CULLINAN & ASSOCIATES
Environmental and green business attorneys

**TRANSMITTED BY EMAIL**

| | | | |
|---|---|---|---|
| | | Date: | 13 August 2026 |
| To: | **SLR Consulting** | Your ref: | SLR Project No.: 720.05018.00052 |
| Att: | Nicholas Arnott | wescoWMF@slrconsulting.com | |
| CC: | **Department of Water & Sanitation** | Your ref: | WU36453 |
| Att: | Ms Zandile Naka | NakaZ@dws.gov.za | |
| CC: | **Western Cape Department of Environmental Affairs and Development Planning** | Your ref: | 16/3/3/6/7/2/A1/2/3034/24 |
| Att: | Mr Zaahir Toefy | DEADPEIAadmin@westerncape.gov.za | |
| CC: | **Department of Forestry, Fisheries & the Environment** | Your ref: | 12/9/11/04062011170 9/9/N/Wesco Waste Management Facility (Pty) Ltd |
| Att: | Ms Mishelle Govender | migovender@environment.gov.za | |
| From: | Sarah Kvalsvig | sarah@greencounsel.co.za | |
| Total pages: | 2 + 2 annexures | Our ref: | M078-001 |

Dear all

**RE: OBJECTIONS BY MELKBOSSTRAND RATEPAYERS ASSOCIATION TO INTEGRATED WATER AND WASTE MANAGEMENT PLAN TECHNICAL SUMMARY REPORT IN SUPPORT OF THE WESCO WASTE MANAGEMENT FACILITY: WATER USE LICENCE APPLICATION**

1. We act for the Melkbosstrand Ratepayers Association (MRA).
2. Please find attached our client's comments on and objections to the Integrated Water and Waste Management Plan (IWWMP) Technical Summary Report submitted to you in support of an application for a water use licence by Wesco Waste Management Facility (Pty) Ltd in respect of proposed water uses on Portion 1 of the Farm Brakkefontein No. 32.
3. Our client's objection comprises:
   3.1. Objection document; and
   3.2. specialist review of the IWWMP report by Peter Rosewarne.
4. Please acknowledge receipt and advise us of the next steps in the process as soon as possible.

Yours sincerely

**CULLINAN & ASSOCIATES INCORPORATED**
Per: SD Kvalsvig

**IWWMP – MRA responses**

| Issue | Page/Document | Notes |
|---|---|---|
| **BACKGROUND** | **IWWMP pg 18 - 19** | **WESCO Comment:** The proposed Wesco WMF has been designed in alignment with the National Waste Management Strategy, the Western Cape Integrated Waste Management Plan and in accordance with all relevant legislation.<br><br>**MRA Response**: Disagree that this is within the National Waste Management Strategy and Western Cape Integrated Waste Management Plan. WESCO has proposed that the lifespan of the WMF is between 30 and 50 years. This does not align with the National Waste Management Strategy 2020, as per Barbara Creecy on page 8, who promotes a future South Africa without landfills.<br><br>In addition, in accordance with CoCT Integrated Waste Strategy, on page 23, it states that the City is progressively growing programmes to move away from landfill. In 2024, their diversion from landfill rates was already at 31.53%. MRA therefore contends that the long term strategy is not to increase the number of landfill sites.<br><br>**WESCO Comment**: The proposed WMF aims to offer waste recovery, recycling, treatment and disposal services for general and hazardous wastes from municipal and private clients.<br><br>**MRA Response**: MRA disagrees that municipalities are the target market as, if it ever was, WESCO would have taken heed of national BEE targets with specific reference to ownership.<br><br>In addition, it is also a well-known fact that the treated hazardous waste ends up in the landfill in a diluted format thus making these additional services offered sound good but in reality Melkbosstrand, and |

| | | |
|---|---|---|
| | | surrounding communities, will have to deal with those hazardous chemicals for years to come, long after the site has been closed down.<br><br>**WESCO Comment**: Wastes would be transported to the proposed Wesco WMF via road and/or potentially by rail.<br><br>**MRA Response**: One of the reasons of selecting this site is the rail access so why is it now only a potential that the rail will be used.<br><br>WESCO have not addressed the situation if the rail cannot be used. How will WESCO clients transport 500 tonnes of waste per day. If it cannot be transported by rail, then it will need to be transported by road and the effect has not been evaluated.<br><br>**Figure 1-1**: Only indicates the current nuclear plant but does not include the extension of the new power plant (known as Nuclear-1) in respect of which an environmental authorisation (EA) has already been granted.<br><br>**WESCO Comment**: Wesco aims to restore and rehabilitate portions of the site and, where possible, establish terrestrial and aquatic biodiversity corridors that maintain ecological connectivity with nearby conservation areas.<br><br>**MRA Response:** WESCO is vague with their assertion that the corridors will be made only where possible. WESCO have previously stated that the corridors will be developed. |
| **Extent and Location** | **IWWMP pg 19** | **WESCO Comment:**<br>• A stretch of the Donkergat River (located within a clearly defined channel) and the associated gently sloping riparian margins, which give way, on the right-hand bank, to terrestrial areas, invaded in places with *Acacia saligna* but supporting stands of indigenous terrestrial vegetation (these terrestrial areas provide |

| | | |
|---|---|---|
| | | supportive habitat and potential ecological corridors into and along the river, adding to overall habitat complexity and diversity). Remaining patches of Critically Endangered Atlantis Sand Fynbos.<br>• Remnant Swartland Shale Renosterveld.<br>• Semi-intact Cape Flats Dune Strandveld near the Donkergat River.<br><br>**MRA Response:** WESCO underplays the value and viability of the ecosystems by repeatedly referring to the ecosystems as 'invaded', 'remnant' or 'semi-intact'. |
| **Stewardship Agreement and Management Commitment** | **IWWMP pg 23** | **WESCO Comment:** Wesco will prepare a draft Biodiversity Management Plan to document the establishment, vision and aims, proposed extent, the management objectives and monitoring commitments, and an implementation plan for the Biodiversity Conservation Area. The draft Biodiversity Management Plan will be shared with CapeNature and further consultations will be held to finalise the Stewardship Agreement process.<br><br>**MRA Response**: Not enough detail on the Biodiversity Management plan. No timelines or scope have been included. Also, no feedback or input will be requested from the community which goes against the community engagement aspect of the application. |
| **Public Participation** | **IWWMP pg 25** | **1.3.3 WESCO** have documented the minimum requirements regarding public participation.<br><br>**The MRA** does not believe that the process was meaningful for the following reasons:<br>• The SLR public documents page provides the WULA, Draft IWWMP (noted as available for 60-day review from mid-June 2026), ESIA versions, specialist studies, appeals from other I&APs, and public participation records. These should be cross- |

| | | |
|---|---|---|
| | | referenced; the 1 200-page IWWMP (or main integrated planning volume) exemplifies the accessibility challenges already pleaded.<br><br>• Inadequate public participation/accessibility (voluminous IWWMP without sufficient plain-language support); failure to demonstrably consider operator history/enforcement record as relevant under s.24O(1); potential misalignment between EA conditions and WULA scope/mitigations; heavy post-licence governance dependency without robust safeguards.<br><br>• The document is dominated by specialist terminology (hydrogeological modelling, contaminant transport, risk matrices, MHI scenarios, etc.) at a level requiring expert training. An average South African citizen (particularly in affected communities) lacks the technical background to interpret key findings or formulate informed comments. This directly impedes the "reasonable opportunity to comment" required by the EIA Regulations and NEMA s.2(4)(f). The absence of comprehensive plain-language chapter summaries or community capacity support exacerbates the barrier already pleaded in Ground 6.<br><br>• The production and reliance on a 1 200-page IWWMP (or main integrated planning volume) as part of the WULA process exemplifies and compounds the public participation failures already pleaded. While Non-Technical Summaries were provided, the core technical material (particularly the IWWMP) is voluminous, highly technical, and not reasonably accessible to ordinary interested and affected parties without substantial resources or expert assistance. This directly contravenes the requirement for *meaningful* public participation under NEMA s.2(4)(f) and EIA Regulations 2014 (regs 23 and 44). The competent authority could not rationally have been satisfied that I&APs (particularly communities in Atlantis and Melkbosstrand) |

| | | |
|---|---|---|
| | | had a reasonable opportunity to comment on all relevant information.<br>• While Non-Technical Summaries were provided for the broader ESIA process, the core technical material in the IWWMP – which directly informs water use licensing, leachate management, groundwater protection and operator governance – is voluminous, highly technical and not reasonably accessible without substantial resources or expert assistance. This directly contravenes the requirement for meaningful public participation under NEMA s.2(4)(f) and EIA Regulations 2014 (regs 23 and 44). The competent authority could not rationally have been satisfied that I&APs had a reasonable opportunity to comment on all relevant information. |
| **Box 1-1: Key Issues Relevant To The Iwula Identified During The EIA** | **IWWMP pg 26** | We believe that this box is incomplete as some of the issues that the MRA raised have not been included. For example:<br>• Potential impact of pollution/contamination impacts on critically endangered flora<br>• The presence of very extensive faulting in the site bedrock and medium to very high permeability/hydraulic conductivities, as described in the WULA, are potential fatal flaws according the DWAF's Minimum Requirements. |
| **Location** | **IWWMP pg 29** | **WESCO Comment:** A portion of the subject property overlaps with the 5 km Precautionary Action Zone (PAZ) associated with the Koeberg Nuclear Power Station (see Figure 1-2). As the Koeberg Emergency Plan (GN 962, 2010) potentially restricts development within the PAZ, Wesco has elected to locate project infrastructure for the proposed Wesco WMF outside of the 5 km PAZ. The balance of the subject property, and thus the proposed Wesco WMF project infrastructure, would be located |

| | | |
|---|---|---|
| | | within the Urgent Protective Action Zone (UPZ), which extends from 5 to 16 km from Koeberg Nuclear Power Station.<br><br>**MRA Response**: WESCO has failed to take into account the Nuclear-1 development.<br><br>• The 5 km Precautionary Action Zone (PAZ) for Koeberg Nuclear Power Plant (KNPP) is indicated and development of the site within this area is therefore excluded. However, there is no mention of the Nuclear-1 development planned for adjacent to the KNPP, on its northern side. As pointed out in Peter Rosewarne's 2025 review of the Hydrogeology report, a 5 km PAZ for this installation would impinge on the proposed site development (see Figure 1a attached). The EA for this NPP has been approved by the regulatory authorities. How does this square with the Koeberg Emergency Plan, or update thereof? Representatives of Eskom and the National Nuclear Regulator (NNR) attended public meetings during the EIA phase but there is no record in the WULA of any concerns raised by them regarding the PAZ. Emergency planning zones for Nuclear-1 are still to be agreed with the NNR.<br><br>• The failure to take into account the emergency planning zones related to the proposed Nuclear-1 NPP is a potential fatal flaw. The part of the site covered by the PAZ for KNPP was specifically excluded from the proposed development. The EA for the Duynefontyn site, including Nuclear-1, has been approved by the regulatory authorities and Government has stated its intention to go ahead with a fast-tracked procurement of new nuclear reactors. The NNR and Eskom are still to agree on emergency planning zones for Nuclear-1. |

| | | |
|---|---|---|
| **Current Land Use** | **IWWMP pg 30** | **WESCO Comment:** However, average annual rainfall in this region is low and soils are poorly suited to crop farming.<br><br>**MRA Response:** By WESCO's own admission, the rainfall in the area is low but WESCO then proposes using scarce water resources for the operation of the WMP.<br><br>**WESCO Comment:** Successful crop and livestock farming in this area requires access to irrigation<br><br>**MRA Response:** The point made that successful farming relies on irrigation is an unsubstantiated assumption.<br><br>**WESCO Comment:** Such uses largely ceased in the early 2000s and the property has not been used productively since.<br><br>**MRA Response:** Productivity is not due to the land itself but to the management of the land by the various owners and the numerous changes to the ownership of the land since the early 2000's. Degrading of land is directly linked to ownership; not the land itself. |
| **Surrounding Land Uses** | **IWWMP pg 30** | **WESCO Comment**: Duynefontein, the nearest residential area, is located 2 km from the south-western corner of the subject property, extending southwards and connecting to the Melkbosstrand residential area.<br><br>There are approximately 50 residences within the Duynefontein suburb that are located with 4 km of the development footprint.<br><br>**MRA Response:** The effect on the Duynefontein community is being underplayed by WESCO as they assert, in one instance, that Duynefontein is located 2km from the south-west corner of the subject property and then they assert that Duynefontein residents are located |

| | | |
|---|---|---|
| | | within 4km of the development footprint. This means that the number of Duynefontein households are understated. We cannot accurately assess the effect on Duynefontein as WESCO has not conducted an independent worst case scenario modelling and its effects on that community. |
| **Conservation Areas** | **IWWMP pg 33** | The MRA notes that the Three Fountains conservation area is not included. We stand by our view that developing a hazardous waste plant among 5 conservation areas is environmentally irresponsible. |
| **Responsible Persons** | **IWWMP pg 37** | **WESCO Comment:** Wesco Waste Management Facility (Pty) Ltd Broad Based Black Economic Empowerment (BBBEE) certificate is included in **Appendix B**.<br><br>**MRA Response:** We note on the BEE certificate, that there is 0% black ownership representation and 0% black female ownership representation. This does not align with the South African government's black ownership targets for doing business with government. |
| **Water Uses to be applied for as part of the proposed Wesco WMF** | **IWWMP pg 39** | **Table 3-1**<br><br>**WESCO Comment:** Under 21c and 21f. WESCO is proposing discharge of waste water into the Donkergat River.<br><br>**MRA Response**: We are opposed to any discharge of waste water into the Donkergat River. The Donkergat River feeds into a wetland – there will be a cumulative impact of waste water entering the ephemeral wetland which is already compromised by the Waste Water Treatment Works (WWTW) and will be to the detriment to the Sout River flowing down to the Van Riebeeckstrand beach.<br><br>We are of the view that there is no plausible reason to merely discharge water into the Donkergat River as it is possible to purify waste water for re-use. Water scarcity is acknowledged throughout the application and |

| | | |
|---|---|---|
| | | the responsible thing to do, is to ensure that water sources are protected and no water is wasted. |
| **Development and Operational Phasing of the Proposed Wesco WMF** | **IWWMP pg 44** | **Table 4-1**<br><br>The MRA contends that the timelines are misleading as WESCO asserts that activities will commence in 2026 although there are no licenses in place or an approved change of land use as of August 2026. These timelines cannot be met.<br><br>In addition, in accordance with CoCT Integrated Waste Strategy, on page 23, it states that the City is progressively growing programmes to move away from landfill. In 2024, their diversion from landfill rates was already at 31.53%. MRA therefore contends that the long term strategy is not to increase the number of landfill sites.<br><br>**Figure 4-1:** Proposed effluent treatment discharge location is in the middle of the biodiversity conservation area. How will WESCO prevent the animals within the conservation corridor from accessing that discharge location? |
| | | |
| **The Class A waste disposal facility ancillary infrastructure** | **IWWMP pg 49** | **WESCO Comment:** Landfill gas extraction and treatment infrastructure (if or when required in the future)<br><br>**MRA Response**: This does not align with the Environmental Authorisation condition 29.6 which states that landfill gas extraction as soon as practically possible – not if or when required in the future.<br><br>**WESCO Comment**: Cover material is deposited at the working face and pushed across the compacted waste to cover the waste as soon as practically feasible to prevent windblown litter, breeding of vectors and rodents and malodours being released from the landfill cell |

| | | |
|---|---|---|
| | | **MRA Response**: This does not align with the Environmental Authorisation condition 29.4 which states that cover material must be applied daily. |
| **Rehabilitation and Capping of Filled Cells** | **IWWMP pg 51** | **WESCO Comment:** After completion of each phase of the waste disposal facility, each of the cells will be capped and rehabilitated progressively while disposal continues to the cells in the next phase. Wherever possible, operations would aim to achieve the levels and slopes for the final landform and a final capping would be applied. In some instances, cells may be capped with an intermediate capping until the levels or slopes of inter-related cells have been matched. Once the final levels are achieved in accordance with the landfill design, the relevant area will be capped with the final capping system.<br><br>All capped areas (intermediate or final) would be vegetated, with locally appropriate species, to ensure soil and slope stability, and to maximise evapotranspiration. The capping and vegetation would be maintained to ensure that surface water runoff will not pond on the capped area and instead be drained off the site and directed to the clean stormwater system.<br><br>**MRA Response**: Is the final capping system permeable or not? MRA requests a technical explanation of a cross section of the capping layer. |
| **Final Landform and Post-closure Site Management** | **IWWMP pg 52** | **WESCO Comment:** The proposed closure of a waste disposal facility would require an application for a waste management licence in terms of the NEM:WA, which would necessitate an impact assessment and public consultation process. The final end land use will be determined through a consultative process.<br><br>**MRA Response**: What does the consultative process encompass? Who will be consulted? What is the timeline? What happens in the event of a dispute as to what the final end land use is? |

| | | |
|---|---|---|
| **Effluent Treatment Plant (ETP) and Seasonal Discharge** | **IWWMP pg 57** | **WESCO Comment:** Thus, provision will also be provided for a discharge pipeline (less than 100 mm diameter and less than 1 km in length) for the discharge of treated effluent into the Donkergat River, if permitted. Authorisation for the discharging of treated effluent will be sought as part of the Water Use License application.<br><br>**MRA Response**: Our position is that we are vehemently opposed to the discharge of any water into the Donkergat River given the additional chemical load it will put onto the river, the wetlands, soil, fauna and flora, the fact that the IWWMP describes the river as "significantly modified" by upstream WWTWs, and given the fact that purification solutions are available which will allow for re-use given that the site is in a water scarce region. |
| **Construction and demolition waste beneficiation plant** | **IWWMP pg 63** | **WESCO Comment**: The plant will further process this waste through screening and crushing processes to produce recovered building aggregates, for use in foundations and road construction (and potentially for cover material for the landfill site).<br><br>**MRA Response**: We do not know what the noise impact will be as no noise evaluation study of the crusher has been conducted. We do not know what the noise impact will be on the surrounding areas. |
| **Dust Suppression** | **IWWMP pg 66** | **WESCO Comment:** Water for dust suppression is primarily sourced from treated water from the effluent treatment plant, sewage package plant and from borehole BRK4 when there would be shortage from the other sources.<br><br>**MRA Response**: WESCO has consistently mentioned that this is a water scarce area but then they are suggesting using borehole water for dust suppression. This is unacceptable to the MRA. |
| **Water Consumption and Sources** | **IWWMP pg 66** | **WESCO Comment:** The Wesco WMF will require 55kl/d of portable water that will be supplied by the CoCT bulk water supply pipeline. |

| | | |
|---|---|---|
| | | As per the estimated water demand, the Wesco WMF will require approximately 127kl/d of non-potable water for purposes such as dust suppression, vehicle washing and other treatment purposes.<br><br>**MRA Response**: In the EA, WESCO stated that they need 50,000 kl of water per year. However, this has now increased to 66,430 kl (potable and non-potable) which is more than 30% over what they have stated in the EA.<br><br>Potable water demand of 55 $m^3$/day is stated to be sourced from a City of Cape Town pipeline that runs along Brakkefontein Road. However, there doesn't appear to be a back-up plan if supply is throttled back due to drought or if the City faces a Day Zero scenario in the future. This take-off point is near the end of this supply pipeline and therefore site supply is at high risk under the above scenario. |
| **Non-potable Demand** | **IWWMP pg 68** | **WESCO Comment:** W6 is a small, isolated, and highly degraded feature with minimal ecological function or biodiversity value, and it will be lost as a result of the construction of the waste facility (see Section 5.7.4).<br><br>**MRA Response:** We believe the spring should not be closed as it contributes to the water source in an extremely water scarce area. As WESCO has mentioned on numerous occasions, this is a water scarce area but then they are suggesting closing off a clean water source.<br><br>**WESCO Comment**: The borehole BRK4, has a measured water level of 24.93 m and a drilled depth of 75 m. It intersects the deep aquifer system within fractured quartzite and shale bedrock, yielding of 4 litres per second. |

| | | |
|---|---|---|
| | | **MRA Response**: Borehole BRK4 will be used to supply non-potable water and has a reported yield of 4 L/s. This is high by South African standards and rather undermines the classification of this aquifer, the Malmesbury Group Aquifer, as a poor aquifer, although that classification takes into account the relatively poor quality of this groundwater. |
| **Estimated water demand for the proposed Wesco WMF** | **IWWMP pg 68** | **Table 4-10**<br><br>**WESCO Comment:** The landfill will use 72,000 kl of a total 126,602 kl water per day for dust suppression and fire fighting.<br><br>**MRA Response:** The National Waste Management Strategy does not support the development of landfills so to pursue a license for a landfill in a water scarce area is counter-intuitive. The total amount of water that will be used by the landfill is 57% of the total water consumption. |
| **Temperature, Precipitation, and Evaporation** | **IWWMP pg 77** | **MRA Response:** The data set is too narrow. Three years is just a snapshot and not a comprehensive timeline. |
| **Wind Speed and Direction** | **IWWMP pg 78** | **MRA Response:** The data set is too narrow. Three years is just a snapshot and not a comprehensive timeline. |
| **Climate change scenarios** | **IWWMP pg 80** | **WESCO Comment**: An overview of the available climate change scenario information for the project area, sourced principally from the Climate Change Statement (Airshed, 2025), is provided below.<br><br>**MRA Response**: Under climate, there is no discussion or quantification of "wet" or drought" periods to cover climate extremes. The tables only cover 3 years of monthly rainfall data. Although climate change is investigated in the SSR/EIA for the Duynefonteinn NPP site, these terms were scientifically determined and quantified. This approach should be applied to the WULA. |
| **Geology** | **IWWMP pg 84** | **MRA Comment:** Note our expert's (Peter Rosewarne) report. |

| | | |
|---|---|---|
| **Hydrogeology** | **IWWMP pg 89** | **MRA Comment:** Note our expert's (Peter Rosewarne) report. |
| **Groundwater levels and direction of groundwater flow** | **IWWMP pg 89** | **WESCO Comment:** Interpretation of the direction of groundwater flow shows groundwater flows in a south-westerly direction at an average hydraulic gradient of 0.0096. Shallow aquifer discharges to the Donkergat River in the east and towards the Atlantis Aquifer to the south-west were observed.<br><br>**MRA Response**: We dispute the average hydraulic gradient of 0.0096 per our expert's (Peter Rosewarne) report dated March 2025 that was submitted as per of the EA. |
| **Wesco Water Quality Monitoring** | **IWWMP pg 93** | **WESCO Comment:** Wesco has been conducting water quality monitoring on the site for a number of years. The water quality monitoring results for 2025 is attached in Appendix J.<br><br>**MRA Response**: The water quality monitoring results are not attached so this is factually incorrect. WESCO have added a note in red: "Will be included after completion of public participation process". There is no explanation as to why I&APs cannot see and comment on the results.<br><br>Also, why are WESCO limited the results to only 2025 if the monitoring been conducted for a number of years? How many years have they been monitoring? |
| **Summary of the Freshwater Assessment** | **IWWMP pg 102** | **WESCO Comment:** In the event that the mitigation measures recommended in this project were implemented, the Section 21c and 21i water uses applicable to the Donkergat River would be likely to be associated with low risk only.<br><br>**MRA Response**: We dispute that the addition of treated water by WESCO into the Donkergat River will not change the low risk categorisation. However, the Donkergat is already under stress so adding treated water will increase the risk and not keep the risk categorisation as low. |

| | | |
|---|---|---|
| **Socio-Economic Profile** | **IWWMP pg 102** | **MRA Response:** There are no conclusions drawn in support of this application. |
| **Hydrological Impact Assessment** | **IWWMP pg 121** | **WESCO Comment:** The 1:50-year and 1:100-year floodlines for the Donkergat River are indicated in Figure 6-1.<br><br>**MRA Response:** Note that the floodlines (blue,dotted) both flow in a west/south-westerly direction towards the KNPP NR and Duynefontein, like in the 2024 flooding episode. From a WMF construction perspective no effort is made using for instance, berms to contain the contaminated stormwaters.<br><br>**WESCO Comment**: The WBM was developed using GoldSim software (version 14.0), with a daily timestep calculation.<br><br>**MRA Response**: We cannot evaluate completely as the assumptions used in this model are not shown. |
| **Hydrological Impact Assessment** | **IWWMP pg 122** | **WESCO Comment**: For the fully developed Phase 1 footprint, the results indicate that discharge is only expected during the winter months, with a peak average flowrate of approximately 50 m3/d from the capped cells during the month of June.<br><br>**MRA Response**: Under no circumstance should there be any allowance for wastewater, even though treated, to enter the Donkergat river/catchment area. The already sensitive area cannot be subjected to more "grey water" even though treated. |
| **Hydrological Impact Assessment** | **IWWMP pg 123** | **WESCO Comment:** Figure 6.2 Site water balance<br><br>**MRA Response**: We cannot evaluate completely as the assumptions used in this model are not shown |
| **Hydrological Impact Assessment** | **IWWMP pg 124** | **WESCO Comment**: The Donkergat River runs along the eastern boundary of the subject property and conveys runoff to the downstream |

| | | |
|---|---|---|
| | | environment. Baseline water quality in the Donkergat River is poor (refer to Section 5.7.3) and there are few receptors making direct use of the river up to the confluence with the Sout River.<br><br>MRA Response: This is not a reason to dump grey water into the riverbed which will reduce quality even further. The word "receptor" is just a reflection of the level of interaction at the PPP stage (currently there is a nil interaction) with the surrounding communities. In DWAF 1998, community participation is rated 1 of the 3 important factors to manage; this factor may equate to a fatal flaw. |
| **Hydrological Impact Assessment** | **IWWMP pg 125** | **WESCO Comment**: Deterioration of water quality during the construction phase is associated with:<br>• Clearing of the surface area and site preparation for the new infrastructure which would result in the exposure of soil surfaces to potential erosion. When a large area of vegetation is cleared and topsoil disturbed, it exposes loose material which is susceptible to erosion.<br><br>• Water contamination could result from poor management of chemicals and waste during the construction phase. Typically, the following pollution sources exist: building materials, lubricants, and sewage or wastewater from the builders' camp etc.<br>• Water quality deterioration due to discharge of dirty water into the catchment around the project site when unplanned events occur, some of the containment structures may overtop and overflow, causing dirty material to wash into nearby streams.<br><br>**MRA Response**: Observing the construction timeline, WESCO have made it clear that construction will continue over an extended period(Table 4,1) and cell construction will take place almost the entire lifespan of the site. MRA is opposed to this very long timeline. |

| | | |
|---|---|---|
| | | **WESCO Comment**: Thus, the significance prior to mitigation is **High.** After implementation of mitigation measures, the significance can be reduced to **Low**.<br><br>**MRA Response**: MRA objects to high significance items being mitigated to low. If one looks at other waste sites within the Westcoast Biodiversity Zone, then it is clear that other waste sites, many years on, are still struggling with these issues. |
| **Hydrological Impact Assessment** | **IWWMP pg 127** | **WESCO Comment**: Storage areas to be located greater than 50 m from any remaining natural drainage lines and drainage pathways which discharge to the environment.<br>• In case of a discharge incident that could result in the pollution of surface water resources, an emergency response procedure must be implemented.<br>• Maintenance of vehicles/plant to be done in a bunded area.<br><br>**MRA Response**: MRA disputes this. See figure 6,1 when overlayed with the construction plan |
| **Hydrological Impact Assessment** | **IWWMP pg 128** | **WESCO Comment**: WESCO to operate the CSWD near empty and always maintain the required freeboard to full supply level.<br><br>**MRA Response**: MRA disputes this. We cannot see why WESCO would build dams that can handle 44 thousand cubic meters and you will run them near empty. This is folly.<br><br>**WESCO Comment**: Return runoff from capped areas of the waste disposal facility to the environment, but only once monitoring indicates that the quality is acceptable for discharge. |

| | | |
|---|---|---|
| | | **MRA Response:** MRA disagrees with this. Why then would WESCO classify runoff from capped areas as clean under Section 6.2?<br><br>**Section 6.3 Peter Rosewarne report is more appropriate.** |
| **Hydrological Impact Assessment** | **IWWMP pg 140** | **WESCO Comment**: To quantify and analyse the potential risk of waste disposal, along the groundwater pathway to receptors, an integrated flow and chemical mass transport systems model was developed in the Afry Intelligent Scenario Modelling (AISM) software. The model simulated the (i) waste source depletion post operation, and (ii) release rate based on a leaching and source depletion model for the four chemical control parameters. The modelling is undertaken until the peak breakthrough concentration is reached (i.e. maximum impact), to quantify the potential risks to humans and the environment.<br><br>**MRA Response:** Again, data based on desktop studies and modelling. Assumptions were not shared to be perused by the I&AP's. |
| **Hydrological Impact Assessment** | **IWWMP pg 144** | **WESCO Comment**: The advective (mobile) chemical parameter Chloride, from the CWC representing a salt, has a **low** risk on the Donkergat River. The Cl plume arrives at the Donkergat River at concentrations in excess of the SANS 241 Drinking Water Standards. However, the Donkergat and Sout (± 4 km downstream) River systems both naturally have saline water with elevated salt content (NaCl). The mean baseline Sodium (319 mg/l) and Chloride (375 mg/l) concentrations of the Donkergat River exceeds the drinking water limits, making it unfit for human consumption.<br><br>**MRA Response:** How can the standard I&AP understand these graphs and technical terminology? Absolutely no effort was made by Wesco or SLR to get the communities together to explain, in layman's terms, this intricate information. |

| | | |
|---|---|---|
| | | **Section 6.4 Freshwater Resources - Infinity Environment report in EIA is more appropriate** |
| **Hydrological Impact Assessment** | **IWWMP pg 158** | **WESCO Comment**: The specialist acknowledges that such impacts are less problematic as they would only occur during periods of natural dilution due to major rainfall events in the catchment, thereby diluting any potential contamination.<br><br>**MRA Response**: High rainfall may dilute the contaminated inflow but it also changes the characteristics of the river into one of continuous flow. The Melkbosstrand community sees this every year as the Sout river rises and flows into seas adjacent to marine protected areas. |
| **Hydrological Impact Assessment** | **IWWMP pg 159** | **WESCO Comment**: This said, it is clear from the 2022 and 2024 site visits that ongoing discharges from the Atlantis WWTW have already resulted in significant changes in riverine habitat as a result of changing the hydroperiod.<br><br>**MRA Response**: This site is established and cannot be changed. This does not mean that another attack on this very sensitive environment must be allowed. |
| **Mitigation Measures** | **IWWMP Sections 6.2 to 6.4.3** | **MRA Response:** Non-sensical mitigation measures are shown throughout the document and are very governance heavy. Not all measures are implementable and is a theme that goes throughout the document.<br><br>**To elaborate:**<br><br>The document contains numerous assumptions in risk assessment, impact prediction, leachate generation, liner performance, monitoring effectiveness, and climate resilience that are not fully mitigated or technically substantiated with site-specific long-term data, sensitivity |

| | | |
|---|---|---|
| | | analysis, or proven precedents. Many “proposed mitigations” are described at a high level (management plans, monitoring programmes) without demonstrated technical substantiation or contingency for failure. This pattern is consistent with the deficiencies already identified in the Cullinan ESIA responses and Peter Rosewarne’s groundwater review.<br><br>e.g. Allegation that land/flora is degraded: “Degraded” is repeatedly used in land/agricultural assessments without balanced disclosure of land-use history. - The term is deployed in land capability and site suitability sections to portray the land as having negligible agricultural value. In context, this creates an impression of “useless” land, while the documented history of deliberate long-term fallowing to facilitate rezoning from agricultural to industrial use reveals selective and potentially biased presentation. This is a relevant consideration under NEMA s.24O(1) and environmental justice that was not transparently addressed.<br><br>e.g. Farm land not suitable for agriculture<br><br>e.g Multiple instances exist where risks (leachate generation rates, liner longevity, monitoring effectiveness, climate impacts on recharge/contamination, fire/explosion effects on water resources) are assumed to be manageable or low-residual without site-specific long-term data, sensitivity analysis, or proven mitigation performance. Proposed mitigations are frequently high-level (“implement monitoring plan”, “maintain liners”) without technical substantiation or contingency for failure.<br><br>These assumptions are not technically substantiated with site-specific long-term data, sensitivity analysis, or proven precedents. |

| | | |
|---|---|---|
| | | Unsubstantiated assumptions, high-level mitigations without contingency or substantiation, selective "degraded" narratives, heavy post-licence governance dependency (130+ continuous monitoring and management actions), and reliance on future plans – when read with the documented enforcement history of the corporate group (Gauteng landfill actions and other incidents), raises serious questions whether the applicant (and broader Séché/Interwaste group) meets the fit and proper person requirements analogous to those in NEM:WA s.59. NEMA s.24O(1) and the principles of integrated environmental management require the licensing authority to consider the applicant's compliance history, competence and ability to comply as relevant considerations. This history and pattern were not demonstrably considered. |
| **Groundwater Management** | **IWWMP pg 180** | **MRA Response**: In Peter Rosewarne's expert report dated July 2026, he notes that this site must be the most faulted site ever considered for a hazardous waste facility (see Figure 4-11 reproduced below and Table 4-3 of that report). All faults are shown as terminating at the site boundaries or Donkergat River, which is unrealistic. The presence of so much faulting is a potential Fatal Flaw in terms of the Department of Water Affairs and Forestry's *Minimum Requirements for Waste Disposal by Landfill* (DWAF, 1998).<br><br>The presence of very extensive faulting in the site bedrock and medium to very high permeability/hydraulic conductivities, as described in the WULA, not my interpretation, are potential fatal flaws according the DWAF's Minimum Requirements.<br><br>Under subsection 5.4.2, it is stated that the site is underlain by faults, shear and breccia zones, and is characterised by "…medium to very high permeability/hydraulic conductivities". These are hardly the type of subsurface conditions conducive to the siting of a hazardous waste |

| | | |
|---|---|---|
| | | facility.<br><br>Subsection 5.4.3 Seismicity, does not reference the Council for Geoscience's seismicity study done for the KNPP. This is publicly available as part of the documentation for the Duynefontyn NPP EIA.<br><br>Subsection 5.7.3 on surface water quality doesn't have any information on the relative flows at the various sampling points, rendering meaningful interpretation of the data presented moot.<br><br>6.3.1 notes that hydrogeological modelling was undertaken for a 10 000 year period, which is entering the realm of science fiction. A period of 100 years maximum would be more appropriate.<br><br>The boundaries used for the numerical modelling are merely a square based on latitude and longitude with no allowance for geological, catchment or hydrogeological conditions. The quaternary catchments are not shown and there is no attempt to define groundwater management zones.<br><br>Table 7-6 contains 130 management and monitoring actions for the Wesco WMF manager, all indicated as "continuous" which is quite a workload to keep abreast of.<br><br>Under 7.11.2, Chemical Oxygen Demand is a standard analyte for landfill groundwater monitoring and should be added to the list<br><br>Also under 7.11.2, it is stated that monitoring data should be reviewed but doesn't indicate who by, nor if groundwater monitoring reports must be submitted to the DWS. Field measurement of EC and pH must be carried out. |

| | | |
|---|---|---|
| | | 7.11.7 concerning surface water monitoring, needs to specify measurement/estimation of flow rates at monitoring points.<br><br>The hydrogeology, hydrology, geotechnical and meteorology reports for the KNPP site EIA should have been studied and referenced. They are freely available<br><br>In comprehensive contaminant transport studies for waste disposal sites or any development with an engineered liner designed to contain hazardous liquids, it is standard practise to include a scenario with a leak to assess a worst-case situation. This has not been done.<br><br>MRA cannot see why WESCO must put community and environment at risk if there is technology to meet potable standards given the scarcity of water in the area.<br><br>We are suggesting that they have not applied their minds to changing the water to potable- WESCO would rather risk harm to the community and environment. |
| **Design Report** | **IWWMP pg 241** | **Annexure D**<br>WESCO has not shown what the cumulative effect of all of the dams on the site will be. Has the gradient of the land been looked at? There are no berms included in the design that would provide another layer of protection. We believe that the cumulative impact of the dams are underestimated. |
| **Section 27 Motivation** | **IWWMP pg 220** | **Annexure K**<br><br>Section 27 of the NWA "guides responsible authorities in the exercise of their discretion to issue and to attach conditions to general authorisations and licences" (preamble to part 2 of Chapter 4 of the |

| | | |
|---|---|---|
| | | NWA). In deciding whether to grant a water use licence, "a responsible authority must take into account all relevant factors, including" the factors explicitly mentioned in this section. It is well-established law that the factors in section 27 do not constitute a closed list. The Supreme Court of Appeal has held that "it is clear that s 27(b) and indeed the rest of the Act, requires these factors to be assessed by finding an appropriate balance after evaluating all the factors expressly provided for and others. Neither the Act nor the section attributes any significant weight to any of the factors." (*Makhanya NO v Goede Wellington Boerdery (Pty) Ltd and Another (230/12, 233/12) [2012] ZASCA 205*)<br><br>In order to place the decision-maker in respect of a WULA in a position to undertake this assessment, he or she must be provided with all the relevant information. This has not been done. For the reasons set out below, the MRA therefore regards the consideration of the section 27 factors in the Section 27 Motivation Report in Annexure K to be significantly flawed.<br><br>**Section 27(1) (b): The need to redress the results of past racial and gender discrimination:**<br><br>**Company Ownership**: We note on the BEE certificate for WESCO that there is 0% black ownership representation and 0% black female ownership representation. This does not align with the South African government's black ownership targets.<br><br>**Control of Water License:** Antoine Deffay – Description: White, Male, Non-South African.<br><br>WESCO anticipates that the BBBEE status will improve once operation of the facility commences should the necessary licensing and authorisation be granted. However, it does not appear that the |

| | | |
|---|---|---|
| | | ownership structure of WESCO will change from 0% black ownership representation and 0% black female ownership representation.<br><br>**Section 27(1)(c) Beneficial Use of Water in the Public Interest:**<br><br>At the outset, it is important for the responsible authority to appreciate that this is a commercial venture and is not in the public interest.<br><br>**WESCO Comment**: In addition to the circular economy solutions which will be offered by the proposed Wesco WMF, the City of Cape Town Metropolitan Municipality (along with the general public and businesses) urgently requires additional airspace for the appropriate disposal of municipal and hazardous waste. Thus, the water use required for the operation of the Wesco WMF is in the public interest.<br><br>**MRA Response**:<br>WESCO are basing the need for the WMF on a need and desirability argument which is not accepted by the MRA.<br><br>WESCO states that "The proposed WESCO WMF facility has considered various measures to ensure that there is efficiency in the use of water and protection of water resources for the benefit of the public". The MRA does not consider the proposed water uses to be for the benefit of the public. The proposed water uses are for the commercial benefit of WESCO, while the harm to the environment is suffered by the public.<br><br>According to the IWMMP "The two main water courses the Donkergat River (directly adjacent to the subject property) and the Sout River (located 0.3 km downstream) that is situated close to the site have been significantly modified by upstream wastewater discharges, creating a sensitive aquatic environment that requires strict compliance with catchment management objectives." The Motivational Report admits that the Wesfleur WWTW "discharges treated effluent to the Donkergat |

| | | |
|---|---|---|
| | | River approximately 1.5km upstream of the site. These discharges were originally intended to be limited to emergencies but are currently almost continuous. The Melkbosstrand WWTW discharges into the Sout River."(page 30)<br><br>We submit that the public interest would be better served by addressing the systemic pollution issues in these water courses and rehabilitating them, rather than adding to the pollution in water courses which are already "significantly modified", regardless of whether the effluent is treated to a minimum standard.<br><br>The question of whether the proposed uses are in the public interest also depends on whether the project itself is sustainable considering the basic needs of future generations (see section 2(a)of the NWA). One of the key impacts of climate change in Southern Africa affecting future generations will be water scarcity. The basic needs of future generations include, we submit, access to healthy aquatic ecosystems producing clean water. Annexure K does not fully consider this.<br><br>In light of the Rosewarne findings that the faults underlying the site are a fatal flaw, and there is therefore potential for groundwater contamination, it is not efficient to use water this way even if integrating re-use of water is technically efficient. Nor is there public interest in siting a WMF in close proximity to many residential areas.<br><br>It is not in the public interest that WESCO "reduces reliance on municipal water and supports regional water security, aligning with the principles of sustainable resource management and the public interest." This is a statutory duty.<br><br>**WESCO comment:** "Excess treated effluent will be discharged into the Donkergat River. The discharge will only occur during the wet season (April–October) and will comply with water quality thresholds stipulated |

| | | |
|---|---|---|
| | | by an independent freshwater specialist, while no discharge will be permitted during the dry season. Continuous monitoring of surface and groundwater quality will be undertaken, supported by compliance audits and adaptive management measures outlined in the Environmental Management Programme. These interventions, combined with beneficial reuse of treated effluent for industrial applications and the implementation of a River Management and Maintenance Plan (RMMP)., will safeguard aquatic ecosystems and regional water security."(page 28)<br><br>**MRA response:** We strongly disagree. What will best safeguard aquatic ecosystems is for there to be **no** release of effluent into the Donkergat River. The applicant is attempting to dress up as a benefit the mitigation of environmental impacts that would not exist if the water uses were not authorised. Mitigation measures for a harmful environmental impact cannot be regarded as a public benefit as the establishment of the WMF is not a foregone conclusion. This is a mischaracterisation. The best practicable environmental option would be not to authorise the harmful impacts at all. Compliance to legislative requirements relating to the operation of a WMF is also not a public interest, but a very basic legal duty of the applicant. Statements about the intention of WESCO to comply with the law have no relevance at all to a discussion about whether it is in the public interest to establish a WMF on the site and must be disregarded.<br><br>**Section 27(1)(d) the socio-economic impact – (i) of the water use or uses if authorised; or (ii) of the failure to authorise the water use or uses**<br><br>**WESCO Comment**: The Wesco WMF will provide an estimated 4 900–7 100 jobs during construction and approximately 140 to 160 jobs during operations |

| | | |
|---|---|---|
| | | **MRA Response**: These are indirect jobs at best as WESCO is not a construction company. WESCO cannot guarantee that these are new jobs – they will engage with vendors who will provide their own employees so these jobs may be a continuation of jobs and not new jobs.<br><br>**WESCO Comment**: The majority of the employees (80%) will comprise historically disadvantaged individuals.<br><br>**MRA Response**: WESCO cannot guarantee this as the construction workers are not their employees.<br><br>**WESCO Comment:** References are made throughout to their specialist report by Dr Bloom.<br><br>**MRA response**: We note that the same content that was used in the EIA is included here in Appendix K - we provided extensive comment to Dr Bloom's report. In short, it is our view that the economic benefit is vastly overstated.<br><br>**Description of Socio-Economic Impact:** If it is the intent for WESCO to show the socio-economic benefit of the issuing of the water license, we cannot reconcile the context of this section with the requirements under Section 27. We would like to refer to previous comments as contained in MRA's appeal in the ESIA regarding economic benefits of this development.<br><br>**Section 27(1)(e) Any catchment management strategy applicable to the relevant water resource:**<br><br>**MRA Response:** It is understood that the Donkergat catchment area and wetland is sensitive in that there are currently external factors affecting these water sources. Adding another source of contamination |

| | | |
|---|---|---|
| | | and monitoring that contamination is not going to improve the critical sensitivity of the wetland.<br><br>The fact that WESCO is "mindful" of its duties under the Bill of Rights and the National Water Resource Strategy is a meaningless statement that does not add anything to the discussion of how the section 27 factors should be considered in a decision whether to authorise the WMF.<br><br>**Section 27(1)(f) The likely effect of the water use to be authorised on the water resources and on water users:**<br><br>**MRA Response:** Other water users will be adversely affected by WESCO's daily non-potable water requirement of 177kl per day. This is water scarce area and any increase in the need for water affects all users and surrounding communities. This is underpinned by WESCO's need for approximately 72,000 litres of water per day to operate the landfill, a commercial enterprise.<br><br>We disagree that measures taken by WESCO can "ensure compliance with Section 27(1)(f)" and promote sustainable water management. (para 4.6) A decision-maker in a WULA is not required to assess compliance with the section 27 factors, he or she is required to weigh the factors against each other and decide their relevance. In this case, bearing in mind our specialist's view that the site is not suitable for landfill due to underlying faults, the likely risk is that the containment barriers will fail and the aquifers will be contaminated, which means the likely effect on both resources and other water users will be highly negative.<br><br>**Section 27(1)(h) investments already made and to be made by the water user in respect of the water use in question** |

| | | |
|---|---|---|
| | | With respect to section 27(1)(h) we disagree that the costs of studies that the applicant has undertaken in order to apply for the various authorisations the project needs are the "investments" contemplated by this section of the NWA. All of these were undertaken by the WESCO with full knowledge of the risk that these authorisations might not be granted. WESCO accepted those risks. No weight can be given to this factor, otherwise it would lead to the absurd result that applications have to be granted because the applicant has spent money on the assessments required for the application. From the information available to interested and affected parties, WESCO has made no investments in the site that do not relate to its application for authorisation.<br><br>**Section 27(1)(i) the strategic importance of the water use to be authorised**<br><br>For the reasons set out in the MRA's comment on the Final Scoping and Environmental Impact Report, its view is that the need for a landfill site in this location is very much overstated by the applicant given that a different site was deemed suitable in earlier applications by the City of Cape Town, that other options exist for a landfill site serving the City of Cape Town and that the City is progressively growing programmes to move away from landfill. Hence the strategic importance of the proposed water uses is also overstated.<br><br>**Section 27(1)(k): the probable duration of any undertaking for which a water use is to be authorised.**<br><br>The proposed WMF has a very long life-span (30-50 years) and the nature of a landfill site that accepts hazardous waste is that groundwater impacts must be monitored for many years after it ceases operation. Accordingly, significant weight must be given to this factor in that the impacts on water resources of this development will last for decades |

| | | |
|---|---|---|
| | | and will likely be irreversible. The decision maker must also give proper weight to the fact that the longer a project operates, the less certainty a decision-maker has that the conditions of authorisation, particularly those relating to socio-economic benefits to the community and ongoing monitoring and protection of the environment will be complied with in the long term. These depend on many factors including the will of the current management of the licence holder, its financial stability and technical competence, all of which can and do change over time. A decision maker must consider carefully authorising such long-standing water uses. The MRA's view is that in this case, the potential for irreversible, long term environmental impacts and uncertain benefit to the public requires that the application be refused.<br><br>**Section 27 Conclusion:**<br>**WESCO Comment:** Strategically, the Wesco WMF is a proactive solution to the regions potential waste management crisis, balancing environmental protection, economic growth, and social equity. The authorised water uses are essential to this outcome, making the project compliant with Section 27 of the National Water Act and aligned with the principles of sustainable development.<br><br>**MRA Response**: We do not agree with WESCO's conclusion. It has misconstrued the nature of the section 27 enquiry which is not an exercise in "compliance" but a weighing and balancing of factors. In our view, the project is a commercial venture and there is no public interest in the water uses, no matter how efficiently they are carried out in a technical sense. The need for the project and its strategic importance are over-stated by WESCO as are the socio-economic benefits. On the other hand, the effects on the water resources, particularly the Donkergat River, and on other water users (considering climate change and water scarcity) are understated, particularly considering the decades for which the project will operate, which is a major factor to be considered, and the potentially irreversible effects of groundwater |

| | | |
|---|---|---|
| | | contamination, which in the opinion of the MRA's specialist are likely to occur as a result of the failure of containment barriers due to faults underlying the site, and which constitute a fatal flaw in the application. Accordingly, the MRA's view is that on a proper assessment of the factors mentioned in section 27, the application for a water use licence must be refused. |

| GENERAL COMMENTS | | |
|---|---|---|
| **Natural Water Drainage** | | From a water natural water drainage, the risk to the Melkbosstrand community and in particular, Duynefontein and Koeberg Nature Reserve is too high. This is evidenced by Figure 7-16 which indicates the natural drainage lines to the waste site in a South Westerly direction towards Melkbosstrand and its coast. |
| **EA Condition 18** | | The EA states that a condition that surface or ground water must not be polluted to any actions on the site.<br><br>MRA contends that the water management plan does not meet this condition in that untreated stormwater, treated effluent and treated sewage will be used to suppress dust. There will be a chemical load which equates to pollution. |
| **Fit and Proper Person** | | The report lists but provides limited explicit analysis of the operator's (Séché/Interwaste/Wesco) compliance history or fit and proper credentials. |
| **Minimum Requirements for Waste Disposal by Landfill 1998** | | The IWWMP references the 1998 Minimum Requirements but does not demonstrate full, site-specific compliance. |
| **Use of "degraded"** | | The term is used extensively in land capability, agricultural, and site suitability sections to characterise the land as having low agricultural potential. We contend that the history of a long-term fallow period caused by the owners and not the land itself, reveal an unfair bias. This |

| | | |
|---|---|---|
| | | selective narrative downplays the land's potential and prior productive use and is used to create an impression of inherently "useless" land. |
| **Technical jargon and accessibility** | | The document is heavily laden with technical jargon (hydrogeological modelling, risk matrices, leachate chemistry, MHI scenarios, etc.) at a level far beyond the reasonable comprehension of the average South African citizen without specialist training. This creates a significant barrier to meaningful public participation. |
| | | We have provided extensive prior comments regarding deficiencies in hydrogeological baseline data, impact assessment on the Atlantis Aquifer/Witzands Aquifer Nature Reserve, risk of leachate migration, and inadequate consideration of alternatives and cumulative effects. The IWWMP mirrors the ESIA's conclusions without adequately addressing these critiques or incorporating input from our specialists. |
| **Governance dependency** | | The IWWMP places heavy reliance on future governance measures (monitoring of effective implementation of mitigation measures) which will place an unacceptable burden on surrounding communities. Hence, this creates a high material risk of regulatory failure. |
| **Downgrading of high risks to low risk** | | The risk assessment in the IWWMP downgrades risks (e.g., leachate contamination, groundwater impact) from high/medium to low/very low based on mitigation. The downgrading of high or medium risks on the basis of unproven and impractical mitigation measures creates governance dependency, placing a burden on communities in surrounding areas |
| **Environmental Issues** | | Unsubstantiated environmental mitigation is consistent with the deficiencies already identified in our responses to the Draft and Final ESIA and in Peter Rosewarne's independent groundwater review (dated 24 June 2026). Rosewarne correctly highlights, *inter alia*, unrealistic 10 000-year hydrogeological modelling (a 100-year maximum would be |

| | | |
|---|---|---|
| | | more appropriate), failure to quantify “wet” or “drought” periods with scientific rigour applied in the Duynefonteinn Nuclear-1 EIA, absence of back-up planning for potable water supply under Day Zero or drought scenarios, inadequate consideration of the 2024 flooding events, unrealistic fault termination mapping, high permeability/shear/breccia zones not conducive to hazardous waste disposal, and absence of reference to the Council for Geoscience seismicity study for Koeberg. These are relevant considerations under NEMA s.24O(1) and the precautionary principle (s.2(4)(a)(vii)) that were not taken into account. |
| **Cumulative Effects** | | We would have expected this license application to deal with cumulative effect of other planned developments in the surrounding area. We note that this has not been done. |

PETER ROSEWARNE: GROUNDWATER CONSULTANT

1004 Palm Brook
Century City
7441
South Africa

# REVIEW OF THE SLR CONSULTING WULA REPORT ON THE PROPOSED WESCO LANDFILL SITE NEAR ATLANTIS

For

**Melkbosstrand Ratepayers Association**

**Report No. 2026/07/001** **July 2026**

***Areas of Expertise***

Groundwater Supply, Dewatering, Mining, Subsurface Contamination, Shale Gas, Nuclear Sites and Landfills

m: +27 (0) 82 600 7635 e: prosewarne40@gmail.com

## Contents



### Figures






m: +27 (0) 82 600 7635 • e: prosewarne40@gmail.com

PETER ROSEWARNE: GROUNDWATER CONSULTANT

1004 Palm Brook
Century City
7441
South Africa

# REVIEW OF THE SLR CONSULTING WULA REPORT DATED 11 JUNE 2026

## 1 Introduction

On 22 June 2026, Mr Deon Gorgons, representing the Melkobosstrand Ratepayers Association, forwarded the undersigned the report, "*Integrated Water and Waste Management Plan Technical Summary Report in Support of the Wesco Waste Management Facility Water Use Licence Application,*" (the site) by SLR Consulting, dated 16 June 2026, for critical review. Far from being a 'summary' report, it is all of 204 pages plus 6 technical appendices. I am familiar with this project from my reviews of two versions of the Artesium hydrogeology report in March and July 2025. I am also very familiar with the site area from my work involving the site safety report (SSR) for the Duynefontyn nuclear site for Eskom, which includes the Koeberg Nuclear Power Plant (KNPP), and the EIA for the proposed adjacent Nuclear-1 NPP, from 2008 to 2024.

Overall, the report presents a very thorough and well written account of the proposed waste facility and its surrounding and underlying environment. All phases of site development are described in detail accompanied by detailed drawings. The extent and detail of the proposed engineered structures and facilities almost seem to be too good to be true and progress in their construction will need to be monitored carefully to ensure compliance with any licence conditions issued.

In the comments that follow, the SLR report is referred to as the WULA.

## 2 General Comments

Starting from the Introduction through to the Conclusions, my general comments are as follows:

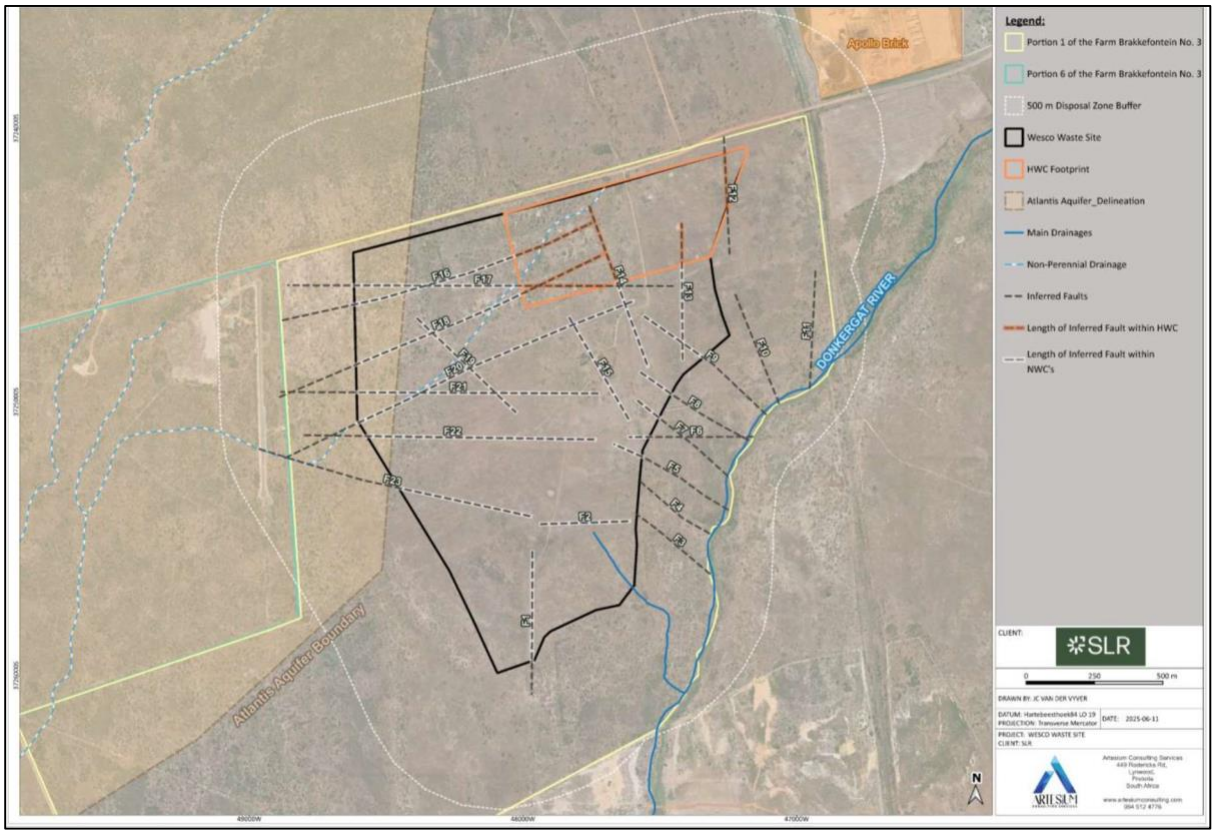
- The 5 km Precautionary Action Zone (PAZ) for Koeberg Nuclear Power Plant (KNPP) is indicated and development of the site within this area is therefore excluded. However, there is no mention of the Nuclear-1 development planned for adjacent to the KNPP, on its northern side. As pointed out in my 2025 review of the Hydrogeology report, a 5 km PAZ for this installation would impinge on the proposed site development (see Figure 1a attached). The EIA for this NPP has been approved by the regulatory authorities. How does this square with the Koeberg Emergency Plan, or update thereof? Representatives of Eskom and the National Nuclear Regulator (NNR) attended public meetings during the EIA phase but there is no record in the WULA of any concerns raised by them regarding the PAZ. Apparently, emergency planning zones for Nuclear-1 are still to be agreed with the NNR.

- Borehole BRK4 will be used to supply non-potable water and has a reported yield of 4 L/s. This is high by South African standards and rather undermines the classification of this aquifer, the Malmesbury Group Aquifer, as a poor aquifer, although that classification takes into account the relatively poor quality of this groundwater.
- Potable water demand of 55 $m^3$/day is stated to be sourced from a City of Cape Town pipeline that runs along Brakkefontein Road. However, there doesn't appear to be a back-up plan if supply is throttled back due to drought or if the City faces a Day Zero scenario in the future. This take-off point is near the end of this supply pipeline and therefore site supply is at high risk under the above scenario.
- Under climate, there is no discussion or quantification of "wet" or drought" periods to cover climate extremes. Table 5-2 only covers 3 years of monthly rainfall data, although climate change is investigated. In the SSR/EIA for the Duynefontyn NPP site, these terms were scientifically determined and quantified. This approach should be applied to the WULA.
- Under Existing sources of emission there is no mention KNPP. Is this not a potential source? What about during the construction of Nuclear-1?
- As stated in my review of the Hydrogeology report, this site must be the most faulted site ever considered for a hazardous waste facility (see Figure 4-11 reproduced below and Table 4-3 of that report). All faults are shown as terminating at the site boundaries or Donkergat River, which is unrealistic. The presence of so much faulting is a potential Fatal Flaw in terms of the Department of Water Affairs and Forestry's *Minimum Requirements for Waste Disposal by Landfill* (DWAF, 1998)



m: +27 (0) 82 600 7635 • e: prosewarne40@gmail.com

1004 Palm Brook
Century City
7441
South Africa




- Under subsection 5.4.2, it is stated that the site is underlain by faults, shear and breccia zones, and is characterised by "…medium to very high permeability/hydraulic conductivities". These are hardly the type of subsurface conditions conducive to the siting of a hazardous waste facility.
- Subsection 5.4.3 Seismicity, does not reference the Council for Geoscience's seismicity study done for the KNPP. This is publicly available as part of the documentation for the Duynefontyn NPP EIA.
- Subsection 5.7.3 on surface water quality doesn't have any information on the relative flows at the various sampling points, rendering meaningful interpretation of the data presented moot.
- 6.3.1 notes that hydrogeological modelling was undertaken for a 10 000 year period, which is entering the realm of science fiction. A period of 100 years maximum would be more appropriate.
- The boundaries used for the numerical modelling are merely a square based on latitude and longitude with no allowance for geological, catchment or hydrogeological conditions. The quaternary catchments are not shown and there is no attempt to define groundwater management zones.
- Table 7-6 contains 130 management and monitoring actions for the Wesco WMF manager, all indicated as "continuous" which is quite a workload to keep abreast of.
- Under 7.11.2, Chemical Oxygen Demand is a standard analyte for landfill groundwater monitoring and should be added to the list.



m: +27 (0) 82 600 7635 • e: prosewarne40@gmail.com

- Also under 7.11.2, it is stated that monitoring data should be reviewed but doesn't indicate who by, nor if groundwater monitoring reports must be submitted to the DWS. Field measurement of EC and pH must be carried out.
- 7.11.7 concerning surface water monitoring, needs to specify measurement/estimation of flow rates at monitoring points.
- The hydrogeology, hydrology, geotechnical and meteorology reports for the KNPP site EIA should have been studied and referenced. They are freely available
- In comprehensive contaminant transport studies for waste disposal sites or any development with an engineered liner designed to contain hazardous liquids, it is standard practise to include a scenario with a leak to assess a worst-case situation. This has not been done.
- Water quality monitoring sections do not include any quality control/assurance issues such as taking of duplicate samples, which is standard industry practice.

## 3 Specific Comments

These comments relate to the various technical appendices attached to the WULA.

### Appendix D: Design Report

- 2.5 Geohydrology: the description is based on reports dated 2022 although the latest hydrogeology report is dated 2025.

### Appendix G: Hydrogeology

- The report version accompanying the WULA is No. 2.2, the sixth iteration, with 5 versions in 2025 alone, which seems to indicate a lot of backwards and forwards and rethinking?

- I reviewed Version 2.2 of July 2025 (my corresponding report is No. 2025/07/001), which indicates that the comments made in my July 2025 review have not been attended to or used to update this report. Therefore, all the comments in black and blue type in my report remain open and unaddressed.

### Appendix H : Water Quality

- Contains laboratory results and graphs for constituents analysed for, with no text. I don't see any record of quality control, such as duplicate samples, which is a major concern.



m: +27 (0) 82 600 7635 • e: prosewarne40@gmail.com

1004 Palm Brook
Century City
7441
South Africa

**Appendix I: Freshwater Ecological Assessment**

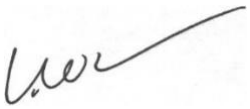
 This is the only specialist report that includes a declaration of independence and information on the specialist's relevant experience  The flood episode of 2024 is highlighted on p25.

## 4. Concluding Remarks

Most of the comments from my June 2025 review of Artesium's hydrogeological report have not been addressed.

The failure to take into account the emergency planning zones related to the proposed Nuclear-1 NPP is a potential fatal flaw. The part of the site covered by the PAZ for KNPP was specifically excluded from the proposed development. The EIA for the Duynefontyn site, including Nuclear-1, has been approved by the regulatory authorities and Government has stated its intention to go ahead with a fast-tracked procurement of new nuclear reactors. The NNR and Eskom are still to agree on emergency planning zones for Nuclear-1.

The presence of very extensive faulting in the site bedrock and medium to very high permeability/hydraulic conductivities, as described in the WULA, not my interpretation, are potential fatal flaws according the DWAF's Minimum Requirements.



Peter Rosewarne *Pr Sci Nat MSc*
Groundwater Consultant

## 5. References

Rosewarne, P.N. (2025), *Review of the Revised Artesium Hydrogeological Report on the Proposed WESCO Landfill Site, Atlantis*. Report 2025/07/01 to Melkbosstrand Ratepayers Association.

Artesium Consulting Services (2025), *Proposed Wesco Waste Management Facility Project: Hydrogeological Study Modelling and Site Risk Assessment*. Technical Report (V2.2). Cape Town.



m: +27 (0) 82 600 7635 • e: prosewarne40@gmail.com

SLR Consulting (2026), *Integrated Water and Waste Management Plan Technical Summary Report in Support of the Wesco Waste Management Facility Water Use Licence Application*. DWS Reference number: WU36453.
SLR Project No.: 720.05018.00052, Rev 01.

Department of Water Affairs and Forestry (1998), *Minimum Requirements for Waste Disposal by Landfill,* 2nd ed. Pretoria.

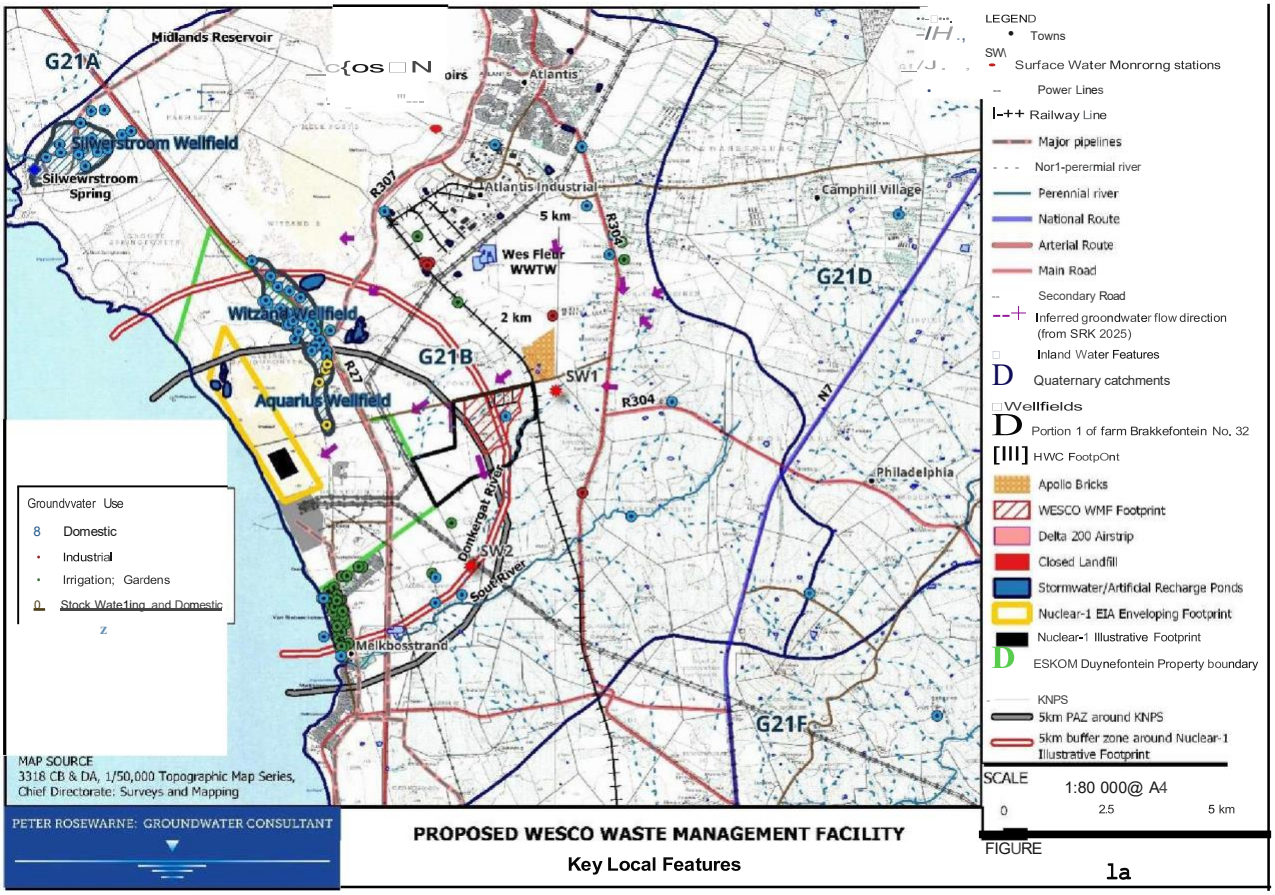


m: +27 (0) 82 600 7635 • e: prosewarne40@gmail.com

PETER ROSEWARNE: GROUNDWATER CONSULTANT

T

1004 Palm Brook
Century City
7441
South Africa




**PROPOSED WESCO WASTE MANAGEMENT FACILITY**

**Key Local Features**

FIGURE 1a