To: The Chief Executive Otago Regional Council Private Bag 1954 Dunedin 9054

## Submitter: South Coast Neighbourhood Society Incorporated ('SCNS')

- 1) This is a submission on an application from the Dunedin City Council for a resource consent (reference RM20.080) for activities associated with the proposed Smooth Hill landfill at the corner of Big Stone Road and McLaren Gully Road, Brighton (the Application).
- 2) SCNS is not a trade competitor for the purposes of section 308B of the Resource Management Act 1991 (RMA).
- 3) SCNS wish to be heard in support of this submission and is happy to present jointly with other parties seeking the same relief.
- 4) We do wish to be involved in any pre-hearing meeting that may be held for this application.
- 5) We do request that the local authority delegates its functions, powers, and duties to hear and decide the application to 1 or more hearings commissioners who are not members of the local authority.
- 6) We have served a copy of my submission on the applicant.

## The specific parts of the application that our submission relates to are:

- Discharge Permit to discharge waste and leachate onto land, and discharge landfill gas, flared exhaust gases, dust and odour to air, and to discharge water and contaminants from an Attenuation Basin and sediment retention ponds, for the purpose of the construction and operation of a Class 1 landfill.
- Water Permit to take of up to 87 m3/day of groundwater, and use of up to 50 m3/day of groundwater, for the purpose of managing groundwater collected beneath a Class 1 landfill.
- Water Permit to divert surface water within the Ōtokia Creek catchment for the purpose of the construction and operation of a Class 1 landfill and associated road realignment works.
- Water Permit to dam water within an Attenuation Basin for the purpose of the construction and operation of a Class 1 landfill.
- Land Use Consent to alter, reclaim and place structures on, the bed of waterbodies and wetlands for the purpose of road realignment works.

## Our submission:

We are the South Coast Neighbourhood Society Incorporated. We have been established to represent the many and varied interests of the residents of Brighton and its wider surrounds. Our opposition to the DCC's application stems from the fundamental change this application will have to our communities way of life and the health of the environment we live in.

- 1) We oppose the Discharge of Waste and Leachate onto land and the discharge of water and contaminants from the Attenuation Basin and sediment retention pond.
  - a) There is a significant risk of leachate escaping into Otokia Creek and out to sea. This risk has not/ and cannot be adequately addressed by the DCC.
    - i) The ecological assessments carried out by the Dunedin City Council ('DCC') do not specifically address the impact that Leachate escaping (other than a small amount of seepage through the liner) would have on the downstream environment. Furthermore, the hazards which could cause leachate to be released into the environment have not been adequately assessed.

## High Rainfall Events

- **ii)** The environmental reports do not provide detailed analysis of the impact high rainfall events will have on the landfill, its retention ponds and the potential for leachate to be realised in a flood event.
- iii) A very small sample of rainfall analysis and its effects on flows downstream has been provided by the DCC<sup>1</sup>. The duration of the sampling is insufficient to give a full assessment of the potential risks involved.
- iv) With Global warming presenting a real risk of increased and more severe weather events in the future, the risk for accidental release is only going to increase in the future.

## Earthquake Risk

- v) The potential risk posed by an earthquake to the proposed landfill site has not been fully investigated.
- vi) The DCC's Geotechnical Factual Report<sup>2</sup> states the nearest active fault is the Alpine fault which is over 200km from the site. They have relied on this as justification for the decision not to undertake a Site Specific Seismic Hazard Assessment.
- vii) This fails to take into account nearby fault lines (most notably the Akatore fault which is just 6km from the proposed landfill) which are much closer to the proposed landfill and

<sup>&</sup>lt;sup>1</sup> Appendix 9 – Surface Water Assessment Report, Pg.24

<sup>&</sup>lt;sup>2</sup> Appendix 6, Geotechnical Factual Report, Pg. 8

the effect these could have on the stability of the landfill<sup>3</sup>. These faults present a very real risk of leachate being uncontrollably released if there was a major seismic event along one of these faults.

## Inadequate Investigations undertaken by DCC

- viii) The Otago Regional Council ('ORC') records in their questions to the DCC<sup>4</sup> that only 50% of the proposed landfill area has been surveyed in the geotechnical report provided by the DCC.
- ix) We are concerned that the DCC is making decisions with regards to this proposed landfill on incomplete data and inadequate reports, despite being requested on a number of occasions by the ORC to explain and rectify inadequacies in this information.
- x) The time to undertake these investigations is before a consent application is made.
  Without these investigations being adequately carried out, a complete assessment of the effects this application cannot be made.
- **xi)** The ORC's experts echo these concerns, for example in one place stating they have little confidence in the ecological effects and conclusions reached in the DCC's assessments<sup>5</sup>.
- xii) We have no confidence that the DCC has completed their due diligence to the standard expected for such a potentially hazardous piece of infrastructure and have real concerns that the potential impacts of the proposed landfill could be disastrous to the Otokia creek, Brighton beach and the wider Brighton community as a whole.

# b) Impact on the Otokia Creek and Wetlands, Brighton Beach and the Local and Wider Community.

#### <u>Leachate</u>

- i) The risk of leachate entering the Otokia Catchment can never be completely eliminated.
- ii) One of the components of leachate that the SCNS is particularly concerned about is the disposal of persistent organic pollutants including elemental mercury, PFAs, dioxins, POP-PBDEs amongst others. These compounds are toxic they do not go away and they can build up over time in the environment. Even small leaks over time of compounds such as these could have an ongoing and detrimental impact on the environment.
- **iii)** The DCC has failed to undertake adequate investigations to demonstrate that the risk at this site is even fully understood. This is particularly important as it relates to the increased risks associated with flooding and earthquakes.
- iv) If there is a significant rupture and/or flood the ensuing release of leachate would have a detrimental impact on the entire catchment all the way to Brighton beach.
- v) There has been no discussion of the potential impact that leachate escaping from the landfill would have in the DCC's environmental assessments.

<sup>&</sup>lt;sup>3</sup> (<u>https://www.odt.co.nz/lifestyle/magazine/shaky-ground</u>).

<sup>&</sup>lt;sup>4</sup> Further Section 92 Response, 5 August 2021 Pg.4

<sup>&</sup>lt;sup>5</sup> ORC Notification Recommendation Report 13 September 2021, Pg 45

## Impact of Leachate on the Otakia Creek and Wetlands

- vi) Degradation and potential destruction of the downstream wetlands from leachate contamination is a very real prospect if this landfill proposal goes ahead.
- vii) These wetlands are home to two at risk fish Species (Longfin Eel and Redfin Bully) and two endangered and at risk bird species (White Heron and Black Stilt) amongst a large number of others that make the wetlands their home.<sup>6</sup>
- viii) We are concerned that situations such as the die off of a large number of fish and sea birds which occurred in the Kaikorai Lagoon earlier this year (which happens to border the DCC's current landfill in Green Island) have a very real risk of being repeated in Otokia catchment if this landfill is allowed to go ahead.
- **ix)** We have little confidence that the DCC can manage the proposed landfill to the standard required to protect the Otokia creek.

## Brighton Beach and Community

- x) Brighton beach and its surrounding area is a popular destination for many local families as well as the wider Dunedin Community with hundreds visiting the beach and area, especially over the summer months.
- xi) If there is a fear of leachate contamination the local community and visitors would be less likely to use Otokia creek and Brighton Beach. This will have a significant negative impact on the wellbeing of Brighton and the wider Dunedin area.
- xii) Currently the beach and coast surrounding the beach are used for swimming, surfing, diving, fishing, boating and other recreational activities. If leachate were to escape from the landfill this could have a significant impact on water quality at Brighton beach and the health and safety of all its users.
- **xiii)** With respect to fishing and collection of Kaimoana contamination from the landfill could result in food safety issues with seafood collected.
- **xiv)** Even the perception created by having a landfill directly upstream will have a significant impact on the use of this regionally popular beach. The DCC has made no (or even given any consideration to) assessment of the social effects this proposed landfill will have on the Brighton Community as a whole.

<sup>&</sup>lt;sup>6</sup> As shown by eDNA testing carried out by the Environmental Protection Agency in the Otokia Wetlands (<u>https://www.epa.govt.nz/community-involvement/open-waters-aotearoa/newsletter/feature-</u>2/?fbclid=IwAR3jHjgAc8QNQRMR5kBgwEW1yBJQvsY\_rvY-KYx8ip-RwK2p2YaElL37fDo)

## 2) We oppose the discharge of waste to land and landfill gas, flared exhaust gases, dust and odour to air.

#### a) Fire Risk

- Landfills in general carry an increased fire risk. The build-up of exhaust gases, together with the type of waste (potentially batteries and other self-combustible waste) present a very real fire risk. Together with an increased risk of fires starting and the depth waste is buried makes fires harder to extinguish.
- ii) The area directly surrounding the proposed landfill is largely made up of pine plantations, interspersed with residential dwellings. During the summer months when fire risk is at its highest a landfill would considerably increase the risk of a major fire breaking out. This has the potential to burn through thousands of hectares of forestry and people's homes, risking people's lives.
- **iii)** The nearest fire Brigade, Brighton is 10 minutes away and would struggle to contain a fire of any significance until the Dunedin and other neighbouring Brigades arrived. This could take well over half an hour allowing any fire to increase in size dramatically.
- iv) The DCC's application does not adequately deal with the risk of fire and has no fire management plan. It is unacceptable that a detailed firefighting and mitigation plan has not been submitted.

#### b) Bird Strike Risk – Commercial Aircraft/ Flight Training

- The proposed landfill would be situated 4.5 km from Dunedin International Airport. The International Civil Aviation Organisation recommends that landfills be located no closer than 13km. This is due to the risk of bird strike to aircraft.
- ii) Commercial aircraft often fly over or near the proposed landfill site on their approach into Dunedin airport. As detailed in the DCC's report they pass over the proposed site at a height that would risk bird strike from birds in the area.
- iii) Flight training is also a common use of the airspace above the hills in which the landfill is proposed. Student pilots often carry out relatively low (down to 500 feet above ground level) manoeuvres in their training over the area.
- iv) The DCC's application deals with how they would intend to mitigate birds and in particular seagulls from gathering at and above the landfill and therefore creating a risk to aircraft. It is difficult to believe that these measures could totally remove all bird risk, as landfills are effectively a beacon for scavenging birds and rodents. Despite the DCC's plans to mitigate, there still remains a very real risk and any risk is unacceptable given the risk to life it involves.
- v) It is unacceptable that in order to push through this proposal the DCC would place any risk to life on airport users.

#### c) Risk to Native Eastern Falcons

- i) The 'at risk' Native Eastern Falcon nest and breed in the area of the proposed landfill. The risk to these birds cannot be understated; there is a real risk that the proposed landfill will impact on breeding pairs of these birds which have been observed to have nested on the proposed site in the past.<sup>7</sup>
- ii) The ORC's Expert notes that:

'magnitude and level of ecological effect pre mitigation is set at the Ecological District (ED) and National level and may result in the underestimation of ecological effect onsite. The level of effect assessment in terms of falcon being considered low if they are breeding onsite seems to be an underestimation if viewed at the site scale.<sup>8</sup>

iii) Any risk to this rare native species is unacceptable, both on a national level and a local level. Biodiversity in New Zealand is increasingly under threat and should be protected at every opportunity.

## d) Lizard Habitat

- i) Five species of lizard are potentially present in the proposed landfill site. Of those five species four are at risk and declining. In particular, the Southern Grass Skink, which is classed as having a high ecological value is very likely to be present in the proposed landfill site and road verges affected by this application.<sup>9</sup>
- **ii)** It is impossible to know the impact this landfill will have on the local lizard population, as the report notes:

"The extent of lizard translocation / habitat enhancement is required is dependent upon the as-yet unknown population size and current locations of lizards"<sup>10</sup>

iii) All native lizards are protected under the Wildlife Act 1953. As part of protecting biodiversity we submit lizards in the proposed site should be protected to the fullest extent. Without a full understanding of the population effected we would submit it is impossible to draw conclusions on the best way to protect these lizards without first understanding the extent of their habitat.

#### e) Landfill odour

i) The odour caused by landfills can be smelled from miles away. On a windy day the rancid odour from the DCC's current landfill at Green Island can be smelt at the beach near Waldronville and even further afield.

<sup>&</sup>lt;sup>7</sup> Boffa Miskell, 'Smooth Hill Landfill, Assessment of Environmental Impacts for Updated Design August 2020 (Update May 2021). (**Boffa Miskell AEI**) Pg 37

<sup>&</sup>lt;sup>8</sup> Tompkin and Taylor; Technical Review to Inform Notification Decision: Smooth Hill Landfill - Appendix 11 -Ecology Assessment. Pg 5

<sup>&</sup>lt;sup>9</sup> Boffa Miskell AEI, Pg 32,33

<sup>&</sup>lt;sup>10</sup> Boffa Miskell AEI, Pg 152

- **ii)** The Application provides for odour mitigation measures, however with the increase in residential activity, especially towards Brighton from the proposed landfill it is inevitable that nuisance odours will occur to the detriment of local inhabitants.
- iii) For owners who have purchased and developed dwellings near the proposed landfill there has been no information provided about the designation or the possibility of the proposed landfill being nearby in LIM reports produced by the DCC and relied upon by prospective purchasers to determine any potential risks or hazards to their properties. We submit that it is unfair, now, to burden those owners with the stress and negative effects of having a landfill nearby when they should have been advised of this potential impact prior to purchasing their properties.

## 3) Due to the Impact of Reduced flow into the Otokia Catchment we oppose the permits to:

- i) take ground water for the purpose of managing groundwater collected beneath a Class 1 landfill;
- ii) to take of up to 87 m3/day of groundwater, and use of up to 50 m3/day of groundwater;
- iii) to divert surface water within the Ōtokia Creek catchment for the purpose of the construction and operation of a Class 1 landfill and associated road realignment works;
- iv) to dam water within an Attenuation Basin for the purpose of the construction and operation of a Class 1 landfill.

We also oppose the Land Use Consent to alter, reclaim and place structures on, the bed of waterbodies and wetlands for the purpose of road realignment works.

## **Reduced Flow**

- v) By the DCCs own admission, alteration of 200 to 300m of wetlands will occur downstream from the proposed landfill.
- vi) In the ORC's Technical Review to Inform Notification Decision<sup>11</sup> it is noted:
  *"The magnitude and level of effect for the ecosystem component of downstream effects swamp wetland and downstream effects valley floor marsh wetland appear to be understated without sufficient supporting information. The construction and management of the landfill has the potential to significantly alter hydraulic connectivity or input into any downstream wetlands which could cause a decrease in wetland area and the alteration or loss of species assemblages."*
- vii) We submit that the loss and/or alteration of any further wetlands as a result of this application is completely unacceptable as it would have a significant impact on the biodiversity of the area. As listed above a number of fish and bird species (some of which carry endangered status) live downstream in the marshes and wetlands and this proposal could have a severely detrimental impact on their habitat.

<sup>&</sup>lt;sup>11</sup> Tonkin and Taylor, Smooth Hill Landfill - Appendix 11 - Ecology Assessment

## National Environmental Standards for Freshwater

- viii) The Application does not align with the 'National Environmental Standards for Freshwater'. In their application the DCC has admitted that, had it been lodged four days later these more stringent environmental standards would apply.
- ix) The DCC's application lacks detail in critical areas as demonstrated throughout this submission and the ORC's further repeated requests for further information. The DCC's application has effectively been rushed through and is incomplete.
- x) It is our submission that this has been done solely in an attempt to avoid the stringent standards that would have been imposed by the National Environmental Standards for Freshwater.

## **General**

- **xi)** Given the lack of information, incomplete assessments, inadequate conditions and potentially significant adverse effects discussed above the proposal is:
  - (1) Inconsistent with the National Policy Statement Freshwater Management 2020
  - (2) Inconsistent with the Partially Operative Otago Regional Policy Statement 2019
  - (3) Inconsistent with the Proposed Otago Regional Policy Statement 2021
  - (4) Inconsistent with the Otago Regional Plan: Water and Waste.
  - (5) It is also likely to be inconsistent with the National Policy Statement for Indigenous Biodiversity when it becomes operative.
- **xii)** Equally the proposal does not achieve the purpose of the Resource Management Act 1991.

#### **Relief Sort:**

We are seeking for the consent authority to decline the DCC's application in its entirety – no landfill.

15.11.2021

Simon Laing (Society Officer)

On behalf of South Coast Neighbourhood Society Incorporated (50065094) (NZBN: 9429049319934)

#### Signature/s of submitter/s

(or person authorised to sign on behalf of submitter/s)

(Date)

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