Closed landfill asset owner approval Guidance notes and application form





Contents

| Council Closed Landfills | 1 |
|---|---|
| The Asset Owner Approval Process | 1 |
| Closed landfills and hazards | 5 |
| Attachment 1: Council-owned closed landfills (September 2019) | 8 |
| Application form1 | 1 |

Tables

| Table 1: Types of AOA and information to be provided | 2 |
|--|---|
| Table 2: Common AOA conditions | 3 |
| Table 3: Works and activities requiring asset owner approval | 4 |
| Table 4: Works and activities NOT requiring Asset Owner Approval | 4 |
| Table 5: Auckland Council closed landfill classification | 6 |
| Table 6: Closed landfill hazards | 6 |



Council Closed Landfills

Closed landfills are sites where waste was disposed of in the past, but they are no longer accepting waste. Many of these sites have been repurposed as parks and reserves. Auckland Council closed landfills range from large, engineered facilities to uncontrolled fill sites, including areas reclaimed with waste or contaminated soils (sites listed in **Attachment 1)**.

The Closed Landfill Management Team manages these closed landfills. Some sites may have structures, services and devices used to control environmental discharges, and ensure safe use of the park or reserve.

The Asset Owner Approval Process

The Asset Owner Approval Process (AOA) is used by the Closed Landfill Management Team to ensure that developments and activities that are proposed on Auckland Council's closed landfills are compatible with the health, safety and environmental risks presented by the sites. The Closed Landfill Management Team is part of the Engineering & Technical Services Unit in the Infrastructure & Environmental Services Department.

There are three types of Asset Owner Approval (**Table 1**) depending on the type of activity or the project's stage. Information to be provided with the application varies depending on the type of AOA.

An AOA is issued as a letter with a set of conditions that the applicant agrees to and is required to comply with. Some conditions are generic and usually apply to all AOA. These are listed in **Table 2**. Specific conditions may also be added.

An AOA is to be obtained prior to the works or activity commencing. Other approvals may be required such as Community Facilities landowner approval or right of entry, resource consents, or building consents.

The Closed Landfill Management Team will endeavour to respond to your request for AOA within two weeks and issue the AOA within four weeks of receiving all information necessary to process the application. Timeframes may vary with workload.

The Closed Landfill Management Team may undertake site visits from time to time to confirm that the AOA conditions are being met.

An AOA is required for all works and the majority of activities on high-risk closed landfill sites, but generally only for works on medium-risk closed landfills (see **Table 3**). An AOA is **not required** for works or activities on low-risk closed landfills or for the activities listed in **Table 4**. Please notify the Closed Landfill Management Team of works not requiring AOA through <u>closedlandfills@aklc.govt.nz</u>.

The closed landfill risk classifications are included in **Table 5** and the list of Auckland Council closed landfills is included in **Attachment 1**.



Table 1: Types of AOA and information to be provided

| AOA type | Description | Information to be provided by applicant (as applicable) |
|--|--|---|
| Approval in principle | Used when early project endorsement is required to assist with project approvals such as resource consent applications. | Completed AOA application form Description of proposed project including expected earthworks, effects on closed landfill assets, intrusion into fill and timeframe Concept Design Report, where appropriate Approval of Works will still be required once the scope of the actual works is known. |
| Approval for works on a closed landfill | Used to assess the impact of specific works on a closed landfill. Obtained prior to physical works commencing. Includes investigations. | Completed AOA application form Map showing key features of works Final detailed design drawings Other consents/approvals issued Construction methodology Site, contamination, asbestos, or other management plans and controls for Table 6 hazards Site access requirements and timing Existing investigation reports and risk assessments |
| Approval for an activity on a closed landfill | Used to assess the impact of activities, including public events, on a closed landfill. | Completed AOA application form Description of activity including expected audience and duration Event management plan List and location (map) of structures and equipment |



| 1 | A copy of the AOA and all referenced documentation should be held on site and available for use at all times. |
|----|--|
| 2 | The Closed Landfill Management Team provides asset owner approval for the works on the basis of the information provided by the Applicant. |
| 3 | This approval does not constitute the granting of resource consent for the purposes of the Resource Management Act 1991, Land Owner Approval or Right of Entry. |
| 4 | No potential ignition sources, including smoking, that are not otherwise addressed in this AOA, are permitted. |
| 5 | The Applicant must ensure suitable health and safety controls are in place to control hazards associated with the closed landfill. |
| 6 | The Closed Landfill Management Team reserves the right to withdraw the approval or add further conditions if conditions or works on site change. Changes proposed to the approved works or activity should be provided to the Closed Landfill Management Team for review and approval prior to these works commencing. |
| 7 | The Applicant is responsible for notifying the Closed Landfill Management Team in writing a minimum of three working days prior to commencement of the physical works or specific activity on the site. |
| 8 | The Applicant will repair any damage to the closed landfill surface and other closed landfill infrastructure as agreed with the Closed Landfill Management Team. |
| 9 | The following incidents shall be reported to the Closed Landfill Management Team immediately: Any unintentional damage to the closed landfill surface or infrastructure Health and safety incidents or environmental discharge incidents on the closed landfill Any new hazards related to the closed landfill or its assets that are identified during the works or activities Accidental discovery in accordance with the Auckland Unitary Plan rules E11.6.1 and E12.6.1. |
| 10 | A breach of any AOA condition may result in the withdrawal of Auckland Council's permission to carry out the works or activity until the breach is resolved. |
| 11 | The servants or agents of Auckland Council should be permitted access to the property at reasonable and mutually agreed times for the purpose of carrying out inspections, surveys, investigations, tests, measurements, audits or taking samples. |
| 12 | This written approval expires one (1) year from the date of the issue of this letter. |



Table 3: Works and activities requiring asset owner approval

| Works / Activity | AOA required | Comment |
|--|--|---|
| Works with ground intrusion such as excavation, drilling, investigations, planting or temporary in-ground | High-risk sites | These works have the potential to damage closed landfill infrastructure or provide a preferential pathway for leachate or landfill gas to be discharged. |
| installations. | Medium-risk sites (depending on scale) | With the variety of projects occurring on closed landfills, the Closed Landfill Management Team will assess the need for an AOA on medium-risk sites based on the scale of the project and potential impact of the project on the closed landfill. |
| Events, and activities that are not considered as everyday use of a park or reserve (with an underlying closed landfill). | High-risk sites | Events may introduce ignition sources that need to be controlled due to the potential presence of landfill gas. Examples of ignition sources include open flames, generators, lighting and sound equipment, food stalls, BBQ, hangi and fireworks. |
| | | Activities that have the potential to damage closed landfill infrastructure should be sited away from these assets. The Closed Landfill Management Team can provide site plans showing the location of assets. |

Table 4: Works and activities NOT requiring Asset Owner Approval

| Works / Activity | Comment |
|--|--|
| Regular maintenance activities by Community Facilities or other Auckland Council departments that do not require ground intrusion such as: Mowing Spraying Weed eating Mulching | These maintenance activities are unlikely to damage closed landfill assets or result in the discharge of landfill gas or leachate. While an AOA is not required, health and safety controls for closed landfill hazards must be considered. |
| Emergency and utility repair works. | Contact the Closed Landfill Management Team when undertaking these works (preferably before work starts) to discuss site-specific hazards, protection of assets and consent requirements. |
| Leases, easements, land transactions and long- term activities. | Please contact the Closed Landfill Management Team. |
| Works and activities on low-risk closed landfill sites. | Closed landfill hazards are unlikely to be encountered. Contingency measures are recommended to cover accidental discovery of contamination. |

CLOSED LANDFILL ASSET OWNER APPROVAL

GUIDANCE NOTES AND APPLICATION FORM



| Works / Activity | Comment |
|---|--|
| Development and activities occurring exclusively on privately owned land adjacent to Council-owned closed landfills. | AOA is restricted to Auckland Council-owned closed landfills. The Closed Landfill Management Team would be an affected party and would need to be contacted as part of any landowner approvals. While an AOA is not required, health and safety controls for closed landfill hazards must be considered. |
| Low-impact activities as agreed with the Closed Landfill Management Team (not applicable to restricted-access sites). | Some low-impact activities may be agreed with the Closed Landfill Management Team to go ahead without an AOA, provided they are unlikely to affect or be affected by the closed landfill. |

Closed landfills and hazards

Closed landfill sites are classified as high, medium or low risk (see **Table 5**) based on the type of fill, associated hazards, and consent requirements.

Closed landfills present hazards that are not usually encountered on a park or construction site, which may not be immediately obvious from the surface. Hazards that may be encountered are detailed in **Table 6**. Site-specific hazard information may also be available from the Closed Landfill Management Team.

The Applicant is responsible for managing hazards associated with their works or activities.



Table 5: Auckland Council closed landfill classification

| Classification | Description |
|----------------|--|
| High risk | Predominantly municipal waste landfills with organic material that breaks down resulting in settlement, landfill gas, and leachate |
| | Potential hazards when undertaking works or events include uncovering landfill waste, contaminated soil, landfill gas, leachate and unstable ground |
| | Most of these sites have long-term discharge consents and infrastructure to manage discharges (e.g. leachate collection systems, gas alarms, soil cover) |
| Medium risk | Construction and demolition fills, managed fills, informal fill sites. Includes some older and smaller municipal waste landfills |
| | Potential hazards when undertaking works include contaminated fill, contaminated water and unstable ground |
| Low risk | Sites with predominantly clean (assumed) soil fill |
| | Potential hazards when undertaking works include unstable ground |

Table 6: Closed landfill hazards

| Source | Hazards | Comments |
|--|--|---|
| Landfill gas (methane, hydrogen sulphide, carbon monoxide, carbon dioxide, reduced oxygen, etc.) | Fire and explosion Chemical contaminant Asphyxiation Nuisance odours | Landfill gas may be generated by the waste and can accumulate in voids within the landfill. Landfill gas can build up in enclosed spaces including pipes, manholes, sumps and excavations, or spaces beneath buildings or structures placed on or set into the landfill. Different landfill gases have different properties, and may require different gas detectors to identify. |
| (High-risk sites, some medium risk sites) | | Electrical equipment, machinery and flames are examples of ignition sources that could cause fire or explosion. |
| Landfill waste and contaminated soils (High and medium-risk sites) | Chemical contaminant Biological contaminant Physical hazards including asbestos and sharps | The waste or contaminants may not be adequately isolated from the surface, resulting in contaminants and physical hazards on the surface. Contaminants may not be visible. Waste or contamination may be encountered in excavations. Soils that overlay the landfill waste may also have |
| | | contaminants (which may not be visible). |
| Leachate (High and medium-risk sites) | Chemical contaminant Biological contaminant | Contaminated liquid can be present within the landfill but can also contaminate surface water or groundwater where it discharges. The contaminants may not be visible. Leachate from high-risk sites tends to have higher |

CLOSED LANDFILL ASSET OWNER APPROVAL



GUIDANCE NOTES AND APPLICATION FORM

| Source | Hazards | Comments |
|--|--|---|
| | | contaminant concentrations than from medium-risk sites. |
| Unstable ground including steep slopes, uneven ground, soft ground and voids (High, medium or low-risk sites) | Physical hazard, i.e. slip, trips and falls Instability | Inadequate compaction and decomposition has resulted in variable settlement and voids in the waste at some sites, meaning the site surfaces can be very uneven. Some sites have overly steep slopes. Heavy equipment may not be suitable in some areas. |
| Monitoring and maintenance activities for the closed landfill (High-risk sites) | Physical hazard | Vehicles, equipment and people involved in monitoring and maintenance may be present. |
| Closed landfill infrastructure | Physical hazardElectrical hazards | Closed landfills often include monitoring wells, leachate and gas collection systems, and other infrastructure. They can be low to the ground (trips) or include electrical or other hazards. Infrastructure can include spaces where gas and other hazards can build up. |



Attachment 1: Council-owned closed landfills (September 2019)

These sites can be viewed on Council's Intranet GIS or location maps can be provided by CLFM.

| High-risk sites | | | |
|--|--|--|---|
| North | | Central | |
| Barry's Point Chelsea Estate Heritage Park Goodall Reserve/Hamatana Marginal Strip Hatfields Beach Millwater Parkway | Ngataringa and Dacre Parks Warkworth Depot West Hoe Road (Sunnyheights Subdivision) Western Reserve Whangaparaoa Road Whangateau Landfill | Basque Park (Exmouth Street) Galway Street (Onehunga) Glendowie Park (Riddell Road) MOTAT, Seddon Fields and Meola Reef Reserve Mt Albert War Memorial Reserve Newmarket Park | Ngahue Reserve Phyllis Reserve Pikes Point (East and West) Seaside Park (Brady Road Tahapa Reserve Tawaipareira Reserve Waikowhai Park Gloucester Park |
| Archibald Park | Singer Park | South Kitchener Road Stormwater | Mayfield Park |
| Ceramco Park | Taipari Strand | Reserve (Tuakau; Manga) | Ngati Otara Park |
| Corban Reserve | Te Rangi Hiroa/Birdwood Depot | Kohuora Park and Lendenfield Reserve | Ray Small Park (Elliott Street |
| Helensville River Reserve (Mill Road) | The Concourse Strand | Martyn Farm Estate (Helland | Waimana Reserve |
| Jack Colvin Park | (Selwood Road) | Drive) | |
| Manawa Wetland Reserve (Margan Avenue) | Waitakere Recovery & Recycling Centre | | |
| | | | |
| Muriwai Regional Park | Waitakere War Memorial Domain (Bethells Road) | | |

| High-risk, restricted access sites (Closed Landfill Management Team induction required) | | | |
|---|---|--|--|
| North | Central | | |
| Lawrie Road Rosedale Tip Site | | | |
| West | South | | |
| Kay Road Waimauku | Greenmount Piggotts Hunua Gorge | | |



Medium-risk sites

| Ashton Road Ashton Road Street Landfill Paremoremo Scenic Park (Harvey Wright Fields) Cambri Reserve Cament Works Cament W | North | | | |
|--|--|---|---|--|
| Antion Road Initial Street Fundadu Initial Stre | | | Central | |
| Bridge Avenue Reserve and Te Atatu Boating Club Coletta Esplanade (Central Park Dr) Clayburn Reserve Craigavon Park Queen Mary Reserve Crum Park Rata Street Esplanade Rerewai Reserve Delta Esplanade Rewarewa Esplanade Glen Eden Depot Shays Reserve Harbour View Reserve Kelvin Strand (Gill Ave) Springbank Esplanade Ken Maunder Park Kelvin Strand (Gill Ave) Ken Maunder Park Lavelle Reserve Lavelle Reserve Levy Reserve Levy Reserve Levy Reserve Levy Reserve McLeod Park McLeod Park and Wolverton Esplanade McLeod Park and Wolverton Esplanade Portage Road Esplanade Revarewa Esplanade/ McNaughton Way Span Farm Esplanade Springbank Esplanade Kei Win Strand (Gill Ave) Kei Wirihana Reserve Levy Reserve | Ashton Road Birkenhead War Memorial Park (Harvey Wright Fields) Cambria Reserve Cement Works (Wilson Road) Deep Creek Reserve Duck Creek Road Reserve (Stillwater; Doctors Creek) | Street Landfill Paremoremo Scenic Reserve Plymouth Reserve Rawene Road Reserve (Highbury Works Depot) South Cove Whangaripo Valley Road | Reserves (Panorama Road) Auckland Domain (Stanley Street) Blockhouse Bay Recreational Reserve (Whitney Street) Brown Reserve Colin Maiden Park Cox's Bay Reserve Fowlds Park Grafton Cemetery East and West (Symonds Street) Grey Lynn Park Little Rangitoto Reserve (Upland Road) Martyn Wilson Fields and | Street) Morrin Road Nixon Park Pascoe's Quarry Reserve Shore Road (Thomas Bloodworth Park, Ayr, Shore Road, Wharau and Waitaramoa Reserves) Taylors Hill Reserve (Sacree Heart) Vermont Reserve Vic Cowen Park Waiatarua Reserve Waiata Reserve (Combes Street) |
| and Te Atatu Boating ClubOlympic Park and Wolverton Esplanade ReserveBeach RoadEsplanade west)Clayburn ReservePortage Road Esplanade ReserveBlack Bridge Reserve (Old Quary Road)Matakawau Recreation and Plantation ReserveClayburn ReservePortage Road Esplanade ReserveColin Dale Motorsports Park (Prices Road)Mountfort ParkDaytona StrandRerewai ReserveColin Lawrie FieldOmana ParkDaytona StrandRerewai ReserveElm ParkOruarangi Road Esplanade (Prices Road)Oruarangi Road Esplanade ReserveDelta EsplanadeRewarewa Esplanade/ McNaugthon WaySpan Farm EsplanadePaul Place Reserve (Dale Motorsports Park (Prices Road)Oruarangi Road Esplanade ReserveDelta EsplanadeRewarewa Esplanade/ McNaugthon WaySpans ReservePaul Place Reserve (Dale Crescent)Harbour View ReserveSpans ReserveFavona Road Reserve and Harania InletPohutakawa Park (Whitford Bridge)Henderson Valley ParkSpargo ReserveHope Farm Esplanade (Robert Allan Road)Potts Road Esplanade Reserve (Clifton Road)Keilvin Strand (Gill Ave)Springbank Esplanade Swanson Scenic ReserveHope Farm Esplanade (Robert Allan Road)Reeves Park (Udys Road)Kewir ReserveTangiwai ReserveLaureston/Halycon Esplanade Reserve (Great South Road)Rivernia Place Esplanade ReserveLavelle ReserveTe Atatu South Park Wirihana ReserveLaebank Park Lawson ParkRooseville Park (Ngahere Road)Lavy ReserveTe Atatu South Park Wirihana Rese | West | | South | |
| (Kingfisher PI) • The Dale (Coxhead Road) | Coletta Esplanade (Central Park Dr) Clayburn Reserve Craigavon Park Crum Park Daytona Strand Delta Esplanade Drury Street Esplanade Glen Eden Depot Harbour View Reserve Henderson Valley Park Kelvin Strand (Gill Ave) Ken Maunder Park Kowhai Reserve | Wolverton Esplanade Reserve Portage Road Esplanade Queen Mary Reserve Rata Street Esplanade Rerewai Reserve Rewarewa Esplanade/ McNaughton Way Shays Reserve Span Farm Esplanade Spargo Reserve Springbank Esplanade Swanson Scenic Reserve Tangiwai Reserve | Black Bridge Reserve (Old Quarry Road) Colin Dale Motorsports Park (Prices Road) Colin Lawrie Field Elm Park Ennis Avenue Reserve Favona Road Reserve and Harania Inlet Harania/Marys Foreshore Reserve (Harania Avenue) Hope Farm Esplanade (Robert Allan Road) Kiwi Esplanade Laureston/Halycon | Matakawau Recreation and Plantation Reserve Mountfort Park Norana Avenue Reserve Omana Park Oruarangi Road Esplanade Reserve Paul Place Reserve (Dale Crescent) Pohutakawa Park (Whitford Bridge) Potts Road Esplanade Reserve (Clifton Road) Reeves Park (Udys Road) Riverhills Park |



Low-risk sites

| North | Central |
|---|--|
| Park Reserve | Harbutt Reserve Ian Mckinnon Drive Reserve (Randolf Street) Koraha Reserve (Abbots Way) Melville Park Millen Avenue Esplanade Reserve Mountain Road and Khyber Pass Reserves Newton Road Onehunga Bay Reserve Point Erin Park, Jacobs Ladder, St Mary's Bay Walkway (Mercer Street) Warren Freer park |
| West | South |
| Henderson Valley Scenic Murillo Place Reserve (Candia Road) Opanuku Reserve Kelman Square | Bledisloe Park Botany Park (Botany Road) Ennis Avenue Reserve (Riverhills School) Laxon Esplanade Reserve (Bairds Road) Lloyd Elsmore Park (Bells Road) Springs Road Reserve Tamaki Bay Drive Reserve (Riverlea Road) Tiraumea Reserve |



Application form

| | APPLICANT DETAILS |
|--|--|
| DEPARTMENT OR ORGANISATION: | |
| CONTACT NAME: | |
| Please include Auckland Council Project Manager if applicable | |
| DDI or MOBILE: | |
| E-MAIL ADDRESS: | |
| | APPLICATION DETAILS |
| APPLICATION TYPE: | Approval in principle for works on a closed landfill |
| | Approval for works on a closed landfill |
| | Approval for an activity on a closed landfill |
| ADDRESS / SITE (S): | |
| (where the works or activity will take place) | |
| CONTRACTOR / SUBCONTRACTOR DETAILS | |
| PLANNED START DATE: | |
| WORKS OR ACTIVITY: Brief description | |



| WORKS / ACTIVITY CHECKLI | ST | | | |
|--|---|------|-------------|---------|
| Item | Information / documentation to be provided | Atta | <u>ched</u> | |
| All works/activities | • Мар | Yes | N/A | No |
| | | | | |
| Design | Drawings, cross sections | Yes | N/A | No |
| Design | | | | |
| | Planting list | Yes | N/A | No |
| Planting | Limitation: large trees, food plants. Consider planter boxes. | | | |
| | Maximum depth of each excavation. | Yes | N/A | No |
| | Reinstatement details. | | | |
| Excavation | At least 300mm clean cover should remain; engineered | Max | Depth | ı (all) |
| | caps must be restored to the same or better condition. | | | |
| | Excavations that penetrate the base of the landfill should be sealed with bentonite at the base. | | | |
| | Source/type | Yes | N/A | No |
| Soil importation | | | | |
| | Planned disposal location | Yes | N/A | No |
| Soil disposal | | | | |
| Die elizatellatien | Evidence of consideration of landfill gas and | Yes | N/A | No |
| Pipe installation | leachate migration in trench and pipe designs | | | |
| | Evidence of consideration of settlement, | Yes | N/A | No |
| Foundations | landfill gas and leachate (e.g. acidity) effects in the design | | | |
| | | | | |
| Electrical work | Evidence of consideration of landfill gas | Yes | N/A | No |
| | hazards | | | |
| Installation of piezometers | Intended installation details | Yes | N/A | No |
| | | | | |
| ATTACHMENTS: | | | | |
| List and attach documents supporting this application (only documentation other than in the above table) | | | | |
| | SIGNATURE OF APPLICANT | | | |
| SIGNATURE: | | | | |
| NAME: | | | | |
| | | | | |
| DATE: | | | | |