area (Takutai Moana) Act 2011; and (c) restore or enhance the mauri of freshwater and coastal ecosystems.	Opportunities for Mana Whenua to be involved with the project and the management of natural resources on site have been provided and will continue to be provided. This is relevant in regards to (a) and (c). Refer to section 9 of the AEE, Volume 1 and the consultation record in Appendix E of the AEE, Volume 1, outlining the engagement with iwi. (b) is not relevant to this proposal.

	Reference	RPS Objective/Policy	Commentary
27.	B6.3.2 Policy (6)	Require resource management decisions to have particular regard to potential impacts on all of the following: (a) the holistic nature of the Mana Whenua world view; (b) the exercise of kaitiakitanga; (c) mauri, particularly in relation to freshwater and coastal resources; (d) customary activities, including mahinga kai; (e) sites and areas with significant spiritual or cultural heritage value to Mana Whenua; and (f) any protected customary right in accordance with the Marine and Coastal Area (Takutai Moana) Act 2011.	This policy is about decisions rather than applications, however in this application, we have given attention to (a)-(e), with (f) not being relevant in this instance. For details on how a-e have been addressed refer back to section 9 of the AEE, Volume 1.
	B6. Mana Whenua **B6.5. Protection of Mana Whenua cultural heritage**		
28.	B6.5.1 Objective (1)	The tangible and intangible values of Mana Whenua cultural heritage are identified, protected and enhanced.	WMNZ recognise and acknowledge the relationship that Mana Whenua have with the land and their cultural heritage. There are no areas registered as culturally significant within the AUP or on the NZAA (ArchSite) database, however WMNZ recognise that these mechanisms have limitations and that engagement with iwi is an integral part of understanding these values. Section 9 of the AEE, Volume 1, identifies some of the values identified by Mana Whenua and discusses how these will be recognised.
29.	B6.5.1 Objective (2)	The relationship of Mana Whenua with their cultural heritage is provided for.	
30.	B6.5.1 Objective (3)	The association of Mana Whenua cultural, spiritual and historical values with local history and whakapapa is recognised, protected and enhanced.	
31.	B6.5.2 Policy (2)	Identify and evaluate Mana Whenua cultural and historic heritage sites, places and areas considering the following factors:	The CVA provided by Ngāti Manuhiri identifies particular areas within the locality which have cultural significance. It is noted that none of these areas are directly affected as the project, has avoided known heritage sites, places and

	Reference	RPS Objective/Policy	Commentary
		(a) Mauri: ko te mauri me te mana o te wāhi, te taonga rānei, e ngākaunuitia ana e te Mana Whenua. The mauri (life force and life-supporting capacity) and mana (integrity) of the place or resource holds special significance to Mana Whenua; (b) Wāhi tapu: ko tērā wāhi, taonga rānei he wāhi tapu, arā, he tino whakahirahira ki ngā tikanga, ki ngā puri mahara, o ngā wairua a te Mana Whenua. The place or resource is a wāhi tapu of special, cultural, historic, metaphysical and or spiritual importance to Mana Whenua; (c) Kōrero Tūturu/historical: ko tērā wāhi e ngākaunuitia ana e te Mana Whenua ki roto i ōna kōrero tūturu. The place has special historical and cultural significance to Mana Whenua; (d) Rawa Tūturu/customary resources: he wāhi tērā e kawea ai ngā rawa tūturu a te Mana Whenua. The place provides important customary resources for Mana Whenua; (e) Hiahiatanga Tūturu/customary needs: he wāhi tērā e eke ai ngā hiahia hinengaro tūturu a te Mana Whenua. The place or resource is a repository for Mana Whenua cultural and spiritual values; and (f) Whakaaronui o te Wa/contemporary esteem: he wāhi rongonui tērā ki ngā Mana Whenua, arā, he whakaahuru, he whakawaihanga, me te tuku mātauranga. The place has special amenity, architectural or educational significance to Mana Whenua.	areas, including those identified in the CVA and those listed within the AUP and Archsite, and archaeology research and fieldwork, recognising the limitations of this type of research without having historical association with the area.
32.	B6.5.2 Policy (8)	Encourage appropriate design, materials and techniques for infrastructure in areas of known	There are no known historic occupation or settlement areas within the project footprint as identified by registered features in the AUP or

	Reference	RPS Objective/Policy	Commentary
		historic settlement and occupation by the tūpuna of Mana Whenua.	ArchSite, or by identification through the fieldwork and historical research undertaken as part of the Archaeological Assessment contained in Technical Report K of Volume 2. In the event that any such areas are discovered, accidental discovery protocol is proposed as recommended by the CVA.
	B7. Toitū te whenua, toitū te taiao – Natural resources **B7.2. Indigenous biodiversity**		
33.	B7.2.1 Objective (1)	Areas of significant indigenous biodiversity value in terrestrial, freshwater, and coastal marine areas are protected from the adverse effects of subdivision use and development.	The Auckland Regional Landfill project has been developed, with particular attention being given to the natural values of the site. In respect of this objective, this has involved designing all components of the project in a way that avoided all SEAs and avoided, to the extent practicable other areas of high ecological value: • A road has been re-aligned in order to avoid kauri trees. • The stockpile one footprint has been designed to minimise its intrusion within a non-scheduled wetland area. • The clay borrow area has been designed to avoid streams within the farm pastoral area as much as practicable. • The works avoid the main stream which runs through the farm area. • The proposed access to the landfill avoids the NSMA overlay as far as possible, and minimises the culvert size and area within the NSMA (only 80m^2 is affected). • The design of the access road avoids the head of the main wetland, being located outside of this area.

	Reference	RPS Objective/Policy	Commentary
			• The bin exchange area has been designed to avoid native vegetation present in the vicinity and avoid the SEA. In addition, WMNZ has committed to placing covenants over at least 40 ha of the property. The project is consistent with this objective.
34.	B7.2.1 Objective (2)	Indigenous biodiversity is maintained through protection, restoration and enhancement in areas where ecological values are degraded, or where development is occurring.	As set out in row 33, WMNZ has sought first to protect indigenous biodiversity by designing the landfill to avoid areas of significant indigenous biodiversity value. Where indigenous biodiversity values are affected, these will be restored or enhanced as set out in the Ecological Report attached as Technical Report G in Volume 2.
35.	B7.2.2 Policy (5)	Avoid adverse effects on areas listed in the Schedule 3 of Significant Ecological Areas – Terrestrial Schedule and Schedule 4 Significant Ecological Areas – Marine Schedule.	The overall land holdings of WMNZ contain the following scheduled SEA areas: SEA_T_5541 – Terrestrial SEA_T_6456 – Terrestrial SEA_909_Terrestrial SEA_T_909c – Terrestrial SEA_T_6850 – Terrestrial SEA_T_6634 – Terrestrial SEA_T_6854-Terrestrial The landfill has been designed to avoid development within SEAs on the site (see row 33), and accordingly the project gives effect to this policy. Despite this, the works outside of (but close to) scheduled SEAs may have effects on the SEA. These effects have avoided as far as practicable

	Reference	RPS Objective/Policy	Commentary
			(through the use of conditions), but are otherwise mitigated or offset through the restoration or enhancement programme proposed (refer row 34). This response is consistent with the requirement, elsewhere in the RPS, to manage the effects of infrastructure on scheduled areas.
	B7. Toitū te whenua, toitū te taiao – Natural resources **B7.3. Freshwater systems**		
36.	B7.3.1 Objective (1)	Degraded freshwater systems are enhanced.	There are freshwater systems within the farm area (western block) that are degraded from historic farming activity that has been undertaken on the site over the years. This has resulted in systems that have poor riparian vegetation, channel modification and low biodiversity values. Freshwater systems that are degraded have been identified within the Freshwater Ecology Report contained in Technical Report G of Volume 2. The project will enhance these degraded freshwater systems, and is accordingly consistent with this objective.
37.	B7.3.1 Objective (2)	Loss of freshwater systems is minimised.	The project will result in the unavoidable loss of permanent and intermittent streams within the landfill footprint. Overall, careful attention has been given to minimising the loss of freshwater systems. For example, the alignment of the main access road, has been chosen from a number of options and results in an alignment that reduces effects on freshwater systems. The location of stockpiles have been located in order to minimise impacts on streams.

	Reference	RPS Objective/Policy	Commentary
			The project is consistent with this objective.
38.	B7.3.1 Objective (3)	The adverse effects of changes in land use on freshwater are avoided, remedied or mitigated.	The Auckland Regional Landfill project will involve a number of land use changes (forestry to landfill and associated activities, pastoral land to forestry, pastoral land to native revegetation, forestry to native revegetation). In all cases, the adverse effects on freshwater systems have been avoided, remedied or mitigated through the design and location of the works, proposed conditions of consent, and the restoration and enhancement works proposed. The project is consistent with this objective.
39.	B7.3.2 Policy (1)	*Integrated management of land use and freshwater systems* (1) Integrate the management of subdivision, use and development and freshwater systems by undertaking all of the following: …. (c) controlling the use of land and discharges to minimise the adverse effects of runoff on freshwater systems and progressively reduce existing adverse effects where those systems or water are degraded; and (d) avoiding development where it will significantly increase adverse effects on freshwater systems, unless these adverse effects can be adequately mitigated.	With particular reference to clauses (c) and (d) of B7.3.2 Policy (1): • Measures to minimise the adverse effects of runoff on freshwater systems are set out in Section 9 and Technical Report P and R, Volume 2 of the AEE. It is considered that these measures represent good practice, and will reliably minimise discharges from the proposed development. • The proposed landfill development will result in a loss of freshwater systems, as described in section 9 of the AEE, Volume 1. These effects can be regarded as being adequately mitigated, having regard to the objectives and policies on infrastructure (and their functional and locational constraints) and the extensive restoration, enhancement and offset package proposed.

	Reference	RPS Objective/Policy	Commentary
			The project is therefore consistent with these sub-policies.
40.	B7.3.2 Policy (4)	*Management of freshwater systems* (4) Avoid the permanent loss and significant modification or diversion of lakes, rivers, streams (excluding ephemeral streams), and wetlands and their margins, unless all of the following apply: (a) it is necessary to provide for: (i) the health and safety of communities; or (ii) the enhancement and restoration of freshwater systems and values; or (iii) the sustainable use of land and resources to provide for growth and development; or (iv) infrastructure; (b) no practicable alternative exists; (c) mitigation measures are implemented to address the adverse effects arising from the loss in freshwater system functions and values; and (d) where adverse effects cannot be adequately mitigated, environmental benefits including on-site or off-site works are provided.	Where possible, the permanent loss and significant modification or diversion of rivers, streams (excluding ephemeral streams), and wetlands and their margins has been avoided through design and layout of the proposed facility. Where this has not been possible, such as within the actual landfill footprint area, the project satisfies all elements of the exception in (a)-(e): (a) the project is necessary in order to provide a municipal landfill, which is essential infrastructure for Auckland; (b) for the reasons described, and as set out in Section 10 of the AEE, Volume 1, alternative sites and alternative designs within the proposed site have been investigated, and it is considered that the proposed site and layout represents the best practicable alternative; (c) mitigation measures to address the adverse effects arising from the loss in freshwater system functions and values are set out in Section 9 and Technical Report G, Volume 2 of the AEE; and (d) to the extent there are residual adverse effects existing after mitigation, environmental benefits including on-site or off-site works are provided as follows: • riparian planting around significant wetlands on site and watercourses; • pest control within the WMNZ site and surrounds; • removal of barriers to fish passage;

	Reference	RPS Objective/Policy	Commentary
			• revegetation planting of pastoral land with native vegetation. Although the proposed environmental benefits (offsets) cannot fully compensate for any unmitigated loss, a "no net loss" outcome is not required by this policy, and accordingly the Auckland Regional Landfill project is consistent with the policy.
41.	B7.3.2 Policy (5)	Manage subdivision, use, development, including discharges and activities in the beds of lakes, rivers streams, and in wetlands, to do all of the following: (a) protect identified Natural Lake Management Areas, Natural Stream Management Areas, and Wetland Management Areas; (b) minimise erosion and modification of beds and banks of lakes, rivers, streams and wetlands; (c) limit the establishment of structures within the beds of lakes, rivers and streams and in wetlands to those that have a functional need or operational requirement to be located there; and (d) maintain or where appropriate enhance: (i) freshwater systems not protected under Policy B7.3.2(5)(a); (ii) navigation along rivers and public access to and along lakes, rivers and streams; (iii) existing riparian vegetation located on the margins of lakes, rivers, streams and wetlands; and (iv) areas of significant indigenous biodiversity.	The Auckland Regional Landfill has been designed and will be operated in order to: • Avoid any development within, and therefore protect the WMAs on the site, and avoid as far as practicable development within the NSMA, with the exception of a small culvert which is required to support the access road (comprising only 80m^2 of work); • Minimise erosion and modification of the beds and banks of the streams within the site in accordance with GD05. As all catchments have been identified as being prone to erosion, provision for holding and releasing the 99th Percentile rain event runoff has been included in the design; • Structures within the beds of streams within the site have been avoided where possible, through alternative designs and layouts. Those that remain are limited to those that have a functional or operational requirement to be there. • The following have been maintained or enhanced:

	Reference	RPS Objective/Policy	Commentary
			○ a range of freshwater systems outside of the NSMA and WMA overlays, including through riparian planting and the provision of fish passage, as described in Technical Report G, Volume 2; ○ public access into Sunnybrook Reserve and along the Hōteo River and Waiwhiu Stream is proposed as described in the AEE; ○ existing riparian vegetation along the margins of the Hōteo River, and streams and wetlands, through additional fencing, planting and pest control as described in Technical Report G, Volume 2; ○ areas of significant indigenous biodiversity have been identified on site, including areas scheduled as SEAs in the AUP, including areas that will be protected in perpetuity. The project is consistent with this policy.
42.	B7.3.2 Policy (6)	Restore and enhance freshwater systems where practicable when development, change of land use, and subdivision occur.	Where practicable, freshwater systems have been restored and enhanced. In particular, enhancement of the wetland systems on the site is proposed as set out in Technical Report G, Volume 2 of the AEE. Refer also row 41 above. The project is consistent with this policy.

	Reference	RPS Objective/Policy	Commentary
	B7. Toitū te whenua, toitū te taiao – Natural resources **B7.4. Coastal water, freshwater and geothermal water**		
43.	B7.4.1 Objective (1)	Coastal water, freshwater and geothermal water are used within identified limits while safeguarding the life-supporting capacity and the natural, social and cultural values of the waters.	A new bore associated with a small groundwater take is proposed in order to supply potable water for the administrative hub associated with the Auckland Regional Landfill (e.g. office block). The adverse effects of this take will be negligible, and the project is therefore consistent with this objective.
44.	B7.4.1 Objective (2)	The quality of freshwater and coastal water is maintained where it is excellent or good and progressively improved over time where it is degraded.	The quality of freshwater will be maintained through the measures set out in Section 9 of the AEE, including: • A draft Construction Erosion and Sediment Control Plan is attached to Technical Report R in Volume 2. Recognising that the extent of earthworks required to establish the site and the access road is significant, the plan sets out measures to manage effects of construction of the landfill on the freshwater system in this catchment. • Potential discharges from the site and proposed stormwater and sediment management controls are set out in the Stormwater and Industrial Trade Activity Report (Technical Report P, Volume 2). This develops a surface water strategy based on the specific requirements for each area within the site. This has been undertaken using a risk based approach which considers the sensitivity of the receiving environment both immediate and further downstream and the activities undertaken in each catchment.

	Reference	RPS Objective/Policy	Commentary
			• The landfill will be designed with a multi-layered liner system designed to contain leachate from the waste. This will protect the quality of groundwater, and to the extent the groundwater emerges as surface water, will also protect that surface water, during operation of the landfill and beyond. The project is consistent with this objective.
45.	B7.4.1 Objective (3)	Freshwater and geothermal water is allocated efficiently to provide for social, economic and cultural purposes.	The proposed groundwater take is small and will be used for potable water only, with other water requirements (e.g. dust suppression) met by using recycled water. This is considered to be an efficient use of the water resource at this site. The project is consistent with this objective.
46.	B7.4.1 Objective (4)	The adverse effects of point and non-point discharges, in particular stormwater runoff and wastewater discharges, on coastal waters, freshwater and geothermal water are minimised and existing adverse effects are progressively reduced.	Adverse effects of discharges on freshwater (and ultimately coastal water) are addressed in Section 9 of the AEE, Volume 1. With particular reference to stormwater runoff and wastewater discharges: • Wastewater will be treated and disposed of via three systems across the site which will comply with the relevant permitted activity standards for waste water treatment. • Stormwater will be collected and treated through a series of stormwater ponds prior to release into the streams. The quality of the stormwater will be tested frequently, while the turbidity of the stormwater being released will be monitored continuously. The effects of wastewater and stormwater are therefore minimised, and the project is accordingly consistent with this objective.

	Reference	RPS Objective/Policy	Commentary
47.	B7.4.1 Objective (5)	The adverse effects from changes in or intensification of land use on coastal water and freshwater quality are avoided, remedied or mitigated.	The adverse effects of the change of land use on freshwater quality are set out in Section 9 of the AEE, Volume 1. These effects are considered to be appropriately avoided, remedied or mitigated, such that the project is consistent with this objective.
48.	B7.4.1 Objective (6)	Mana Whenua values, mātauranga and tikanga associated with coastal water, freshwater and geothermal water are recognised and provided for, including their traditional and cultural uses and values.	The CVA provided by Ngāti Manuhiri sets out matters of importance to Mana Whenua, including in relation to freshwater. In relation to the subject site, geothermal water is not a relevant consideration. Coastal water is only relevant at the point where the Hōteo River joins the coastal environment, which is some distance from the project. For freshwater systems, beyond the areas within the active landfill footprint in Valley 1 the project is designed to allow cultural uses of all other freshwater systems.
49.	B7.4.2 Policy (1)	*Integrated management* Integrate the management of subdivision, use, development and coastal water and freshwater, by: (a) ensuring water supply, stormwater and wastewater infrastructure is adequately provided for in areas of growth; and (b) requiring catchment management planning as part of structure planning; (c) controlling the use of land and discharges to minimise the adverse effects of runoff on water and progressively reduce existing adverse effects where those water are degraded; and (d) avoiding development where it will significantly increase adverse effects on water,	With particular reference to clauses (c) and (d) of B7.4.2 Policy (1): • Measures to minimise the adverse effects of stormwater runoff on water are set out in Section 9 and Technical Report P, Volume 2. It is considered that these measures represent good practice, and will reliably minimise discharges from the proposed development. • Managing potential discharges from the site as set out in the Stormwater, and Industrial Trade Activity Report (Technical Report P, Volume 2). • An on-site wastewater disposal system is proposed for the domestic wastewater discharges from the administration hub and

	Reference	RPS Objective/Policy	Commentary
		unless these adverse effects can be adequately mitigated.	ablution facilities. Provided this is installed in accordance with supplier's instructions, adverse effects will be less than minor as set out in Section 9 of the AEE. The project gives effect to this policy.
50.	B7.4.2 Policy (7)	*Water quality* Manage the discharges of contaminants into water from subdivision, use and development to avoid where practicable, and otherwise minimise, all of the following: (a) significant bacterial contamination of freshwater and coastal water; (b) adverse effects on the quality of freshwater and coastal water; (c) adverse effects from contaminants, including nutrients generated on or applied to land, and the potential for these to enter freshwater and coastal water from both point and non-point sources; (d) adverse effects on Mana Whenua values associated with coastal water, freshwater and geothermal water, including wāhi tapu, wāhi taonga and mahinga kai; and (e) adverse effects on the water quality of catchments and aquifers that provide water for domestic and municipal supply.	Management of discharges of contaminants is integral to the design and management of the proposed Auckland Regional Landfill. This project gives effect to the requirements of this policy as follows: (a) significant bacterial contamination of freshwater will be avoided through the design of the landfill, which comprises a multiple-barrier lining system designed to contain leachate (see Section 5 of the AEE). Any leachate that might enter the ground beneath the landfill due to manufacturing defects in the liner have been conservatively estimated at 8 l/day. The effect of this discharge (were it to occur) have been assessed as being orders of magnitude below the level likely to cause any effects on aquatic ecosystems or on human health; (b) adverse effects from the construction and operation of the landfill relate to both sediment discharges from earthworks and discharges to land from leachate generation from the breakdown of waste materials. The landfill is designed during both the construction and operation phase to capture these discharges and treat them, thereby avoiding or minimising effects (see Technical Report K, Volume 2 and in the Engineering Design Report attached as Technical Report E in Volume 2);

	Reference	RPS Objective/Policy	Commentary
			(c) refer (a) and (b) above; (d) refer back to row 48; (e) there are not expected to be any effects of potable water used for domestic or municipal supply (refer Section 9 of the AEE).
51.	B7.4.2 Policy (8)	*Sediment runoff* Minimise the loss of sediment from subdivision, use and development, and manage the discharge of sediment into freshwater and coastal water, by: (a) promoting the use of soil conservation and management measures to retain soil and sediment on land; and (b) requiring land disturbing activities to use industry best practice and standards appropriate to the nature and scale of the land disturbing activity and the sensitivity of the receiving environment.	Land disturbing activities associated with the construction of the landfill will be managed using industry accepted practice, as set out in the ESCP for preliminary works phases and within the LMP for on-going landfill operation phases. This plan provides a suite of standard controls relevant to the type and scale of earthworks to be undertaken with respect to the individual projects within the areas, along with a process for identifying the specific controls to be implemented where the site specific constraints and sensitivity of the receiving environment mean some specific measures should be considered. The project will minimise the loss of sediment and will therefore give effect to this policy.
52.	B7.4.2 Policy (9)	*Stormwater management* Manage stormwater by all of the following: (a) requiring subdivision, use and development to: (i) minimise the generation and discharge of contaminants; and (ii) minimise adverse effects on freshwater and coastal water and the capacity of the stormwater network; (b) adopting the best practicable option for every stormwater diversion and discharge; and	Stormwater on site will be managed in a way (described in Technical Report P, Volume 2) that gives effect to the requirements of sub-policies (a) and (b): (a) the sediment ponds have been designed to provide effective removal of sediment, but will also provide removal of suspended contaminants including heavy metals (primarily copper and zinc associated with vehicle movements on-site, as well as potential for oils and grease from the workshop and the truck wash);

	Reference	RPS Objective/Policy	Commentary
		(c) controlling the diversion and discharge of stormwater outside of areas serviced by a public stormwater network.	(b) the stormwater diversions and discharges will adopt the best practicable option to minimise the effects of discharges.
53.	B7.4.2 Policy (10)	*Wastewater* Manage the adverse effects of wastewater discharges to freshwater and coastal water by all of the following: (a) ensuring that new development is supported by wastewater infrastructure with sufficient capacity to serve the development; (b) progressively reducing existing network overflows and associated adverse effects by all of the following: (i) making receiving environments that are sensitive to the adverse effects of wastewater discharges a priority; (ii) adopting the best practicable option for preventing or minimising the adverse effects of discharges from wastewater networks including works to reduce overflow frequencies and volumes; (iii) ensuring plans are in place for the effective operation and maintenance of the wastewater network and to minimise dry weather overflow discharges; (iv) ensuring processes are in place to mitigate the adverse effects of overflows on public health and safety and the environment where the overflows occur; (c) adopting the best practicable option for minimising the adverse effects of discharges from wastewater treatment plants; and	Facilities associated with the landfill include staff bathroom facilities, which will be serviced by an on-site wastewater system. This will be designed, installed and operated in order to avoid adverse effects on freshwater and meet the permitted standards of the AUP. In that regard, attention is drawn to Section C1.2(2) of the AUP which states "When considering an application for resource consent for an activity that is classed as a discretionary or non-complying activity, the Council will have regard to the standards for permitted activities on the same site as part of the context of the assessment of effects on the environment." The wastewater component of the project will be consistent with this policy.

	Reference	RPS Objective/Policy	Commentary
		(d) ensuring on-site wastewater systems avoid significant adverse effects on freshwater and coastal water.	
54.	B7.4.2 Policy (11)	*Freshwater and geothermal water quantity, allocation and use* Promote the efficient allocation of freshwater and geothermal water by all of the following: (a) establishing clear limits for water allocation; (b) avoiding over-allocation of water, including phasing out any existing over-allocation; (c) safeguarding spring flows, surface waterbody base flows, ecosystem processes, life-supporting capacity, the recharge of adjacent aquifers, and geothermal temperature and amenity; and (d) providing for the reasonable requirements of domestic and municipal water supplies.	The groundwater take is proposed for potable use associated with the staff facilities. (For non-potable water use such as dust management, water will be recycled primarily from the stormwater ponds.) No surface water take is proposed. This is considered to be a reasonable and efficient use and associated effects on groundwater will be less than minor. The groundwater take is consistent with these three policies.
55.	B7.4.2 Policy (12)	Promote the efficient use of freshwater and geothermal water.	
56.	B7.4.2 Policy (13)	Promote the taking of groundwater rather than the taking of water from rivers and streams in areas where groundwater is available for allocation.	
57.	B7.4.2 Policy (14)	Enable the harvesting and storage of freshwater and rainwater to meet increasing demand for water and to manage water scarcity conditions, including those made worse by climate change.	As set out above, for non-potable water use such as dust management, water will be recycled primarily from the stormwater ponds, supplemented with water from other sources, such as a pond formed where the access road crosses the stream in the southern valley of the Western Block, and sediment ponds located below stockpile areas. The creation of the ponds, and re-use of collected

	Reference	RPS Objective/Policy	Commentary
			water in these ponds, is consistent with and gives effect to this policy.
	B7. Toitū te whenua, toitū te taiao – Natural resources **B7.5. Air**		
58.	B7.5.1 Objective (1)	The discharge of contaminants to air from use and development is managed to improve region-wide air quality, enhance amenity values in urban areas and to maintain air quality at appropriate levels in rural and coastal areas.	The landfill site is located within a rural zone, identified in the AUP as a medium air quality environment. The objective directs that air quality is to be maintained at appropriate levels within rural areas. The landfill operation in itself generates discharges to air principally from: • combustion products generated by the burning of collected landfill gas in a flare or generator; • fugitive emissions of landfill gas (LFG) which can be odorous; • odour from the waste itself; and • dust emissions from construction or dusty waste. The range of management measures used to reduce emissions of dust are also set out in the Air Quality Assessment (Technical Report D, Volume 2), including sealing of the main access road, regular use of a water cart on unpaved roads during dry conditions and rapid burial of dusty wastes. Odour dispersion modelling has been undertaken as part of the proposal, which shows that there is no appreciable risk of odour nuisance effects in the surrounding area as a result of normal operational odour emissions at the landfill. Dispersion modelling also shows that there will

	Reference	RPS Objective/Policy	Commentary
			be no exceedances of the ambient air quality standards set in the NESAQ, anywhere beyond the boundary (see Technical Report D, Volume 2). Due to proposed management measures and the extent of the buffer to sensitive receivers, the risk of adverse odour or other effects associated with the discharges to air is low. The project will maintain the air quality at an appropriate level, and is therefore consistent with this objective.
59.	B7.5.1 Objective (2)	Industry and infrastructure are enabled by providing for reduced ambient air quality amenity in appropriate locations.	The Auckland Regional Landfill is infrastructure, as defined by the AUP. Enabling the project in this location, which is identified as a medium air quality environment, is consistent with this objective.
60.	B7.5.1 Objective (3)	Avoid, remedy or mitigate adverse effects from discharges of contaminants to air for the purpose of protecting human health, property and the environment.	The discharges to air and the modelling undertaken is described in row 58 above. Air discharges that have the potential to cause human health effects arise from the combustion of LFG in the flare and generators at the Energy Centre. The combustion generates exhaust containing a number of contaminants – principally fine particulate, oxides of nitrogen, carbon monoxide and sulphur dioxide. If people are exposed to these contaminants at sufficiently high concentrations it can cause adverse health effects. Atmospheric dispersion modelling has been used to assess the potential effects of discharges to air from combustion. The modelling concludes that taking into account likely background concentrations, cumulative

	Reference	RPS Objective/Policy	Commentary
			effects of these discharges from the site are expected to be well within relevant ambient air quality standards and guidelines at residential dwellings and will not cause exceedances of NESAQ values beyond the boundary. The project will be consistent with this objective because through the combination of management measures (see row 58) and the large buffer distances provided by WMNZ between the landfill itself and any sensitive receivers, any significant adverse effects from the discharge of contaminants to air (including dust) will be avoided.
61.	B7.4.2 Policy (1)	Manage discharge of contaminants to air from use and development to: (a) avoid significant adverse effects on human health and reduce exposure to adverse air discharges; (b) control activities that use or discharge noxious or dangerous substances; (c) minimise reverse sensitivity effects by avoiding or mitigating potential land use conflict between activities that discharge to air and activities that are sensitive to air discharges; (d) protect activities that are sensitive to the adverse effects of air discharges; (e) protect flora and fauna from the adverse effects of air discharges; (f) enable the operation and development of infrastructure, industrial activities and rural production activities that discharge contaminants	Discharges of contaminants to air from the construction and operation of the landfill facility will be managed as follows (refer Technical Report D, Volume 2): (a) significant adverse effects on human health are not anticipated as discussed above in row 60; (b) the discharge of contaminants from combustion (which can be noxious or dangerous in high concentrations over an extended period) will be controlled; (c) the wide buffer provided on the site will avoid potential reverse sensitivity effects; (d) sensitive activities such as residential use will be protected mainly due to the width of the buffer (the nearest residential dwelling is 500m away from the bin exchange area and over 1000m away from the landfill footprint); (e) the effects of dust on flora, and concludes that any effects on vegetation of dust emissions will be temporary and of a short duration;

	Reference	RPS Objective/Policy	Commentary
		into air, by providing for low air quality amenity in appropriate locations;	(f) enabling the operation of the Auckland Regional Landfill will not result in low quality amenity for any surrounding land. The project gives effect to this policy.
	B9. Toitū te tuawhenua- Rural environment **B9.2. Rural activities**		
62.	B9.2.1 Objective (4)	Auckland's rural areas outside the Rural Urban Boundary and rural and coastal towns and villages are protected from inappropriate subdivision, urban use and development.	Given the functional and locational constraints of a large municipal landfill (see row 10 above), the rural area is an appropriate location for the proposed Auckland Regional Landfill. The landfill has been designed and will be constructed and managed, in such a way that, together with the extensive offset and mitigation package, the landfill will not represent inappropriate development in this location.
63.	B9.2.2 Policy (1)	Enable a diverse range of activities while avoiding significant adverse effects on and urbanisation of rural areas, including within the coastal environment, and avoiding, remedying, or mitigating other adverse effects on rural character, amenity, landscape and biodiversity values.	The landfill is an appropriate activity for this location (see row 62 above). Significant adverse effects on rural character, amenity and landscape are avoided and other effects on these values are remedied or mitigated as set out in Section 9 of the AEE. Effects on biodiversity values will be avoided or mitigated, with residual effects being the subject to an extensive offset programme (refer Technical Report G, Volume 2). The project gives effect to this policy.

	Reference	RPS Objective/Policy	Commentary
	B9. Toitū te tuawhenua- Rural environment **B9.3. Land with high productive potential**		
64.	B9.3.1 Objective (2)	Land containing prime soil is managed to enable its capability, flexibility and accessibility for primary production.	The location of the Auckland Regional Landfill entirely avoids areas of prime soils. The project is consistent with this objective.
65.	B9.3.1 Objective (3) B9.3.2 Policy (3)	The productive potential of land that does not contain elite or prime soil is recognised. Recognise the productive potential of land that does not contain elite or prime soil and encourage the continued use of this land for rural production.	The landfill facility is largely located on non-arable (Class 6 soils). This land is suitable for grazed pasture, tree crops and/or forestry and in some case vineyards. In this case, the land is currently forested. While the productive potential of this soil is recognised, the functional and locational constraints of landfills mean that it is unavoidable that some areas of non-elite or prime soils will be affected. The project is not contrary to this objective or policy.
66.	B9.3.2 Policy (2)	Encourage activities that do not depend on using land containing elite and prime soil to locate outside these areas.	The proposed landfill does not depend on land containing elite and prime soil, and therefore the footprint is located outside of these areas. The project is consistent with this policy.
	B10. Ngā tūpono ki te taiao - Environmental risk **B10.2. Natural hazards and climate change**		
67.	**B10.2.1 Objective (3)**	New subdivision, use and development avoid the creation of new risks to people, property and infrastructure.	In order to avoid the creation of new risks as part of the development of the landfill facility, the following has been undertaken: • The Seismic Hazard Assessment (Technical Report C, Volume 2) identifies that the project site is located in a region that is subject to relatively low seismic hazard in New Zealand Terms. In order to further minimise seismic risk, analysis on the soil class for the site has

	Reference	RPS Objective/Policy	Commentary
			been undertaken and this informed the design of the landfill. • Stormwater requirements have been calculated in accordance with GD01, which requires that for larger devices (such as ponds and wetlands), climate change factors should be incorporated into the sizing. • Flooding has been assessed as part of Technical Report P, Volume 2. This report concludes that the risk based approach has identified that the potential risk of flooding effects associated with the proposal are low. • A flood plain is identified in the bin exchange area however, all activities proposed are also located above the identified flood plain level, and therefore no additional risk will be created. The project will not create new risks to people, property or infrastructure, and the project is consistent with this objective.
68.	B10.2.1 Objective (4)	The effects of climate change on natural hazards, including effects on sea level rise and on the frequency and severity of storm events, is recognised and provided for.	As set out above in row 67, the effects of climate change have been considered particularly in relation to stormwater management and the avoidance of flood risks, on the site. The project is consistent with this objective.
69.	B10.2.1 Objective (5)	The functions of natural systems, including floodplains, are protected from inappropriate subdivision, use and development.	The bin exchange area is located within a flood plain. This has been acknowledged and incorporated into the design and layout of this part of the facility, as set out in Section 6.3.1 of the AEE. The area has been designed to be elevated above the flood plain.

	Reference	RPS Objective/Policy	Commentary
			The effect of raising this ground in the area of the bin exchange area has been assessed to only increase any future flood level by 1mm, and is accordingly a negligible effect. Wetlands on the site are to be maintained and enhanced. The project is consistent with these objectives.
70.	B10.2.1 Objective (6)	The conveyance function of overland flow paths is maintained.	
71.	B10.2.2 Policy (4)	*Identification and risk assessment* Assess natural hazard risks: (a) using the best available and up-to-date hazard information; and (b) across a range of probabilities of occurrence appropriate to the hazard, including, at least, a 100-year timeframe for evaluating flooding and coastal hazards.	Natural hazard risks have been assessed using the best available and up-to-date hazard information, particularly as set out in Technical Report C, Volume 2 and Technical Report P, Volume 2. There is are no potential coastal hazards affecting the site, and the potential flooding impacts have been assessed after making an allowance for climate change and using a 1 in 100 ARI (Technical Report P, Volume 2). The project gives effect to this policy.
72.	B10.2.2 Policy (5)	*Identification and risk assessment* Manage subdivision, use and development of land subject to natural hazards based on all of the following: (a) the type and severity of potential events, including the occurrence natural hazard events in combination; (b) the vulnerability of the activity to adverse effects, including the health and safety of people and communities, the	A risk based approach has been taken to development of this site for seismic and flooding hazards (refer rows 83 to 85 above). In particular: (a) the type and severity of potential natural hazards have been assessed; (b) the project has been designed to minimise potential impacts of natural hazards, including the development of contingency plans to respond to natural hazards;

	Reference	RPS Objective/Policy	Commentary
		resilience of property to damage and the effects on the environment; and the cumulative effects of locating activities on land subject to natural hazards and the effects on other activities and resources.	(c) the cumulative (downstream) impact of locating the bin exchange area within a known flood plain have been assessed and determined to be negligible (see row 83-84 above). The project gives effect to this policy.
73.	B10.2.2 Policy (7)	*Management approaches* Avoid or mitigate the effects of activities in areas subject to natural hazards, such as earthworks, changes to natural and built drainage systems, vegetation clearance and new or modified structures, so that the risks of natural hazards are not increased.	The project will not increase the potential effects of natural hazards (flooding) by any more than a negligible extent. The project involves stabilisation of areas immediately following the forestry clearance, and in the longer term the permanent revegetation of large areas of the site with indigenous vegetation. The use of rain gardens and filter strips, together with the ability to detain and treat stormwater from near the landfill activities, prior to discharging the stormwater into the same catchment, will ensure that the risks of flooding on downstream properties is not increased. The project is consistent with these policies.
74.	B10.2.2 Policy (9)	*Management approaches* Encourage activities that reduce, or do not increase, the risks posed by natural hazards, including any of the following: (a) protecting and restoring natural landforms and vegetation; (b) managing retreat by relocation, removal or abandonment of structures; (c) replacing or modifying existing development to reduce risk without using hard protection structures;	

	Reference	RPS Objective/Policy	Commentary
		(d) designing for relocatable or recoverable structures; or (e) providing for low-intensity activities that are less vulnerable to the effects of relevant hazards, including modifying their design and management.	
75.	B10.2.2 Policy (10)	*Management approaches* Encourage redevelopment on land subject to natural hazards to reduce existing risks and ensure no new risks are created by using a range of measures such as any of the following: (a) the design and placement of buildings and structures; (b) managing activities to increase their resilience to hazard events; or (c) change of use to a less vulnerable activity.	As set out above in rows 67 and 69, no new risks will be created through the development and management of this site. Particular consideration has been given to: (a) the design and placement of buildings such as the administrative hub, which is more sensitive to flooding than other uses on the site and has therefore been located outside of the identified floodplain. (b) site management, particularly ensuring that the stormwater ponds retain sufficient capacity to detain high rainfall events; (c) the landfill is already considered to be comparable to a less vulnerable activity (the AUP defines waste management facilities as a less vulnerable activity). The project is consistent with this policy.
76.	B10.2.2 Policy (11)	*Role of natural systems* Strengthen natural systems such as flood plains, vegetation and riparian margins, beaches and sand dunes in preference to using hard protection structures.	As set out in the Technical Report P Volume 2, natural systems such as wetlands and raingardens will be utilised to mitigate potential sedimentation effects. The proposal also involves the revegetation of extensive areas of riparian margins, which will result in a number of positive effects as well as reducing adverse effects on these areas in times of high flood flows.

	Reference	RPS Objective/Policy	Commentary
			The project is consistent with this policy.
	B10. Ngā tūpono ki te taiao - Environmental risk **B10.3. Land – hazardous substances**		
77.	B10.3.1 Objective (1)	The environment is protected from adverse effects associated with the storage, use, disposal and transport of hazardous substances.	Hazardous substances, including diesel and oils and greases, are essential to the site's operations. These will be managed as set out in the Technical Report P, Volume 2, in order to protect the environment from adverse effects associated with their storage, use, and transport. To the extent that any hazardous substances are disposed of in the landfill, this will only occur if they comply with the waste acceptance criteria, and the environment will be protected from the adverse effects of these substances through the multiple-barrier liner system and the range of operational and monitoring controls described in Technical Report N, Volume 2. The proposal is consistent with these objectives and policy.
78.	B10.3.1 Objective (2)	The storage, use, disposal and transport of hazardous substances are provided for and the social and economic benefits of these activities are recognised.	
79.	B10.3.2 Policy (1)	Manage the use and development of land for hazardous facilities and industrial or trade activities to avoid adverse effects on human health and the environment and remedy or mitigate these effects where they cannot be avoided.	Landfills are an industrial or trade activity (but are excluded from the AUP definition of a hazardous facility). Inappropriate management practices from Industrial or Trade Activities can result in discharges of environmentally hazardous substances associated with the activity onto or

	Reference	RPS Objective/Policy	Commentary
			into land or water. As set out in Technical Report P, Volume 2, the key method for addressing this issue is the preparation and implementation of site specific environmental management plans, which identify the environmentally hazardous substances associated with a particular Industrial or Trade Activity, and set out methods to avoid, remedy or mitigate discharges. The ITA Management Plan (contained in Technical Report P, Volume 2) identifies the activities with the potential to generate contaminants and outlines methods to avoid or minimise potential effects. The project gives effect to this policy.

Table 1: AUP Chapter D Overlays: objectives and policies assessment

	Reference	Chapter D Objective/Policy	Commentary
	D4. Natural Stream Management Areas Overlay [rp]		
80.	D4.2 Objective (1)	Rivers and streams identified as natural stream management areas with high natural character and high ecological values are protected.	There are four NSMA overlays on or near the site that have particular significance. The overlays cover the Hōteo River, the Waiteraire Stream, the Waiwhiu Stream and a tributary of the Waiteraire Stream. In order to protect the various NSMA overlays identified on site the design and layout of the landfill avoids the overlays with the exception of a small culvert associated with the landfill access road. This comprises only 80m^2 of NSMA. The project is consistent with this objective and policy.
81.	D4.2 Policy (1)	Protect the in-stream values and riparian margins of natural stream management areas.	
82.	D4.2 Policy (2)	Allow water takes and contaminant discharges only where they are of a scale and type that protects the in-stream values of these rivers and streams.	No surface water takes or contaminant discharges to the Hōteo River are proposed. As discussed in Section 5 of the AEE, the Auckland Regional Landfill will be a modern landfill, including a protective liner to capture leachate and prevent it from entering waterways including the NSMA. The project is consistent with this policy.
83.	D4.2 Policy (3)	Maintain and where possible enhance fish passage between the coastal marine area and the upstream extent of natural stream management areas.	Fish passage will be precluded through those permanent and intermittent streams in the landfill footprint that are being reclaimed, however a perched culvert will be reconstructed so as to open up fish passage to a large extent of tributaries. New culverts will be designed so as to allow fish passage where that is considered appropriate. The project is therefore consistent with this policy.
84.	D4.2 Policy (4)	Avoid structures and activities in natural stream management areas that disturb, damage, remove or replace the natural bed	Policy 4 and 5 need to be read together. A culvert is proposed within the NSMA overlay, related to the construction of the

	Reference	Chapter D Objective/Policy	Commentary
		and course of the river or stream and its associated indigenous riparian vegetation.	access road. The extent of these works have been minimised to the greatest extent practicable. Refer to section 10 of AEE for a discussion on the development of the access road design. The project is not contrary to these policies.
85.	D4.2 Policy (5)	Provide for infrastructure in natural stream management areas where there is a functional or operational need to be in that location or traverse the area and there is no practicable alternative.	
	D8. Wetland Management Areas Overlay [rp]		
86.	D8.2 Objective (1)	High natural character and ecological values of wetland management areas are maintained or enhanced.	Works within WMAs are avoided as a result of the design and layout of the Auckland Regional Landfill. The natural character and ecological values of the wetlands are proposed to be enhanced in association with the proposal, as described in Section 9 of the AEE. The project is consistent with this objective.
87.	D8.2 Objective (2) D8.2 Objective (3)	The reduction in the spatial extent of wetlands is avoided as far as is practicable. Cultural, recreational and amenity values of wetland management areas are maintained or enhanced.	No reduction in the spatial extent of the wetlands within WMAs found on the site is proposed, as the landfill design avoids encroaching on these including through the design of the road which is located at the head of the main wetland. Some reclamation of wetlands not subject to WMAs is proposed in relation to the stockpile one area. Enhancement of wetlands is proposed as described in Technical Report G, Volume 2. Currently, the wetland areas have no recreational or amenity values as they are not publicly accessible. This will not change as part of the proposal. To the extent that the wetlands are enhanced and protected, then the cultural values of those wetlands are expected to be equally maintained or enhanced. The project is consistent with these objectives.
88.	D8.2 Policy (1)	Maintain or enhance wetland management areas by:	The two WMAs within the site area will be maintained and enhanced by avoiding works directly within these WMAs, and as

	Reference	Chapter D Objective/Policy	Commentary
		(a) maintaining water quality where it is excellent or good and progressively improve where it is degraded; (b) maintaining water levels to ensure ecosystem functionality and significant variations in water levels occur only through natural fluctuations; (c) avoiding the removal or degradation of wetland vegetation in, on, or adjacent to wetlands; (d) avoiding adverse effects of any activity on ecological values; (e) maintaining the size and spatial extent of the wetland area by avoiding progressive loss of wetland areas; and (f) providing for wetland enhancement activities, including riparian planting and the removal of invasive pests.	otherwise described in Technical Report G, Volume 2. Works will in proximity to WMAs, as described in row 89 below. The project is consistent with this policy.
89.	D8.2 Policy (2)	Recognise and provide for ecosystem functions of wetlands in wetland management areas, including the attenuation of flooding and treatment of discharges, where these functions will not result in significant adverse effects on the ecological or cultural values of the wetland.	The natural WMAs located on the site are not proposed to be functionally used by the Auckland Regional Landfill facility, including as attenuation of flooding or treatment of discharges. Instead, all surface water from the landfill catchment will be directed to the bottom of the catchment where it will pass through a sequence of ponds and an artificial wetland. The project is therefore consistent with this policy.
90.	D8.2 Policy (3)	Avoid activities in, on or adjacent to wetland management areas except where the activity: (a) is for wetland conservation purposes, including pest removal; (b) is for public access and interpretative activities relating to high natural character and ecological values; or (c) is for operation, maintenance, upgrading or replacement of existing or new infrastructure; provided significant adverse effects on the high natural character and ecological values of the wetland are avoided, and other adverse effects are avoided, remedied, mitigated or offset.	Works located adjacent to the WMAs are associated with the proposed Auckland Regional Landfill, which is new infrastructure (see D8.2 Policy (3)(c)). It is considered that significant adverse effects on the high natural character and ecological values of the wetland are avoided, and other adverse effects are avoided, remedied, mitigated or offset as set out in Section 9 and Technical Report G, Volume 2. The project is consistent with this policy.

	Reference	Chapter D Objective/Policy	Commentary
91.	D8.2 Policy (4)	Provide for infrastructure in, on, under or over the wetland management areas only where there is a functional or operational need to be in that location or traverse the area where there is no practicable alternative.	The landfill infrastructure avoids the WMA overlays located within the broader site area. The project is consistent with this policy.
	D9. Significant Ecological Areas Overlay [rcp/rp/dp]		
92.	D9.2 Objective (1)	Areas of significant indigenous biodiversity value in terrestrial, freshwater, and coastal marine areas are protected from the adverse effects of subdivision, use and development.	These areas will be avoided. See row 35 above. The project is therefore consistent with this objective.
93.	D9.2 Objective (2)	Indigenous biodiversity values of significant ecological areas are enhanced.	Proposed riparian planting adjoining the wetland SEAs on the site will help to enhance the values, while pest/predator and weed control will enhance the values of SEAs on and adjacent to the site. Refer Technical Report G, Volume 2 for details of these measures. The project is consistent with this objective and policy.
94.	D9.3 Policy (3)	*Managing effects on significant ecological areas – terrestrial and marine* Enhance indigenous biodiversity values in significant ecological areas through any of the following: (a) restoration, protection and enhancement of threatened ecosystems and habitats for rare or threatened indigenous species; (b) control, and where possible, eradication of plant and animal pests; (c) fencing of significant ecological areas to protect them from stock impacts; (d) legal protection of significant ecological areas through covenants or similar mechanisms; (e) development and implementation of management plans to address adverse effects; (f) re-vegetating areas using, where possible, indigenous species sourced from naturally growing plants in the vicinity with the same climactic and environmental conditions; or (g) providing for the role of Mana Whenua as kaitiaki and for the practical exercise of kaitiakitanga in restoring, protecting and enhancing areas.	

	Reference	Chapter D Objective/Policy	Commentary
95.	D9.2 Objective (3	The relationship of Mana Whenua and their customs and traditions with indigenous vegetation and fauna is recognised and provided for	As discussed in the CVA and summarised in section 9 of the AEE, the project seeks to address issues of significance to Mana Whenua including by involvement with mana whenua in choice of plants, sourcing of plants and relocation of fauna.

Table 2: AUP Chapter E Auckland-wide: objectives and policies assessment

	Reference	Chapter E Objective/Policy	Commentary
	E1. Water quality and integrated management [rp/rcp/dp]		
96.	E1.2 Objective (1)	Freshwater and sediment quality is maintained where it is excellent or good and progressively improved over time in degraded areas.	Discharges from the site may affect freshwater quality through increasing levels of sedimentation. The minimisation of sediment generating activities is a key component of the project, with potential effects from sediment also being mitigated through the implementation of erosion and sediment control measures. Monitoring of water quality will provide for an adaptive approach to managing sediment quantity and maintaining freshwater quality. Freshwater quality should be maintained as a result of proposed treatment devices, however, although all appropriate erosion and sediment control measures will be put in place, there may be some short degradation of water quality during the initial site establishment works. Overall, the project is not contrary to this objective.
97.	E1.2 Objective (2)	The mauri of freshwater is maintained or progressively improved over time to enable traditional and cultural use of this resource by Mana Whenua.	Intention is to maintain mauri by preventing contamination by leachate or sediment. Outside of the project footprint intention is to improve with planting of riparian margins and stock exclusion.
98.	E1.3 Policy (1)	*Freshwater quality and ecosystem health interim guidelines* Manage discharges, until such time as objectives and limits are established in accordance with Policy E1.3(7), having regard to: (a) the National Policy Statement for Freshwater Management National Bottom Lines;	Discharges which may affect freshwater quality and ecosystem health include erosion and sediment discharges associated with construction of the landfill facility. Freshwater values and the associated assessment of effects (see Technical Report G, Volume 2) have been assessed using the Macroinvertebrate Community Index (MCI), an index for assessing the quality class of a stream using

	Reference	Chapter E Objective/Policy	Commentary
		(b) the Macroinvertebrate Community Index as a guideline for freshwater ecosystem health associated with different land uses within catchments in accordance with Policy E1.3(2); or (c) other indicators of water quality and ecosystem health.	presence or absence of macroinvertebrates. This index tool has been used alongside: • an assessment of taxonomic richness (a reflection on the diversity of the sample), • Ephemeroptera, Plecoptera and Trichoptera (EPT) richness (measuring the number of pollution-sensitive macroinvertebrates), and • Quantitative Macroinvertebrate Community Index (QMCI), based on the relative abundance of taxa within a community (rather than just presence or absence). The project is consistent with and gives effect to this policy.
99.	E1.3 Policy (2)	*Freshwater quality and ecosystem health interim guidelines* Manage discharges, subdivision, use, and development that affect freshwater systems to: (a) maintain or enhance water quality, flows, stream channels and their margins and other freshwater values, where the current condition is above National Policy Statement for Freshwater Management National Bottom Lines and the relevant Macroinvertebrate Community Index guideline in Table E1.3.1 below; or (b) enhance water quality, flows, stream channels and their margins and other freshwater values where the current condition is below national bottom lines or the relevant Macroinvertebrate Community Index guideline in Table E1.3.1 below.	This policy applies to stream channels that will remain at the completion of the project construction and requires either maintenance or enhancement of these channels according to their MCI rating. The freshwater systems will be managed in accordance with (a) or (b), as described in Technical Report G, Volume 2. In relation to the remaining streams on site post construction, the project will be consistent with this policy.

<table>
<tr><th></th><th>Reference</th><th>Chapter E Objective/Policy</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>Table E1.3.1 Macroinvertebrate Community Index guideline for Auckland rivers and streams
<table>
<tr><th>Land use</th><th>Macroinvertebrate Community Index guideline</th></tr>
<tr><td>Native forest</td><td>123</td></tr>
<tr><td>Exotic forest</td><td>111</td></tr>
<tr><td>Rural areas</td><td>94</td></tr>
<tr><td>Urban areas</td><td>68</td></tr>
</table></td><td></td></tr>
<tr><td>100.</td><td>E1.3 Policy (3)</td><td>Freshwater quality and ecosystem health interim guidelines
Require freshwater systems to be enhanced unless existing intensive land use and development has irreversibly modified them such that it practicably precludes enhancement.</td><td>Some degraded freshwater systems on site will be enhanced, as described in Technical Report G, Volume 2.

The project is consistent with this policy.</td></tr>
<tr><td>101.</td><td>E1.3 Policy (4)</td><td>National Policy Statement on Freshwater Management
When considering any application for a discharge, the Council must have regard to the following matters:
(a) the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of freshwater including on any ecosystem associated with freshwater; and
(b) the extent to which it is feasible and dependable that any more than a minor adverse effect on freshwater, and on any ecosystem associated with freshwater, resulting from the discharge would be avoided.</td><td>In relation to the discharges from the proposed Auckland Regional Landfill and (a), the AEE and Technical Report P and E have described how discharges from the site will avoid contamination that will have an adverse effect on the life supporting capacity of freshwater. The primary source of risk of contamination would be contamination from leachate, and the assessments undertaken have demonstrated that even if leachate were to be discharged through the multiple barrier lining system, the levels of contaminants would be orders of magnitude below those likely to cause an effect on ecosystem health.

The AEE and Technical Report P and E have described that there will be a no more than minor effect on freshwater, and accordingly (b) does not apply.</td></tr>
</table>

	Reference	Chapter E Objective/Policy	Commentary
			The project therefore satisfies the requirements of this policy.
102.	E1.3 Policy (5)	*National Policy Statement on Freshwater Management* When considering any application for a discharge the Council must have regard to the following matters: (a) the extent to which the discharge would avoid contamination that will have an adverse effect on the health of people and communities as affected by their secondary contact with fresh water; and (b) the extent to which it is feasible and dependable that any more than minor adverse effect on the health of people and communities as affected by their secondary contact with fresh water resulting from the discharge would be avoided.	As described in row 101 above, the only discharge with the potential to cause an effect on the health of people and communities is leachate. The effects of this, were leachate to be discharged through the lining system and into the groundwater and surface water, have been described in Technical Report E. The potential contamination will be avoided through the measures proposed to contain and safely dispose of leachate, however even if there were a discharge of leachate it will not have an adverse effect on health of people and communities.
103.	E1.3 Policy (8)	*Stormwater management* Avoid as far as practicable, or otherwise minimise or mitigate, adverse effects of stormwater runoff from greenfield development on freshwater systems, freshwater and coastal water by: (a) taking an integrated stormwater management approach (refer to Policy E1.3.10); (b minimising the generation and discharge of contaminants, particularly from high contaminant generating car parks and high use roads and into sensitive receiving environments; (c) minimising or mitigating changes in hydrology, including loss of infiltration, to: (i) minimise erosion and associated effects on stream health and values; (ii) maintain stream baseflows; and (iii) support groundwater recharge; (d) where practicable, minimising or mitigating the effects on freshwater systems arising from changes in water temperature caused by stormwater discharges; and	Adverse effects of stormwater runoff will be avoided as far as practicable, and otherwise minimised or mitigated, by: (a) Developing an overall surface water strategy based on the specific requirements for each area within the site (see Technical Report P, Volume 2). (b) the discharge of contaminants into sensitive receiving environments will be minimised, particularly via the erosion and sediment measures set out in the Technical Report R, Volume 2, the stormwater management measures set out in Technical Report P, Volume 2, and the design of the landfill which captures all leachate to prevent this discharging into the environment. (c) refer to Technical Report G and P, Volume 2. (d) the facility will be serviced by two stormwater ponds and a wetland, which will minimise changes of water temperature affecting the receiving environment. (e) In relation to the landfill itself, litter is actively managed as set out in Section 9 of the AEE, including through daily compaction and cover.

	Reference	Chapter E Objective/Policy	Commentary
		(e) providing for the management of gross stormwater pollutants, such as litter, in areas where the generation of these may be an issue.	The project is consistent with this policy.
104.	E1.3 Policy (10)	In taking an integrated stormwater management approach have regard to all of the following: (a) the nature and scale of the development and practical and cost considerations, recognising: (i) greenfield and comprehensive brownfield development generally offer greater opportunity than intensification and small-scale redevelopment of existing areas; (ii) intensive land uses such as high-intensity residential, business, industrial and roads generally have greater constraints; and (iii) site operational and use requirements may preclude the use of an integrated stormwater management approach. (b) the location, design, capacity, intensity and integration of sites/development and infrastructure, including roads and reserves, to protect significant site features and hydrology and minimise adverse effects on receiving environments; (c) the nature and sensitivity of receiving environments to the adverse effects of development, including fragmentation and loss of connectivity of rivers and streams, hydrological effects and contaminant discharges and how these can be minimised and mitigated, including opportunities to enhance degraded environments; (d) reducing stormwater flows and contaminants at source prior to the consideration of mitigation measures and the optimisation of on-site and larger communal devices where these are required; and (e) the use and enhancement of natural hydrological features and green infrastructure for stormwater management where practicable.	An integrated approach has been taken on site, having regard to: (a) the significant nature and size of this development means that a holistic approach to stormwater management is integral to the overall success of the development. (b) refer to Technical Report P, Volume 2(c) refer to Technical Report P, Volume 2 (d) refer to Technical Report P, Volume 2 (e) two stormwater ponds and a wetland are proposed as the overall endpoint for stormwater discharges generated on the main site, with rain gardens proposed at the bin exchange area. The project is consistent with these policies.

	Reference	Chapter E Objective/Policy	Commentary
105.	E1.3 Policy (11)	Avoid as far as practicable, or otherwise minimise or mitigate adverse effects of stormwater diversions and discharges, having particular regard to: (a) the nature, quality, volume and peak flow of the stormwater runoff; (b) the sensitivity of freshwater systems and coastal waters, including the Hauraki Gulf Marine Park; (c) the potential for the diversion and discharge to create or exacerbate flood risks; (d) options to manage stormwater on-site or the use of communal stormwater management measures; (e) practical limitations in respect of the measures that can be applied; and (f) the current state of receiving environments.	
106.	E1.3 Policy (13)	Require stormwater quality or flow management to be achieved on-site unless there is a downstream communal device or facility designed to cater for the site's stormwater runoff.	As discussed in Technical Report P, Volume 2, all stormwater is to be collected and treated within the site prior to being discharged into the environment. The project is consistent with this policy.
107.	E1.3 Policy (23)	*On-site and small scale wastewater treatment and disposal* Enable on-site domestic-type wastewater treatment and disposal where: (a) there is no wastewater network available, or it is not practicable to connect into one of the network, or any existing network does not have capacity and it is not practicable to upgrade it; and (b) the on-site wastewater treatment results in a discharge that is of a quality and volume that avoids significant adverse effects on groundwater, surface and coastal water quality, public health and amenity.	In this case, there is no wastewater network available and therefore on-site wastewater treatment and disposal is required to manage domestic-type wastewater associated with the administration block. The discharge will be treated using a standard system, to be installed and operated in accordance with the manufacturer's instructions. The discharge will comply with the permitted activity standards in the AUP, and it will constructed operated and maintained in accordance with those standards and with the manufacturer's instructions, and accordingly would be consistent with these policies.
108.	E1.3 Policy (24)	*On-site and small scale wastewater treatment and disposal*	

	Reference	Chapter E Objective/Policy	Commentary
		Require proposals for on-site wastewater treatment and disposal to land or water to demonstrate all of the following: (a) there is no practicable alternative land based disposal option; (b) significant adverse effects on public and environmental health, water quality and amenity values are avoided and other adverse effects are remedied or mitigated; (c) an assessment of the site conditions has been undertaken and the proposed system and its design are appropriate for these conditions; (d) the design of the on-site wastewater system and the proposed volume of discharge will minimise the level of contaminants to the greatest extent practicable; (e) that adverse effects on Mana Whenua values will be avoided; and (f) that operations, management and response procedures are in place to ensure the on-going performance of the system and where systems service more than one site, responsibilities for these functions are clearly identified.	
109.	E1.3 Policy (26)	*Other discharges* Prevent or minimise the adverse effects from construction, maintenance, investigation and other activities on the quality of freshwater and coastal water by: (a) adopting best management practices and establishing minimum standards for the discharges; or (b) where Policy E1.3(26)(a) is not practicable, have regard to the following: (i) the nature, volume and concentration of the contaminants in the discharge; (ii) the sensitivity of the receiving environment to the contaminants in the discharge; (iii) other practicable options for the discharge, including reuse or discharge to the trade sewer; and	The effects of other discharges on freshwater will be managed through site operational procedures (to be described in the LMP), including bunding, contingency measures associated with any spills, and a regime of maintenance and inspection of stormwater treatment devices. The project is consistent with this policy.

	Reference	Chapter E Objective/Policy	Commentary
		(iv) practicable measures to reduce contaminant concentrations prior to discharge or otherwise mitigate adverse effects.	
	E2. Water quantity, allocation and use		
110.	E2.2 Objective (1)	Water in surface rivers and groundwater aquifers is available for use provided the natural values of water are maintained and established limits are not exceeded.	A small groundwater take is proposed in order to supply potable water to the administration block. A hydrogeological assessment has been undertaken and concluded that the WMNZ landholdings are not located within a high use or vulnerable aquifer as defined by Auckland Council's Groundwater Management Areas. A search of the Auckland Council database also indicates that there are no consented groundwater abstraction points within 1km of the landfill footprint area. The effects of this take will be minor or less than minor. The project is consistent with these objectives.
111.	E2.2 Objective (2)	Water resources are managed within limits to meet current and future water needs for social, cultural and economic purposes.	
112.	E2.2 Objective (3)	Freshwater resources available for use are managed and allocated in order of priority to provide for domestic and municipal water supplies, animals, and economic development.	
113.	E2.2 Objective (4)	Water resources are managed to maximise the efficient allocation and efficient use of available water.	
114.	E2.2 Objective (5)	Mana Whenua values including the mauri of water, are acknowledged in the allocation and use of water.	Values and areas of concern identified in the CVA have been discussed within section 9 of the AEE.
115.	E2.3 Policy (1)	*Priority of water use* Manage the allocation of fresh water within the guidelines provided by Appendix 2 River and stream minimum flow and availability and Appendix 3 Aquifer water availabilities and levels and give priority to making freshwater available for the following uses (in descending order of priority): (a) existing and reasonably foreseeable domestic and municipal water supply and animal drinking water requirements; (b) existing lawfully established water users; (c) uses of water for which alternative water sources are unavailable or unsuitable; and (d) all other uses.	Refer row 111 above. The use of groundwater for potable water for workers on site is an appropriate and efficient use. The proposed take is consistent with this policy.

	Reference	Chapter E Objective/Policy	Commentary
116.	E2.3 Policy (2)	*Priority of water use* Ensure allocations support the outcomes sought by relevant objectives and policies in B7.3 Freshwater systems.	The proposal is consistent with the provisions in E2.3 Policy (2), as set out in relation to the RPS provisions (see rows 36-42 above). The project is therefore consistent with this policy.
117.	E2.3 Policy (4)	*Efficient allocation and use* Promote the efficient allocation and use of freshwater and geothermal water by: (a) requiring the amount of water taken and used to be reasonable and justifiable with regard to the intended use, and where appropriate: (i) municipal water supplies are supported by a water management plan; (ii) industrial and irrigation supplies implement best practice, in respect of the efficient use of water for that particular activity or industry; or (iii) all takes (other than municipal water supplies from a dam) are limited to a maximum annual allocation based on estimated water requirements; (b) requiring consideration of water conservation and thermal efficiency methods; (c) facilitating the transfer of surface water take permits, provided the transfer is within the same surface water catchment and does not result in site-specific adverse effects; (d) encouraging the shared use and management of water through water user groups or other arrangements where it results in an increased efficiency in the use and allocation of water; and (e) providing for storage and harvesting of fresh water.	In response to E2.3 Policy (4), the amount to be taken is reasonable and justifiable and will have minor or less than minor effects on the aquifer's resource. Where possible stormwater will be re-used on site for dust suppression and other non-potable uses. The proposed use of the water is consistent with this policy.
118.	E2.3 Policy (5)	*Water allocation and availability guidelines*	The proposed take will have a minor or less than minor effect on the aquifer resources.

	Reference	Chapter E Objective/Policy	Commentary
		Manage the taking and use of surface water from rivers, streams and springs and taking and use of groundwater from aquifers to meet all of the following except where water allocation exceeds or is close to exceeding the guidelines (refer to Policy E2.3(11)): (a) the minimum flow and availability guidelines in Table 1 River and stream minimum flow and availability in Appendix 2 River and stream minimum flow and availability are not exceeded; and (b) the aquifer availability and groundwater levels in Table 1 Aquifer water availabilities and Table 2 Interim aquifer groundwater levels in Appendix 3 Aquifer water availabilities and levels are not exceeded.	
119.	E2.3 Policy (7)	Require all proposals to take and use groundwater from any aquifer to demonstrate that: (a) the taking is within the water availabilities and levels for the aquifer in Table 1 Aquifer water availabilities and Table 2 Interim aquifer groundwater levels in Appendix 3 Aquifer water availabilities and levels, except in accordance with Policy E2.3(11), and meeting all of the following: (i) recharge to other aquifers is maintained; and (ii) aquifer consolidation and surface subsidence is avoided. (b) the taking will avoid, remedy or mitigate adverse effects on surface water flows, including the following: (i) base flow of rivers, streams and springs; and (ii) any river or stream flow requirements and in particular the minimum stream flow and availability in Appendix 2 River and stream minimum flow and availability. (c) the taking will avoid, remedy or mitigate adverse effects on terrestrial and freshwater ecosystem habitat; (d) the taking will not cause saltwater intrusion or any other contamination;	In response to E2.3 Policy (7): (a) the proposed take is within water availabilities and levels, and will maintain recharge to other aquifers and avoids aquifer consolidation and surface subsidence. (b) the take will avoid adverse effects on surface water flows as set out in Section 9 of the AEE. (c) the take will avoid adverse effects on terrestrial and freshwater ecosystem habitat as set out in Section 9 of the AEE. (d) no saltwater intrusion is anticipated due to the very minor nature of the take proposed and distance between the bore and the coast. (e) no interference effects on any existing bores are anticipated. (f) not applicable. (g) the bore is capable of extracting 50 m^3 per day, which is sufficient for the estimated water requirements. (h) the proposed take will not result in ground settlement. The take and use is consistent with this policy.

	Reference	Chapter E Objective/Policy	Commentary
		(e) the taking will not cause adverse interference effects on neighbouring bores to the extent their owners are prevented from exercising their lawfully established water takes; (f) Policy E2.3(7)(e) above will not apply in the following circumstances: (i) where it is practicably possible to locate the pump intake at a greater depth within the affected bore; or (ii) where it can be demonstrated that the affected bore accesses, or could access, groundwater at a deeper level within the same aquifer, if drilled or cased to a greater depth. (g) the proposed bore is capable of extracting the quantity of groundwater applied for; and (h) the proposal avoids, remedies or mitigates any ground settlement that may cause distress, including reducing the ability of an existing building or structure to meet the relevant requirements of the Building Act 2004 or the New Zealand Building Code, to any existing: (i) buildings; (ii) structures; or (iii) services including roads, pavements, power, gas, electricity, water and wastewater networks and fibre-optic cables.	
120.	E2.3 Policy (8)	Consider mitigation options, where there are significant adverse effects on the matters identified in policies E2.3(6) and (7) above, including any of the following: (a) consideration of alternative locations, rates and timing of takes for both surface water and groundwater; (b) use of alternative water supplies; (c) use of water conservation methods when water shortage conditions apply;	There are no significant adverse effects identified in relation to the proposal to take and use groundwater for potable water use, as identified in policies E2.3(6) and (7).

	Reference	Chapter E Objective/Policy	Commentary
		(d) provision for fish passage in rivers and streams; (e) wetland creation or enhancement of existing wetlands; (f) riparian planting; or (g) consideration of alternative designs for groundwater dewatering proposals.	
121.	E2.3 Policy (13)	*National Policy Statement for Freshwater Management 2014* When considering any application the Council must have regard to the following matters: (a) the extent to which the change would adversely affect safeguarding the life supporting capacity of fresh water and of any associated ecosystem; and (b) the extent to which it is feasible and dependable that any adverse effect on the life-supporting capacity of freshwater and of any associated ecosystem resulting from the change would be avoided.	The proposed take and use will not cause any effects on the life supporting capacity of freshwater. The project is consistent with this policy.
122.	E2.3 Policy (18)	*Damming of surface water* Encourage the off-stream damming of water in preference to the damming of rivers or streams.	Online and offline dams are proposed – as discussed in the alternatives assessment (Section 10 of the AEE), wherever possible, dams have been located 'offline', however, due to terrain in some areas of the site, dams need to be located online in order to ensure sufficient treatment of water quality prior to discharge. The project is not contrary to this policy.
123.	E2.3 Policy (19)	Avoid damming water in the Natural Lake Management Areas Overlay, Wetland Management Areas Overlay and Natural Stream Management Areas Overlay other than where: (a) these areas are in a Water Supply Management Areas Overlay and the damming is necessary for municipal water supply; (b) the damming is necessary for the protection or maintenance of the natural values of the management area and	No damming of water is proposed within the WMAs overlay or the NSMA overlay located within the landholding. The project is consistent with this policy.

	Reference	Chapter E Objective/Policy	Commentary
		there are no practicable alternative methods to achieve this protection; or (c) the damming is necessary for managing hazards or the provision of infrastructure and there are no practicable alternatives to damming the water	
124.	E2.3 Policy (20)	Require proposals to dam a river to demonstrate the following: (a) adverse effects on fish passage are avoided or remedied, where native fish and/or habitats actually or potentially exist upstream; (b) appropriate water levels and downstream flow regimes will be maintained, including: (i) low flows in rivers and streams to protect in stream values; (ii) downstream flow variability; (iii) water levels and flows in wetlands to protect vegetation and habitat values of the wetland throughout the year; and (iv) [not applicable]. (c) existing lawfully established upstream and downstream water uses are not adversely affected by the damming proposal, including those allowed by section 14(3)(b) of the Resource Management Act 1991; (d) Mana Whenua values associated with the wetland, lake or river are identified and the effect of the proposal on these values are assessed and taken into account; (e) the design, construction, operation and maintenance of the dam avoids significant adverse effects and remedies or mitigates other effects on the following: (i) flooding; (ii) bank or bed erosion or aggregation; (iii) drainage of any property; (iv) land instability;	Some on-stream dams – stormwater treatment ponds - are proposed, and are necessary because of the terrain (refer row 122 above). In respect of the stormwater treatment ponds below the landfill, no fish passage is required because there will not be any native fish or habitats upstream. Downstream flows will be maintained, consistent with the need to detain and treat stormwater to reduce sediment loads etc. No existing lawfully established upstream or downstream uses will be affected by the proposed stormwater ponds. The stormwater ponds will be designed and constructed so as to avoid significant effects and remedy or mitigate the other effects identified in (e). The proposed damming for the purpose of creating stormwater treatment ponds is consistent with this policy.

	Reference	Chapter E Objective/Policy	Commentary
		(v) people and communities; (vi) the habitat of fauna or flora, including wetlands, either upstream or downstream of the dam; (vii) catchment conditions arising from the scale, location or number of dams in the catchment; or (viii)risk of dam failure. (f) [not applicable]	
125.	E2.3 Policy (21)	Require proposals for new, change or replacement applications to dam a river or stream or dam water with an off-stream dam to undertake monitoring of a type and scale appropriate for the activity and its effects, including: (a) inspection of dam embankments and spillways; (b) measurement and recording of embankment internal water levels and pressures; (c) sampling and assessment of water quality and freshwater biota in on-stream dams; and (d) variable flows below on-stream dams where required.	To the extent these matters are required to be undertaken in respect of low level stormwater ponds (as opposed to substantial dams), then that will occur. The damming will therefore comply with this policy.
126.	E2.3 Policy (22)	*Surface water diversions* Require proposals to divert surface water to demonstrate the diversion will to the extent practicable avoid significant adverse effects and remedy or mitigate other adverse effects including where relevant, effects on: (a) existing lawfully established surface water takes including those allowed by section 14(3)(b) of the Resource Management Act 1991; (b) existing buildings, structures and services; (c) existing flood hazard risks; (d) river bank stability; (e) scheduled historic heritage places or scheduled sites and places of significance to Mana Whenua; (f) people and communities; and	There will be some surface water diversions in order to reduce erosion and generation of sediment. This will be undertaken in accordance with an approved erosion and sediment control plan, and to the extent that Policy 22 applies to such diversions then those matters will be addressed in the plan. The proposed surface water diversions are consistent with this policy.

	Reference	Chapter E Objective/Policy	Commentary
		(g) the life supporting capacity of freshwater, ecosystem processes, and indigenous species and their ecosystems.	
127.	E2.3 Policy (23)	*Diversion of groundwater* Require proposals to divert groundwater, in addition to the matters addressed in Policy E2.3(6) and (7) above, to ensure that: (a) the proposal avoids, remedies or mitigates any adverse effects on: (i) scheduled historic heritage places and scheduled sites and places of significance to Mana Whenua; and (ii) people and communities. (b) the groundwater diversion does not cause or exacerbate any flooding; (c) monitoring has been incorporated where appropriate, including: (i) measurement and recording of water levels and pressures; and (ii) measurement and recording of the movement of ground, buildings and other structures. (d) mitigation has been incorporated where appropriate including: (i) minimising the period where the excavation is open/unsealed; (ii) use of low permeability perimeter walls and floors; (iii) use of temporary and permanent systems to retain the excavation; or (iv) re-injection of water to maintain groundwater pressures.	The excavation, lining and filling of valley 1 for the landfill results in the diversion of groundwater. The effects of this diversion are described in Technical Report E, Volume 2 as being less than minor. The project is consistent with this policy.
128.	E2.3 Policy (24)	*Drilling holes and bores* Require proposals to drill holes or bores to demonstrate that the location, design and construction:	Any bores drilled will comply with, and therefore be consistent with, Policy 24.

	Reference	Chapter E Objective/Policy	Commentary
		(a) complies with the New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001); (b) prevents contaminants from entering an aquifer; (c) prevents cross-contamination between aquifers with different pressure, water quality or temperature; (d) prevents leakage of groundwater to waste; (e) avoids the destruction, damage or modification of any scheduled historic heritage place or scheduled sites and places of significance to Mana Whenua; and (f) avoids disturbance of wetlands and significant ecological areas where practicable.	
	E3. Lakes, rivers, streams and wetlands		
129.	E3.2 Objective (1)	Auckland's lakes, rivers, streams and wetlands with high natural values are protected from degradation and permanent loss.	Refer rows 36-42 above. The reclamation of streams within valley 1 will be contrary to this policy, but that reclamation is considered to be consistent with Objective 6 (see row 134 below). This objective states that reclamation is to be avoided unless there is no practicable alternative. While the proposal involves the permanent loss of a number of streams within the landholding, this loss has been minimised as far as practicable. In addition, extensive revegetation of stream and wetland margins will be undertaken. This includes improvements and positive benefits to the values of significant features on site such as the Hōteo River and significant scheduled wetlands. In combination with the direction from Objective 6 regarding 'where practicable', there are other relevant policies such as Policy 13 (see row 145) which recognise the role of infrastructure and the potential effects of its development and use. When read in this context, the
130.	E3.2 Objective (2)	Auckland's lakes, rivers, streams and wetlands are restored, maintained or enhanced.	

	Reference	Chapter E Objective/Policy	Commentary
			proposal is not consistent with some of these objectives, but is not contrary. Objective 1, only relates to lakes, rivers, streams and wetlands with high natural values. While it is accepted that NSMAs meet this description, streams within the forestry plantations are not identified within the planning framework as having high natural values and are not identified as NSMAs. The forestry streams to be reclaimed have been identified as having high ecological value, this does not necessarily translate through to having high natural values due to forestry land-use and modification over time through the predominant land use. The project is considered to not be contrary to this objective when considering the reference to high natural values.
131.	E3.2 Objective (3)	Significant residual adverse effects on lakes, rivers, streams or wetlands that cannot be avoided, remedied or mitigated are offset where this will promote the purpose of the Resource Management Act 1991.	A significant restoration and offset programme is proposed, as described in Technical Report G, Volume 2. It is not practicable for all residual adverse effects to be fully offset, but that is not what the objective requires. Accordingly, the proposed reclamation of streams is consistent with this objective.
132.	E3.2 Objective (4)	Structures in, on, under or over the bed of a lake, river, stream or wetland are provided for where there are functional or operational needs for the structure to be in that location, or traverse that area.	A small culvert within the NSMA is proposed in order to support the access road, and a bridge is required over the Waiteraire Stream. As far as possible these footprints have been minimised however, there is a functional need for an access road to safely access the landfill footprint in this instance. The project is consistent with this objective.

	Reference	Chapter E Objective/Policy	Commentary
133.	E3.2 Objective (5)	Activities in, on, under or over the bed of a lake, river, stream and wetland are managed to minimise adverse effects on the lake, river, stream or wetland.	Other than the reclamation of streams and the proposed culvert and bridge described above, any other activities in the beds of streams will be managed to minimise effects. No works, other than restoration works, are proposed in any identified wetland as part of this project.
134.	E3.2 Objective (6)	Reclamation and drainage of the bed of a lake, river, stream and wetland is avoided, unless there is no practicable alternative.	Refer rows 132 above. In this case, landfills have a number of functional and operational requirements which mean that there are limited locations for a landfill within the Auckland region. These include being located in natural valleys that can be filled. As a result, there is no practicable alternative to reclamation within the landfill footprint. Accordingly, the proposed reclamation of permanent and intermittent streams is considered to be consistent with this objective.
135.	E3.2 Policy (1)	*General* Avoid significant adverse effects, and avoid where practicable or otherwise remedy or mitigate other adverse effects of activities in, on, under or over the beds of lakes, rivers, streams or wetlands within the following overlays: (a) D4 Natural Stream Management Areas Overlay; (b) D5 Natural Lake Management Areas Overlay; (c) D6 Urban Lake Management Areas Overlay; (d) D9 Significant Ecological Areas Overlay; and (e) D8 Wetland Management Areas Overlay.	Works within WMAs and SEAs have been avoided. As set out above, a small culvert within the NSMA is proposed in order to support the access road. This is not considered to have significant adverse effects. A range of enhancement and restoration works are proposed as described in section 9 of the AEE, Volume 1 and Technical Report G, Volume 2. The project is consistent with these policies.
136.	E3.2 Policy (2)	Manage the effects of activities in, on, under or over the beds of lakes, rivers, streams or wetlands outside the overlays identified in Policy E3.3(1) by:	

	Reference	Chapter E Objective/Policy	Commentary
		(a) avoiding where practicable or otherwise remedying or mitigating any adverse effects on lakes, rivers, streams or wetlands; and (b) where appropriate, restoring and enhancing the lake, river, stream or wetland.	
137.	E3.2 Policy (3)	Enable the enhancement, maintenance and restoration of lakes, rivers, streams or wetlands	
138.	E3.2 Policy (4)	Restoration and enhancement actions, which may form part of an offsetting proposal, for a specific activity should: (a) be located as close as possible to the subject site; (b) be 'like-for-like' in terms of the type of freshwater system affected; (c) preferably achieve no net loss or a net gain in the natural values including ecological function of lakes, rivers, streams or wetlands; and (d) consider the use of biodiversity offsetting as outlined in Appendix 8 Biodiversity offsetting. *Note 1* *When having regard to Policy E3.3(4) above, the following documents or any updated version of them should be referred to:* • *Auckland Council Technical Report 2011/009: Stream Ecological Valuation (SEV): a method for assessing the ecological functions of Auckland Streams (October 2011) for guidance on how the location and extent of any offset may be calculated and assessed; and* • *Guidance on Good Practice Biodiversity Offsetting in New Zealand, New Zealand Government et al, August 2014.* *Neither of these reference documents has precedence. An acceptable offsetting proposal may combine elements from both documents*	

	Reference	Chapter E Objective/Policy	Commentary
139.	E3.2 Policy (5)	Avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects of activities in, on, under or over the beds of lakes, rivers, streams or wetlands on: (a) the mauri of the freshwater environment; and (b) Mana Whenua values in relation to the freshwater environment.	Refer to rows 35-42.
140.	E3.2 Policy (6)	Manage the adverse effects on Mana Whenua cultural heritage that is identified prior to, or discovered during, subdivision, use and development by: (a) complying with the protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin; (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) undertaking appropriate measures to avoid adverse effects, or where adverse effects cannot be avoided, effects are remedied or mitigated.	Through the CVA provided to WMNZ, a proposed accidental discovery protocol was discussed. This has been adopted into the proposed conditions of consent contained in Appendix G of the AEE, Volume 1. Refer to row 28-31.
141.	E3.2 Policy (7)	*Structures and the diversion of surface water* Provide for the operation, use, maintenance, repair, erection, reconstruction, placement, alteration or extension, of any structure or part of any structure in, on, under, or over the bed of a lake, river, stream or wetland, and any associated diversion of water, where the structure complies with all of the following: (a) there is no practicable alternative method or location for undertaking the activity outside the bed of the lake, river, stream or wetland; (b) the structure is designed to be the minimum size necessary for its purpose to minimise modification to the bed of a lake, river, stream or wetland; (c) the structure is designed to avoid creating or increasing a hazard; (d) the structure is for any of the following:	Any diversion of surface water would be for the purposes of erosion and sediment control and would be undertaken in accordance with an approved erosion and sediment control plan. Accordingly, to the extent this policy applies, any surface water diversions would be consistent with it.

	Reference	Chapter E Objective/Policy	Commentary
		(i) required as part of an activity designed to restore or enhance the natural values of any lakes, rivers, streams or wetlands and their margins, or any adjacent area of indigenous vegetation or habitat of indigenous fauna; (ii) designed to maintain and/or enhance public access to, over and along any lake, river, stream or wetland and their margins; (iii) necessary to provide access across a lake, river, stream or wetland; (iv) associated with infrastructure; (v) necessary for flood protection and the safeguarding of public health and safety; or (vi) required for the reasonable use of production land. (e) the structure avoids significant adverse effects and avoids, remedies or mitigates other adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai	
142.	E3.2 Policy (10)	*Planting of plants* Enable the planting of any plant, excluding pest species, in, on, or under the bed of a lake, river, stream or wetland where it is suitable for habitat establishment, restoration or enhancement, the maintenance and enhancement of amenity values, flood or erosion protection or stormwater runoff control provided it does not create or exacerbate flooding.	The proposed restoration and mitigation package, described in Section 9 of the AEE and Technical Report G, Volume 2, and any approved [Restoration and mitigation plan] will address these matters. Any planting required as a result of the project is therefore consistent with these policies.
143.	E3.2 Policy (11)	Encourage the planting of plants that are native to the area	
144.	E3.2 Policy (12)	Encourage the incorporation of Mana Whenua mātauranga, values and tikanga in any planting in, on, or under the bed of a lake, river, stream or wetland	
145.	E3.2 Policy (13)	*Reclamation and drainage* Avoid the reclamation and drainage of the bed of lakes, rivers, streams and wetlands, including any extension to existing reclamations or drained areas **unless all of the following apply**:	In this instance, SEAs, two WMAs and a NSMA have been identified on the broader site however, the landfill

	Reference	Chapter E Objective/Policy	Commentary
		(a) there is **no practicable alternative method** for undertaking the activity outside the lake, river, stream or wetland; (b) for lakes, permanent rivers and streams, and wetlands **the activity is required for** any of the following: (i) as part of an activity designed to restore or enhance the natural values of any lake, river, stream or wetland, any adjacent area of indigenous vegetation or habitats of indigenous fauna; (ii) **for the operation, use, maintenance, repair, development or upgrade of infrastructure**; or (iii) to undertake mineral extraction activities; and (c) **the activity avoids significant adverse effects** and avoids, remedies or mitigates other adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai.	development has been designed to avoid construction within these overlays in the first instance. In particular: • The stockpile footprints have been avoided to minimise their footprint within wetland areas (NB: these wetlands are not scheduled as SEAs). • The clay borrow area has been designed to avoid streams as much as practicable. • The facility avoids the main stream which runs through the farm area. However, some reclamation and drainage of the bed of streams and part of some wetlands on site (outside of AUP overlays) is required in order to construct the landfill infrastructure. Part (c) relates to Mana Whenua values. We are not aware of significant effects on Mana Whenua values, based on the CVA provided to date and therefore avoidance is not required by the policy. In respect of other adverse effects on Mana Whenua values the project is remedying or mitigating these effects as set out in section 9 of the AEE.
146.	E3.2 Policy (15)	*Riparian margins* Protect the riparian margins of lakes, rivers, streams, and wetlands from inappropriate use and development and promote their enhancement to through all of the following: (a) safeguard habitats for fish, plant and other aquatic species, particularly in rivers and streams with high ecological values; Auckland Unitary Plan Operative in part 6 E3 Lakes, rivers, streams and wetlands (b) safeguard their aesthetic, landscape and natural character values; (c) safeguard the contribution of natural freshwater systems to the biodiversity, resilience and integrity of ecosystems; and	The proposal includes the revegetation of extensive areas of riparian and wetland margins. This will provide a number of benefits including additional habitat for terrestrial species, resilience of ecosystems and mitigation of flooding, surface and bank erosion and contamination. The project is consistent with this policy.

	Reference	Chapter E Objective/Policy	Commentary
		(d) avoid or mitigate the effects of flooding, surface erosion, stormwater contamination, bank erosion and increased surface water temperature.	
147.	E3.2 Policy (16)	Protect land alongside streams for public access through the use of esplanade reserves and esplanade strips, marginal strips, drainage reserves, easements or covenants where appropriate and for water quality, ecological and landscape protection purposes.	It is not appropriate for public access to be provided on or near the landfill's operational areas, although enhanced public access opportunities are proposed along a nearby stream (refer section 5 of the AEE).
	E11. Land Disturbance – Regional		
148.	E11.2 Objective (1)	Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies and mitigates adverse effects on the environment.	The Sediment and Erosion Control Assessment (see Technical Report R, Volume 2) provides sample erosion and sediment control measures, which will minimise sediment generated from earthworks associated with the Project. The management of sediment falls under two main approaches – erosion control, which seeks to prevent the sediment from becoming mobilised in the first place and sediment control, which provides measures to contained mobilised sediment on the site. The strategies to be employed as part of the project include: • Minimise land disturbance • Stage construction • Protect steep slopes • Protect water courses • Stabilise exposed areas rapidly • Install perimeter controls • Employ detention devices • Get trained contractors • Evolve the plan as required • Assess and adjust and take responsive actions. The project is consistent with this policy.
149.	E11.2 Objective (2)	Sediment generation from land disturbance is minimised.	
150.	E11.2 Objective (3)	Land disturbance is controlled to achieve soil conservation	

	Reference	Chapter E Objective/Policy	Commentary
151.	E11.3 Policy (1)	Avoid where practicable, and otherwise mitigate, or where appropriate, remedy adverse effects on areas where there are natural and physical resources that have been scheduled in the Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character	The areas of proposed disturbance on site from earthworks, are outside of scheduled areas in the AUP, except for the small (80m^2) of development within the NSMA. Because it is not practicable to avoid that area of NSMA, the project is consistent with this policy.
152.	E11.3 Policy (2)	Manage land disturbance to: (a) retain soil and sediment on the land by the use of best practicable options for sediment and erosion control appropriate to the nature and scale of the activity; (b) manage the amount of land being disturbed at any one time, particularly where the soil type, topography and location is likely to result in increased sediment runoff or discharge; (c) avoid, remedy and mitigate adverse effects on accidentally discovered sensitive material; and (d) maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering.	In respect of (a) and (b), refer to Technical Report R, Volume 2. Accidental discovery protocol to be followed and is included as a recommended condition of consent. This will be in place to address effects if sensitive material is accidentally discovered (responding to (c)). In respect of (d), a CVA has been undertaken by local iwi and the proposed works area is not considered to be disturbing areas that may be considered wahi tapu. No land disturbance works are proposed within streams known to be used for the gathering of kaimoana. The project is consistent with this policy.
153.	E11.3 Policy (4)	Enable land disturbance necessary for a range of activities undertaken to provide for people and communities social, economic and cultural well-being, and their health and safety.	Large scale earthworks are necessary in order to develop the landfill, both the access road and the footprint itself. However the landfill is a piece of critical infrastructure which provides for Auckland's economic wellbeing and health and safety. Granting consent to the works would be consistent with this policy.
154.	E11.3 Policy (5)	Design and implement earthworks with recognition of existing environmental site constraints and opportunities, specific	The nature and scale of the project requires large scale earthworks to be undertaken. Notwithstanding this, the landfill has been designed to utilise the natural landform of

	Reference	Chapter E Objective/Policy	Commentary
		engineering requirements, and implementation of integrated water principles.	Valley 1 and the wider landholding, minimising the amount of earthworks required as far as practicable. The project is consistent with this policy.
155.	E11.3 Policy (7)	Require any land disturbance that will likely result in the discharge of sediment laden water to a surface water body or to coastal water to demonstrate that sediment discharge has been minimised to the extent practicable, having regard to the quality of the environment; with: (a) any significant adverse effects avoided, and other effects avoided, remedied or mitigated, particularly in areas where there is: (i) high recreational use; (ii) relevant initiatives by Mana Whenua, established under regulations relating to the conservation or management of fisheries, including taiāpure, rāhui or whakatupu areas; (iii) the collection of fish and shellfish for consumption; (iv) maintenance dredging; or (v) a downstream receiving environment that is sensitive to sediment accumulation; (b) adverse effects avoided as far as practicable within areas identified as sensitive because of their ecological values, including terrestrial, freshwater and coastal ecological values; and (c) the receiving environments ability to assimilate the discharged sediment being taken into account.	The development and operation of the Landfill on site results in two separate phases of earthworks. Firstly the construction phase in order to establish the landfill on site and secondly the on-going operational phase which results in regular earthworks to enable the construction of cells for waste placement. To manage sediment there are different measures in place for each phase. For the construction phase, the following methods will be employed: - Use of cleanwater diversions where possible to direct stormwater around the works areas; - Undertaking the works progressively to minimise the open areas; - Progressive stabilisation; - Use of super silt fences downstream of the works areas; - Use of decanting earth bunds; - Permanent sediment control ponds for some aspects such as the stockpiles; - Construction of sediment pond 1 downstream of the landfill footprint during the construction phase. The project is consistent with this policy.
156.	E11.3 Policy (8)	Monitor the quality of fresh and coastal water bodies across the region and the effects of land disturbance on water quality and receiving environments.	Monitoring conditions will be recommended, and the project is accordingly consistent with this policy.

	Reference	Chapter E Objective/Policy	Commentary
	E12. Land disturbance – District [dp]		
157.	E12.2 Objective (1)	Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies and mitigates adverse effects on the environment.	Refer Technical Report R, Volume 2. The project is consistent with this objective.
158.	E12.3 Policy (1)	Avoid where practicable, and otherwise, mitigate, or where appropriate, remedy adverse effects of land disturbance on areas where there are natural and physical resources that have been scheduled in the Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character.	Refer row 80 above. The project is consistent with this policy.
159.	E12.3 Policy (2)	Manage the amount of land being disturbed at any one time, to: (a) avoid, remedy or mitigate adverse construction noise, vibration, odour, dust, lighting and traffic effects; (b) avoid, remedy and mitigate adverse effects on accidentally discovered sensitive material; and (c) maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering.	Refer Technical Report R, Volume 2. The project is consistent with this policy.
160.	E12.3 Policy (3)	Enable land disturbance necessary for a range of activities undertaken to provide for people and communities social, economic and cultural well-being, and their health and safety.	Refer row 153 above (E11.3 Policy 4). The project is consistent with this policy.
161.	E12.3 Policy (4)	Manage the impact on Mana Whenua cultural heritage that is discovered undertaking land disturbance by: (a) requiring a protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin; (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) undertaking appropriate measures to avoid adverse effects, or where adverse effects cannot be avoided, effects are remedied or mitigated.	Refer row 152 above (E11.3 Policy 2). The project is consistent with this policy.

	Reference	Chapter E Objective/Policy	Commentary
162.	E12.3 Policy (5)	Design and implement earthworks with recognition of existing environmental site constraints and opportunities, specific engineering requirements, and implementation of integrated water principles	The nature and scale of the project requires large scale earthworks to be undertaken. Notwithstanding this, the landfill has been designed to utilise the natural landform of Valley 1 and the wider landholding, minimising the amount of earthworks required as far as practicable. The project is consistent with this policy.
163.	E12.3 Policy (6)	Require that earthworks are designed and undertaken in a manner that ensures the stability and safety of surrounding land, buildings and structures.	The Geotechnical Interpretative Report (Technical Report B, Volume 2) provides an assessment of the landholdings geological considerations and stability. The results of this assessment have informed the design of the earthworks, ensuring the stability and safety of surrounding land. The project is consistent with this policy.
164.	**E13. Cleanfills, managed fills and landfills [rp]**		
165.	E13.2. Objective (1)	Cleanfills, managed fills and landfills are sited, designed and operated so that adverse effects on the environment, are avoided, remedied or mitigated	Refer Technical Report N, Volume 2. The project is consistent with this objective.
166.	E13.2. Objective (2)	Human health is protected from the adverse effects of operational or closed cleanfills, managed fills and landfills	Refer Technical Report E and D. The project is consistent with this objective.
167.	E13.3. Policy (1)	Avoid significant adverse effects and remedy or mitigate other adverse effects of cleanfills, managed fills and landfills on lakes, rivers, streams, wetlands, groundwater and the coastal marine area.	Section E13.3 of the AUP has been interpreted as relating to adverse effects from discharges of contaminants (ie leachate) from any material placed in the ground. The Auckland Regional Landfill's multiple barrier lining system is designed to contain leachate and allow it to be safely collected and treated and disposed of. Accordingly, all significant adverse effects of the landfill on rivers, streams, wetlands and groundwater will be avoided.
168.	E13.3. Policy (2)	Require cleanfills, managed fills and landfills to be sited, and where appropriate, designed and constructed, to avoid the risk of land instability	Refer Technical Report B and N. The project is consistent with this policy.
169.	E13.3. Policy (3)	Require cleanfills, managed fills and landfills to be designed and operated in accordance with relevant industry best practice	Refer Technical Report N. The project is consistent with this policy.

	Reference	Chapter E Objective/Policy	Commentary
170.	E13.3. Policy (4)	Avoid adverse effects from new landfills.	New landfills, and indeed any activity, will always have some adverse effects. However, as discussed above, section E13.3 of the AUP has been interpreted as relating to adverse effects from discharges of contaminants (ie leachate) from any material placed in the ground. The Auckland Regional Landfill's multiple barrier lining system is designed to contain leachate and allow it to be safely collected and treated and disposed of. Accordingly, the landfill is consistent with this policy.
	E14. Air quality [rcp/rp]		
171.	E14.2 Objective (1)	Air quality is maintained in those parts of Auckland that have high air quality, and air quality is improved in those parts of Auckland that have low to medium air quality.	Refer rows 58 to 61 above, and Technical Report D, Volume 2. The project is consistent with this objective.
172.	E14.2 Objective (2)	Human health, property and the environment are protected from significant adverse effects from the discharge of contaminants to air	Refer rows 58 to 61 above, and Technical Report D, Volume 2. The project is consistent with this objective.
173.	E14.2 Objective (3)	Incompatible uses and development are separated to manage adverse effects on air quality from discharges of contaminants into air and avoid or mitigate reverse sensitivity effects.	Refer rows 58 to 61 above, and Technical Report D, Volume 2. The project is consistent with this objective.
174.	E14.2 Objective (4)	The operational requirements of light and heavy industry, other location-specific industry, infrastructure, rural activities and mineral extraction activities are recognised and provided for.	Landfills must locate in the rural environment to achieve appropriate separation from sensitive receivers (eg surrounding residents). Approving the Auckland Regional Landfill in the location proposed would be consistent with this objective.
175.	E14.3 Policy (1)	Manage the discharge of contaminants to air, including by having regard to the Auckland Ambient Air Quality Targets in Table E14.3.1, so that significant adverse effects on human health, including cumulative adverse effects, are avoided, and all other adverse effects are remedied or mitigated.	Significant adverse effects avoided, and other effects are mitigated, such that all discharges of contaminants to air are consistent with this policy. Refer also rows 58 to 61 above, and Technical Report D, Volume 2.
176.	E14.3 Policy (2)	In the coastal marine area and in urban and rural zones, except for those zones and precincts subject to policies E14.3(3) to (5):	Appropriate separation distances, and other operational controls are proposed, that collectively will ensure that offensive and objectionable effects from dust and odour will

	Reference	Chapter E Objective/Policy	Commentary
		(a) avoid offensive and objectionable effects from dust and odour discharges and remedy or mitigate all other adverse effects of dust and odour discharges; or (b) require adequate separation distance between use and development which discharges dust and odour to air and activities that are sensitive to adverse effects of dust and odour discharges, or both of the above.	be avoided. The activity is therefore consistent with this policy.
177.	E14.3 Policy (3)	In the Rural – Rural Production Zone […]: (a) recognise that rural air quality is generally a result of dust and odours, and other emissions generated by rural production activities; (b) avoid, remedy or mitigate adverse effects of dust and odour discharges; (c) provide for minor and localised elevation of dust and odour levels where the air discharge is from: (i) rural production activities or rural industry; or (ii) the operation of infrastructure or location specific industry; or (iii) mineral extraction activities; or (iv) activities undertaken by the New Zealand Defence Force for training and munitions testing; or (v) for emergency services training; (d) require adequate separation between use and development which discharge dust and odour and activities that are sensitive to these adverse effects.	Refer rows 58 to 61 above, and Technical Report D, Volume 2. The project is consistent with this policy.
178.	E14.3 Policy (6)	Avoid the discharge of contaminants to air from industrial activities in rural zones and the coastal marine area except where the activity is: (a) location specific, such as mineral extraction activities and mineral processing, wastewater treatment facilities, marine and port activities,	To the extent that the landfill is considered an industrial activity, then the activity is appropriate in a rural zone by virtue of it being infrastructure that requires large separation distances that cannot be provided for within urban areas.

	Reference	Chapter E Objective/Policy	Commentary
		(b) undertaken by the New Zealand Defence Force for training and munitions testing, or for emergency services training; (c) infrastructure requiring large separation distances that cannot be provided for within urban areas; or (d) a rural industry	The project is consistent with this policy.
179.	E14.3 Policy (8)	Avoid, remedy or mitigate the adverse effects on air quality from discharges of contaminants into air by: (a) using the best practicable option for emission control and management practices that are appropriate to the scale of the discharge and potential adverse effects; or (b) adopting a precautionary approach, where there is uncertainty and a risk of significant adverse effects or irreversible harm to the environment from air discharges.	The project is proposing to use the BPO for emission control, and in respect of discharges to air there is no risk of any significant adverse effects or irreversible harm to the environment. Refer Technical Report D, Volume 2, which also demonstrates the conservative nature of the assessments undertaken. The project is consistent with this policy.
180.	E14.3 Policy (9)	Avoid, remedy or mitigate the adverse effects on air quality beyond the boundary of the premises where the discharge of contaminants to air is occurring, in relation to: (a) noxious or dangerous effects on human health, property or the environment from hazardous air pollutants; or (b) overspray effects on human health, property or the environment.	In respect of (a), there will be no noxious, dangerous, offensive or objectionable odour beyond the boundary (a). The project is consistent with this policy.
181.	E14.3 Policy (10)	Require large scale combustion sources that discharge contaminants to air to avoid, remedy or mitigate any adverse effects on aircraft safety.	There will be no effects on aircraft safety from any combustion activities undertaken on site.
	E15. Vegetation management and biodiversity		
182.	E15.2 Objective (1)	Ecosystem services and indigenous biological diversity values, particularly in sensitive environments, and areas of contiguous indigenous vegetation cover, are maintained or enhanced while providing for appropriate subdivision, use and development	Refer rows 33 to 35 above, and Technical Report G, Volume 2. The project is consistent with this objective.
183.	E15.2 Objective (2)	Indigenous biodiversity is restored and enhanced in areas where ecological values are degraded, or where development is occurring.	Refer rows 33 to 35 and Technical Report G, Volume 2. The project is consistent with this objective.

	Reference	Chapter E Objective/Policy	Commentary
184.	E15.3 Policy (1)	Protect areas of contiguous indigenous vegetation cover and vegetation in sensitive environments including the coastal environment, riparian margins, wetlands, and areas prone to natural hazards.	Refer rows 33 to 35 Technical Report G, Volume 2. The project is consistent with this policy.
185.	E15.3 Policy (2)	Manage the effects of activities to avoid significant adverse effects on biodiversity values as far as practicable, minimise significant adverse effects where avoidance is not practicable, and avoid, remedy or mitigate any other adverse effects on indigenous biological diversity and ecosystem services, including soil conservation, water quality and quantity management, and the mitigation of natural hazards.	Refer rows 33 to 35 Technical Report G, Volume 2. The project has avoided significant effects as far as practicable, and has avoided, remedied or mitigated other effects, and accordingly is consistent with this policy (especially when read together with Policy 7 (see row 205 below)).
186.	E15.3 Policy (3)	Encourage the offsetting of any significant residual adverse effects on indigenous vegetation and biodiversity values that cannot be avoided, remedied or mitigated, through protection, restoration and enhancement measures, having regard to Policy E15.3(4) below and Appendix 8 Biodiversity offsetting.	Refer rows 33 to 35 Technical Report G, Volume 2. The project is consistent with this policy.
187.	E15.3 Policy (4)	Protect, restore, and enhance biodiversity when undertaking new use and development through any of the following: (a) using transferable rural site subdivision to protect areas in Schedule 3 Significant Ecological Areas -Terrestrial Schedule; (b) requiring legal protection, ecological restoration and active management techniques in areas set aside for the purposes of mitigating or offsetting adverse effects on indigenous biodiversity; or (c) linking biodiversity outcomes to other aspects of the development such as the provision of infrastructure and open space.	Refer rows 33 to 35 Technical Report G, Volume 2. The project is consistent with this policy.
188.	E15.3 Policy (7)	Manage any adverse effects from the use, maintenance, upgrading and development of infrastructure in accordance with the policies in E15.3, recognising that it is not always practicable to locate or design infrastructure to avoid areas with indigenous biodiversity values	This policy recognises that infrastructure may not be able to avoid being located within areas of significant indigenous biodiversity values, and accordingly such effects are required to be managed. While the Auckland Regional Landfill has avoided areas of SEA, there are effects on indigenous biodiversity outside of SEAs and potential "edge effects" on areas of SEA. As described in Technical Report G, Volume 2 and section 9 of the AEE, these effects will be

	Reference	Chapter E Objective/Policy	Commentary
			managed through the suite of conditions (including offsetting and restoration proposed) such that the project will comply with this policy.
	E24. Lighting [rcp/dp]		
189.	E24.2 Objective (1)	Artificial lighting enables outdoor activities and the security and safety of people and property.	Landfill activities may occur in the hours of darkness, particularly in the winter, which will require some limited lighting, while artificial lighting is needed for the safe operation of the bin exchange area (which is intended to operate 24 hours per day.) Any lighting of the bin exchange area will avoid adverse safety effects on the users of SH1, and any lighting used for the project will avoid light spill on to adjacent properties and will minimise the loss of night sky viewing. Any lighting will comply with the relevant permitted activity standards for the Rural Zone. For those reasons, lighting required by the project will be consistent with the objectives and policies.
190.	E24.2 Objective (2)	The adverse effects of outdoor lighting on the environment and safety of road users are limited.	
191.	E24.3 Policy (1)	Provide for appropriate levels of artificial lighting to enable the safe and efficient undertaking of outdoor activities, including night time working, recreation and entertainment.	
192.	E24.3 Policy (2)	Control the intensity, location and direction of artificial lighting to avoid significant glare and light spill onto adjacent sites, maintain safety for road users and minimise the loss of night sky viewing.	
193.	E24.3 Policy (3)	Use area or activity specific rules where the particular functional or operational needs of the area or activity make such rules appropriate.	
	E25. Noise and vibration [rcp/dp]		
194.	E25.2 Objective (1)	People are protected from unreasonable levels of noise and vibration.	As discussed in Technical Report L, Volume 2, with only one limited short term exception relating to construction, the noise and vibration effects will comply with the permitted activity standards of the Rural zone. This is predominantly due to the large buffer distances proposed by WMNZ on land owned by the applicant. Any construction related effects will be managed through the use of an approved CNVMP.
195.	E25.3 Policy (2)	Minimise, where practicable, noise and vibration at its source or on the site from which it is generated to mitigate adverse effects on adjacent sites.	
196.	E25.3 Policy (3)	Encourage activities to locate in zones where the noise generated is compatible with other activities and, where practicable, adjacent zones.	
197.	E25.3 Policy (4)	Use area or activity specific rules where the particular functional or operational needs of the area or activity make such rules appropriate.	

	Reference	Chapter E Objective/Policy	Commentary
198.	E25.3 Policy (9)	Noise arising from or affecting rural zones (9) Avoid, remedy or mitigate the adverse effects of noise in the rural environment, having regard to the working nature of this environment	All noise and vibration effects are therefore considered to be consistent with these objectives and policies. Bird scaring in rural zone standards will be relevant.
199.	E25.3 Policy (10)	Construction, demolition and maintenance activities (10) Avoid, remedy or mitigate the adverse effects of noise and vibration from construction, maintenance and demolition activities while having regard to: (a) the sensitivity of the receiving environment; and (b) the proposed duration and hours of operation of the activity; and (c) the practicability of complying with permitted noise and vibration standards.	
	E26. Infrastructure [rp/dp] ***Note – these objectives and policies are listed under 'network utilities and electricity generation', so may only be relevant to the energy centre***		
200.	E26.2.1 Objective (1)	The benefits of infrastructure are recognised.	As discussed in rows 4 through to 10 above the Auckland Regional Landfill is essential infrastructure for Auckland, which is supported by a range of objective and policies in the AUP. A component of the landfill's operation is the substantial renewable electricity generation proposed, which is separately supported by objectives and policies of the AUP and the NPS-REG (eg Objective 8 and Policy 12). The Auckland Regional Landfill project is therefore considered to be consistent with the objectives and give effect to the policies listed.
201.	E26.2.1 Objective (3)	Safe, efficient and secure infrastructure is enabled, to service the needs of existing and authorised proposed subdivision, use and development.	
202.	E26.2.1 Objective (4)	Development, operation, maintenance, repair, replacement, renewal, upgrading and removal of infrastructure is enabled.	
203.	E26.2.1 Objective (8)	The use and development of renewable electricity generation is enabled.	
204.	E26.2.1 Objective (9)	The adverse effects of infrastructure are avoided, remedied or mitigated	
205.	E26.2.2 Policy (1)	Recognise the social, economic, cultural and environmental benefits that infrastructure provides, including: (a) enabling enhancement of the quality of life and standard of living for people and communities; (b) providing for public health and safety; (c) enabling the functioning of businesses; (d) enabling economic growth; (e) enabling growth and development; (f) protecting and enhancing the environment; (g) enabling the transportation of freight, goods, people; and (h) enabling interaction and communication.	

	Reference	Chapter E Objective/Policy	Commentary
206.	E26.2.2 Policy (2)	Provide for the development, operation, maintenance, repair, upgrade and removal of infrastructure throughout Auckland by recognising: (a) functional and operational needs; (b) location, route and design needs and constraints; (c) the complexity and interconnectedness of infrastructure services; (d) the benefits of infrastructure to communities with in Auckland and beyond; (e) the need to quickly restore disrupted services; and (f) its role in servicing existing, consented and planned development.	
207.	E26.2.2 Policy (4)	*Adverse effects of infrastructure* Require the development, operation, maintenance, repair, upgrading and removal of infrastructure to avoid, remedy or mitigate adverse effects, including, on the: (a) health, well-being and safety of people and communities, including nuisance from noise, vibration, dust and odour emissions and light spill; (b) safe and efficient operation of other infrastructure; (c) amenity values of the streetscape and adjoining properties; (d) environment from temporary and ongoing discharges; and (e) values for which a site has been scheduled or incorporated in an overlay.	
208.	E26.2.2 Policy (5)	Consider the following matters when assessing the effects of infrastructure: (a) the degree to which the environment has already been modified; (b) the nature, duration, timing and frequency of the adverse effects; (c) the impact on the network and levels of service if the work is not undertaken; (d) the need for the infrastructure in the context of the wider network; and (e) the benefits provided by the infrastructure to the communities within Auckland and beyond.	
209.	E26.2.2 Policy (11)	*New technologies* Provide flexibility for infrastructure operators to use new technological advances that: (a) improve access to, and efficient use of services;	

	Reference	Chapter E Objective/Policy	Commentary
		(b) allow for the re-use of redundant services and structures where appropriate; (c) result in environmental benefits and enhancements; and (d) utilise renewable sources	
210.	E26.2.2 Policy (12)	*Renewable electricity generation* Provide for renewable electricity generation activities to occur at different scales and from different sources, including small and community-scale renewable electricity generation activities.	
	E31. Hazardous substances [rcp/dp]		
211.	E31.2 Objective (1)	The risks of hazardous facilities to people, property and the environment are minimised to acceptable levels while recognising the benefits of these facilities.	As discussed in rows 77 through to 79 above, and Technical Report P, Volume 2, the landfill site is not in itself a hazardous facility, but it will include the storage of hazardous substances in order to enable operation of the landfill, include diesel, oil and greases. . In order to manage the use and storage of these substances the following measures will be employed: • Storage containers for hazardous substances are housed in dedicated indoor/covered facilities with secondary containment. • Routinely the substances will be located indoors and in locations designed for their use. • Containers will be appropriate for the substance being stored. • Containers must be clearly labelled to identify their contents. • Spill kits to be located in close proximity to all areas where hazardous substances are used or stored. • Spill response plan to form part of the LMP and to be implemented in the case of a larger spill.
212.	E31.3 Policy (1)	Manage hazardous substances by: (a) locating, designing, constructing and managing hazardous facilities to avoid or adequately mitigate adverse effects, including risks, to people, property and the environment; (b) identifying, assessing and managing cumulative effects of hazardous facilities so they do not increase to unacceptable levels of risk to people, property and the environment; and (c) locating land use activities so that the adverse effects of the transport of hazardous substances on roading infrastructure and other land use activities are minimised.	
213.	E31.3 Policy (2)	Require adequate separation distances between hazardous facilities and activities sensitive to hazardous facilities to avoid or adequately mitigate risk to people and property and to avoid reverse sensitivity effects.	

	Reference	Chapter E Objective/Policy	Commentary
			The nearest storage location for the hazardous substances is located approximately 500m from the nearest sensitive receivers. The project is consistent with this objective and policies.
	E33. Industrial and trade activities [rcp/rp]		
214.	E33.2 Objective (1)	Industrial and trade activities are managed to avoid adverse effects on land and water from environmentally hazardous substances and discharge of contaminants, or to minimise adverse effects where it is not reasonably practicable to avoid them.	As discussed in Technical Report P, Volume 2, the Auckland Regional Landfill includes activities that are classified as industrial and trade activities. These include the workshop area, the energy compound, the landfill development area, the wheel wash, leachate tank and the bin exchange area. All of these activities have the potential to generate contaminants that could adversely affect the environment if not properly managed. The method of avoiding or minimising the effects of these activities will be described in the LMP and Technical Report P, Volume 2, and summarised in section 9 of the AEE. The project is consistent with this objective, and the policies listed.
215.	E33.3 Policy (1)	Manage the use of land for industrial or trade activities to prevent or minimise any adverse effects of storage, use or disposal of environmentally hazardous substances.	
216.	E33.3 Policy (2)	Require industrial or trade activities to have, where reasonably practicable, onsite management systems, processes, containment, treatment, or disposal by lawful means.	
217.	E33.3 Policy (3)	Require measures to be implemented, where contaminants cannot be disposed as trade waste to the wastewater network or contained on site, to minimise adverse effects on land and water including: (a) reducing contaminant volumes and concentrations as far as practicable; and (b) applying measures, including treatment, management procedures, monitoring, controls, or offsite disposal, having regard to the nature of the discharge and the sensitivity of the receiving environment.	
	E36. Natural hazards and flooding		
218.	E36.2 Objective (1)	Subdivision, use and development outside urban areas does not occur unless the risk of adverse effects to people, property, infrastructure and the environment from natural hazards has been assessed and significant adverse effects are avoided, taking into account the likely long-term effects of climate change	As discussed in Technical Report P, Volume 2, the Auckland Regional Landfill includes the proposed bin exchange area that is located within a floodplain. The risk of the area flooding has been avoided through a

	Reference	Chapter E Objective/Policy	Commentary
219.	E36.2 Objective (4)	Where infrastructure has a functional or operational need to locate in a natural hazard area, the risk of adverse effects to other people, property, and the environment shall be assessed and significant adverse effects are sought first to be avoided or, if avoidance is not able to be totally achieved, the residual effects are otherwise mitigated to the extent practicable.	proposal to raise this area above what is conservatively estimated to be a future flood level in a 1 in 100 ARI and after making an allowance for climate change. The effects of raising this area on the operation of the flood plain generally has been assessed, and the effects of doing so are negligible (i.e. an increase in flood levels of 1mm). Risks of other natural hazards have also been assessed, and will be mitigated through the design and construction of the landfill. For those reasons, and as discussed in the report, the project is consistent with these objectives and policies.
220.	E36.2 Objective (5)	Subdivision, use and development including redevelopment, is managed to safely maintain the conveyance function of floodplains and overland flow paths.	
221.	E36.3 Policy (3)	Consider all of the following, as part of a risk assessment of proposals to subdivide, use or develop land that is subject to natural hazards: (a) the type, frequency and scale of the natural hazard and whether adverse effects on the development will be temporary or permanent; (b) the type of activity being undertaken and its vulnerability to natural hazard events; (c) the consequences of a natural hazard event in relation to the proposed activity; (d) the potential effects on public safety and other property; (e) any exacerbation of an existing natural hazard risk or the emergence of natural hazard risks that previously were not present at the location; (f) whether any building, structure or activity located on land subject to natural hazards near the coast can be relocated in the event of severe coastal erosion, inundation or shoreline retreat; (g) the ability to use non-structural solutions, such as planting or the retention or enhancement of natural landform buffers to avoid, remedy or mitigate hazards, rather than hard protection structures; (h) the design and construction of buildings and structures to mitigate the effects of natural hazards; (i) the effect of structures used to mitigate hazards on landscape values and public access; (j) site layout and management to avoid or mitigate the adverse effects of natural hazards, including access and exit during a natural hazard event; and (k) the duration of consent and how this may limit the exposure for more or less vulnerable activities to the	

	Reference	Chapter E Objective/Policy	Commentary
		effects of natural hazards including the likely effects of climate change.	
222.	E36.3 Policy (4)	Control subdivision, use and development of land that is subject to natural hazards so that the proposed activity does not increase, and where practicable reduces, risk associated with all of the following adverse effects: (a) accelerating or exacerbating the natural hazard and/or its potential impacts; (b) exposing vulnerable activities to the adverse effects of natural hazards	
223.	E36.3 Policy (16)	*Floodplains in rural areas* In rural areas, avoid where practicable locating buildings accommodating more vulnerable activities in the 1 per cent annual exceedance probability (AEP) floodplain and manage other buildings and structures so that flood hazards are not exacerbated.	
224.	E36.3 Policy (21)	*Floodplains – general* In rural areas, avoid where practicable locating buildings accommodating more vulnerable activities in the 1 per cent annual exceedance probability (AEP) floodplain and manage other buildings and structures so that flood hazards are not exacerbated.	
225.	E36.3 Policy (22)	Required the storage and containment of hazardous substances in floodplains so that the integrity of the storage method will not be compromised in a flood event.	
226.	E36.3 Policy (23)	Provide for flood mitigation measures which reduce flood-related effects and provide for the reconstruction of culverts and bridges where those measures do not create or exacerbate flooding upstream or downstream or otherwise increase flood hazards.	
227.	E36.3 Policy (25)	When considering mitigation of flood hazards where buildings are located in floodplains, promote measures such as use of water resistant materials and flood-proof utility connections to increase resilience to flood damage.	
228.	E36.3 Policy (26)	Construct accessways, including private roads, so that flood hazard risks are not increased.	

	Reference	Chapter E Objective/Policy	Commentary
229.	E36.3 Policy (29)	Maintain the function of overland flow paths to convey stormwater runoff safely from a site to the receiving environment.	
230.	E36.3 Policy (30)	Require changes to overland flow paths to retain their capacity to pass stormwater flows safely without causing damage to property or the environment.	
231.	E36.3 Policy (31)	*Land instability* Identify land that may be subject to land instability taking into account all of the following features: (a) proximity to cliffs; (b) steepness of land; (c) geological characteristics; and (d) uncontrolled fill.	
232.	E36.3 Policy (32)	Require risk assessment prior to subdivision, use and development of land subject to instability.	
233.	E36.3 Policy (33)	Locate and design subdivision, use and development first to avoid potential adverse effects arising from risks due to land instability hazards, and, if avoidance is not practicably able to be totally achieved, otherwise to remedy or mitigate residual risks and effects to people, property and the environment resulting from those hazards	
234.	E36.3 Policy (35)	*Infrastructure in areas subject to natural hazards* Allow for the operation, maintenance, upgrading and construction of infrastructure, in areas subject to natural hazards when: (a) infrastructure is functionally or operationally required to locate in hazard areas or it is not reasonably practicable that it be located elsewhere; (b) in coastal hazard areas the infrastructure does not significantly increase risk to people, property and the environment, and where risks cannot be avoided, adverse effects are mitigated; and (c) in all flood hazard areas risks to people, property and the environment are mitigated to the extent practicable.	

Table 3: AUP Chapter H Zones: objectives and policies assessment

	Reference	Chapter E Objective/Policy	Commentary
	H19. Rural zones [dp]		
235.	H19.2.1 Objective (1)	*General rural* Rural areas are where people work, live and recreate and where a range of activities and services are enabled to support these functions.	As discussed in Technical Report H, Volume 2, the Auckland Regional Landfill is an appropriate activity within the rural area, and the suite of controls, together with the extensive buffer proposed on its land, will ensure that people's use of the rural area adjacent to WMNZ's land will not be affected. The project is therefore consistent with this objective.
236.	(5)	Enable a range of rural production activities and a limited range of other activities in rural areas by: (a) separating potentially incompatible activities such as rural production and rural lifestyle living into different zones; (b) [not relevant] (c) managing the effects of activities in rural areas so that; (i) essential infrastructure can be funded, coordinated and provided in a timely, integrated, efficient and appropriate manner; and (ii) reverse sensitivity effects do not constrain rural production activities. (d) acknowledging that, in some circumstances, the effective operation, maintenance, upgrading and development of infrastructure may place constraints on productive land and other rural activities; or (e) providing for tourism and activities related to the rural environment.	As discussed in Technical Report H, Volume 2, the Auckland Regional Landfill is an appropriate activity within the rural area. In respect of the components of this policy, the buffer provided by WMNZ owned land will effectively and permanently separate potentially incompatible activities (a), and will avoid creating reverse sensitivity effects. The location of the landfill will constrain that land from ever being used for any other productive purpose, which is recognised by (d). In respect of (e), the project includes the provision of mountain biking/walking areas that will provide recreational activities for both local residents and tourists. The project is consistent with this policy.
237.	H19.2.3 Objective (1)	*Rural character, amenity and biodiversity values*	The rural character, amenity and biodiversity values of the broader area will be maintained or enhanced through the suite

	Reference	Chapter E Objective/Policy	Commentary
		The character, amenity values and biodiversity values of rural areas are maintained or enhanced while accommodating the localised character of different parts of these areas and the dynamic nature of rural production activities.	of controls, and the extensive mitigation and restoration plan proposed. While there will be some short term construction effects visible during the site establishment works, this will be in the nature of earthworks which are a common component in the rural landscape. The direct access off SH1 will avoid adverse amenity effects from trucks carrying waste traveling along local roads. The project is consistent with this objective.
238.	(2)	Areas of significant indigenous biodiversity are protected and enhanced	As discussed in Technical Report G, Volume 2, areas of scheduled indigenous biodiversity (i.e. SEAs) are protected and enhanced, while other areas are avoided as far as practicable. Having regard to the mitigation and offset package proposed, the project is not contrary to this policy.
239.	H19.2.4 Policy (1)	(1) Manage the effects of rural activities to achieve a character, scale, intensity and location that is in keeping with rural character, amenity and biodiversity values, including recognising the following characteristics: (a) a predominantly working rural environment; (b) fewer buildings of an urban scale, nature and design, other than residential buildings and buildings accessory to farming; and (c) a general absence of infrastructure which is of an urban type and scale.	As discussed in Technical Report H, Volume 2, the proposed buffer distance, vegetation screening proposed, and location of the physical plant and equipment, will ensure that the any effects on rural character, amenity and biodiversity values are appropriately managed. Accordingly, the project is consistent with this policy.
240.	(3)	Enable opportunities to protect existing Significant Ecological Areas or provide opportunities to enhance or restore areas to areas meeting criteria of Significant Ecological Areas.	As discussed in Technical Report G, Volume 2, SEAs will be protected and enhanced, consistent with this policy.
241.	H19.2.5 Objective (3)	The rural economy and the well-being of people and local communities are maintained or enhanced by social, cultural and economic non-residential activities, while the area's rural character and amenity is maintained or enhanced.	As discussed in Technical Report I, Volume 2, the Auckland Regional Landfill project will generate significant local economic benefit, while ensuring that the rural character and amenity of the rural areas surrounding the landfill are maintained or

	Reference	Chapter E Objective/Policy	Commentary
			enhanced. Granting consent to the project would be consistent with this objective.
242.	H19.2.6 Policy (1)	Enable rural industries and rural commercial services only where they have a direct connection with the resources, amenities, characteristics and communities of rural areas.	While not a rural industry, for the reasons explained, the functional and operational constraints of landfills mean that the rural zone is the appropriate location for landfills. In respect of Policy 1, landfills have a direct connection to the natural resources (being an isolated valley system of a considerable size), such that the project is consistent with this policy.
243.	(2)	Manage rural industries, rural commercial services and other non-residential activities to: (a) avoid creating reverse sensitivity effects; (b) contain and manage adverse effects on-site; and (c) avoid, remedy or mitigate adverse effects on traffic movement and the road network.	The site will be managed to: (a) avoid creating reverse sensitivity effects, by having a wide buffer area. (b) contain and manage adverse effects on-site, particularly in relation to odour and noise. (c) avoid, remedy or mitigate adverse effects on traffic movement and the road network through the proposed roundabout/access off SH1. The site is accessed directly from SH1, which is designed to take large numbers of vehicles including trucks.
244.	H19.3.2 Objective (2)	The productive capability of the land is maintained and protected from inappropriate subdivision, use and development.	The proposed Auckland Regional Landfill facility will not materially affect the productive capacity of the rural land area in the north of Auckland. Accordingly, the project is not inconsistent with this objective.