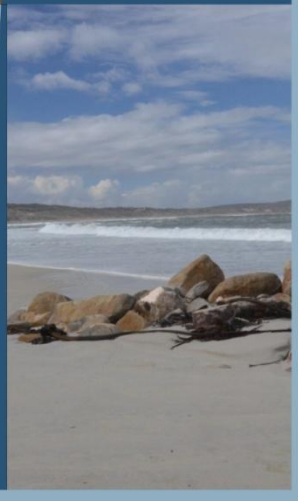
Environmental Impact Assessment (EIA) for the proposed construction, operation and decommissioning of the Saldanha Regional Marine Outfall Project of Frontier Saldanha Utilities (Pty) Ltd. at Danger Bay in the Saldanha Bay region

FINAL EIA REPORT

CHAPTER 6:

ISSUES AND RESPONSES TRAIL



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CHAPTER 6. ISSUES AND RESPONSES TRAIL

6.1 BACKGROUND

An important element of the EIA process is to capture the comments raised by I&APs during the EIA Process and to respond to these by the EIA Project Team (CSIR, the project proponent (Frontier Utilities) and the public participation facilitator (Sustainable Futures ZA, SFZA)). In accordance with the philosophy of Integrated Environmental Management, it is important for the EIA to focus on the key issues.

To assist in the identification of key issues, a decision-making process is applied to the issues and concerns raised, based on the following criteria (Figure 6.1):

1. Whether or not the issue falls within the scope and responsibility of the SRMO Project EIA; and
2. Whether or not sufficient information is available to respond to the issue or concern raised without further specialist investigation.

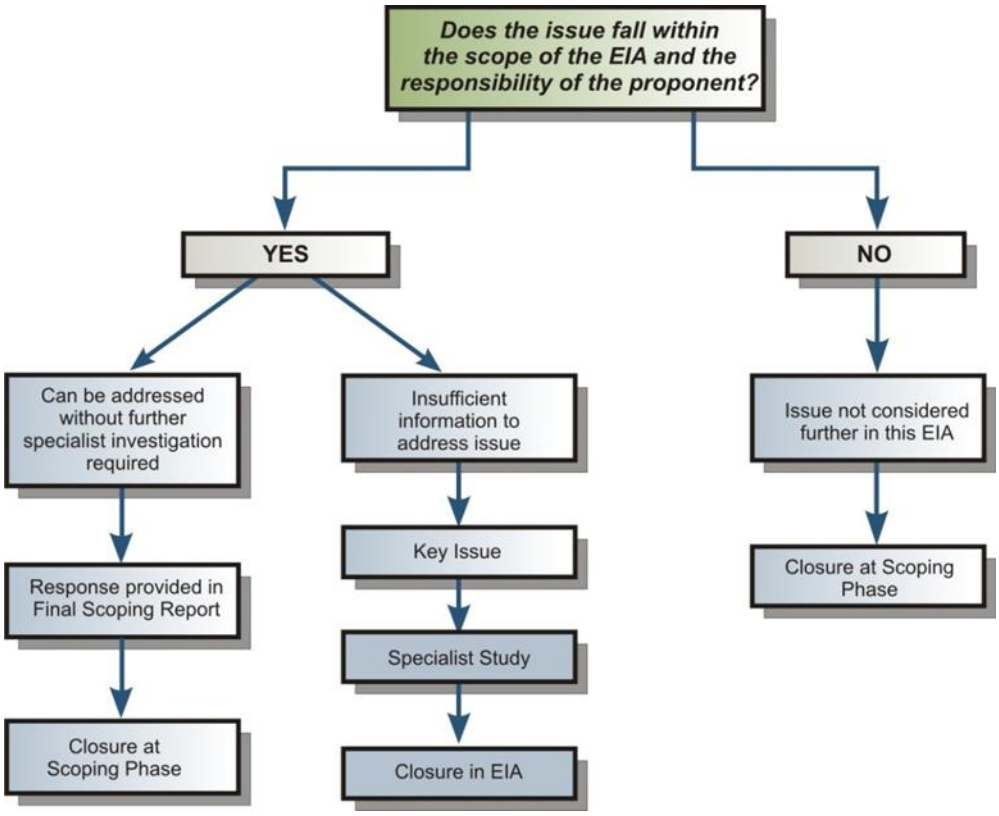

Figure 6.1 Decision-making framework for identification of key issues for the EIA

Appendix G contains the written comments received prior and after the release of the Draft EIA Report.

The comments received have also been included in the Issues and Responses Trail included in this chapter.

Some of the issues which were raised following the release of the Draft EIA Report:

1. Impacts on Terrestrial biodiversity;
2. Impacts on Marine Ecology;
3. Impact on Fauna;
4. Issues related to Integrated coastal management, coastal protection zone & coastal risk zones;
5. Impacts to mariculture;
6. Impacts during the construction phase;
7. Issues related to dune restoration and plant rehabilitation;
8. Issues related to effluent monitoring protocols including effluent leak detection systems;
9. Accountability of non-conformance to national norms and standards; and
10. Issues related to Heritage.

The issues below have been raised following the release of the Final Scoping Report:

1. Issues related to Integrated coastal management, coastal public property, coastal protection zone & coastal access;
2. Issues related to Water;
3. Issues related to Heritage; and
4. Comments raised by the Department of Environmental Affairs and Development Planning following the release of the Final Scoping Report.

The issues below were raised following the release of the Draft Scoping Report:

1. Issues related to Terrestrial Biodiversity, including vegetation (Critical Biodiversity Areas (CBAs));
2. Issues related to Water Quality and impacts on Marine ecology;
3. Issues related to Pipeline Routes and servitude;
4. Issues related to Landownership;
5. General issues;
6. Issues related to Waste and Waste Water Management;
7. Issues related to Road Networks;
8. Issues related to Aquaculture and Marine Ecology;
9. Issues related to Heritage;
10. Issues related to Rare Earths; and
11. Issues related to environmental impacts.

6.2 ISSUES AND RESPONSES TRAIL

The Issues and Responses Trail include comments received following the release of the Draft EIA Report, Final Scoping Report and the Draft Scoping Report. It also includes the responses to the comments received by the EIA Project Team.

Notes on the Issues Trail:

- Some issues were submitted by I&APs in PDF format and had to be retyped by SFZA.
- The response refers to a response from the EIA Project team, which includes the CSIR, Frontier Utilities and Sustainable Futures ZA (SFZA).
- The original issues submitted are included in Appendix G of Volume I of this FEIAR.

ISSUES TRAIL

6.2.1 Issues submitted after the release of the Draft EIA Report and the responses thereto by the EIA Project Team

No.	Issue	Raised by	Response
		CapeNature	
1	Dear Shawn, Please find comment from CapeNature attached. Kind regards, Alana	Alana Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mailed letter, 01 December 2014.	Dear Alana, Thank you for the CapeNature comments provided on the SRMO EIA. Sincerely, Shawn Johnston
2	Impact on terrestrial biodiversity: 1. We note that it is intended for the effluent pipeline to follow the same route as the pipeline for the desalination plant (which has yet to be constructed). An application is currently underway to amend the environmental authorisation for the desalination plant pipeline route to allow the Western corridor alignment to be used for the pipeline instead of the Eastern corridor which was originally authorised. The botanical study undertaken for the environmental impact assessment process clearly indicated that the Western corridor is of very high ecological importance and sensitivity and should be considered a "no-go" area and CapeNature strongly supports it remaining a no-	Alana Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mailed letter, 01 December 2014.	Comment noted. Frontier Utilities acknowledge and agree that a portion of the Jacobsbaai Western Corridor is of high botanical sensitivity. However, this routing alternative was not initially regarded as the preferred alternative by Frontier Utilities. Frontier Utilities and the WCDM (for their proposed desalination plant pipeline) preferred the Jacobsbaai Eastern Corridor due to the route's lower botanical impact. However, during discussions with landowners along the Jacobsbaai Eastern Corridor it was determined that certain land owners along this corridor were not amiable to negotiate the potential for registering a servitude over these properties, in particular Erf 299 owned by Forrelendam (Pty) Ltd (Forellendam). Erf 299 currently has development rights which were approved by the Saldanha Bay Municipality for building a residential estate on the property. Please refer to Appendix B2 (ii) of Volume I of the FEIAR

No.	Issue	Raised by	Response
	go area. Much of the vegetation within the Western corridor is in near-pristine condition and the site contains a number of special habitats as well as Species of Conservation Concern (SCC). The Western corridor forms part of a Critical Biodiversity Area (CBA). Options to conserve CBAs on the Saldanha Peninsula, especially one that contains such pristine examples of Saldanha Limestone Strandveld and Saldanha Granite Strandveld, are extremely limited and becoming increasingly more so.		for the letter of objection from Mr Smit of Forellendam and detailed surveyors plan of the proposed development on Erf 299 (including 889 and 892) as approved by the Saldanha Bay Municipality. The letter states that Forellendam will not allow the pipeline to traverse the said property as it is planned for residential development. Forellendam will not be amenable towards any negotiations in this regard. This is in spite of negotiation efforts by Frontier Utilities and the WCDM representatives, Worley Parsons, with Mr Smit. The Jacobsbaai Eastern Corridor was therefore eliminated as a feasibility alternative for the SRMO Project. Due to the above Frontier Utilities has reconsidered the previous routing alternatives including the 'Afrisam' and 'Jacobsbaai Road Western Corridor' that were considered by the WCDM during their EIA for the WCDM desalination plant. Afrisam objects to the pipeline crossing over their property. Frontier Utilities received a letter from Afrisam (letter dated 9 February 2015; see Appendix B3 in Volume I) stating their objection to the proposed SRMO Project. The letter states that the traversing of their property in Saldanha is a no go option as the proposed route is directly through an area of sensitive granite limestone Strandveld. Apart from the botanical issues it may be necessary to occasionally blast for mining activities, and Afrisam is restricted in having any activity within a certain distance of their mining activities. Such a pipeline would prejudice their mining activities. While the proposed 'Jacobsbaai Road Western Corridor ' was initially established as a no-go area when investigating corridor routing alternatives for the WCDM desalination EIA, it has to be considered

No.	Issue	Raised by	Response
			that no-go areas (like any sensitivity mapping process) is about balancing trade-offs of environmental impact. As the 'Jacobsbaai Road Eastern Corridor' and 'Afrisam Corridor' have proved unfeasible during the EIA for the WCDM desalination plant, the botanical specialist has agreed to reconsider the no-go status on the 'Jacobsbaai Road Western Corridor' as part of the proposed EA Amendment. In light of this, the Jacobsbaai Western Corridor was included and assessed in the EIA phase of the SRMO Project. The Jacobsbaai Western Corridor is considered to be the preferred and only pipeline routing option for the SRMO Project. This pipeline routing was assessed in the Terrestrial Ecological specialist study undertaken by Nick Helme (Appendix B of Volume II). The study concluded that both proposed pipeline routes (i.e. the Jacobsbaai Western and Eastern Corridors) will have some negative botanical impacts which cannot be avoided or mitigated. Without mitigation the Jacobsbaai Western Corridor will have a High negative botanical impact, which could be reduced to Medium negative impact with mitigation (rerouting a portion of the route along the Jacobsbaai Western Corridor from Pump station C to D); and Low – Medium negative with financial contribution to a biodiversity offset. Frontier Utilities is committed to minimize environmental impact and will implement the mitigation measures proposed in the Ecological study (Appendix B of Volume II) to minimise impacts of this sensitive area including but not limited to: • installing the pipeline entirely within the road reserve west of the main road to reduce impacts on sensitive vegetation along the pipeline corridor (section of 2 000 m traversing through an area with endangered vegetation within and to the south of

No.	Issue	Raised by	Response
			Jacobsbaai). Most of the Species of Special Concern are located east of the main road. This recommendation has been accepted by Frontier Saldanha Utilities; • burying the pipeline on the western (seaward) side of the road as this side is more disturbed and hence less sensitive than the eastern side (section of 2 000 m traversing through an area with endangered vegetation within and to the south of Jacobsbaai); • undertaking a plant rehabilitation programme (including a Search and Rescue Programme) prior to construction; • the pipeline must be constructed on the northern side of the Jacobsbaai Road between the proposed Pump Stations C and D to avoid the crossing of sensitive wetland areas. • appointing an Environmental Control Officer (ECO) to assist during construction to guide and manage the construction team to minimise the construction impact wherever possible. In addition to the above, Frontier Saldanha Utilities must enter into an agreement with CapeNature or another relevant authority or institution (e.g. WWF) to provide an offset in the form of a financial contribution for the conservation and management of valuable land parcels as identified by CapeNature or another authority or institution (see item 3 below). Cognisance must be taken that the SRMO Project would benefit the larger Saldanha Industrial area. It is a pre-requisite for the development of the Frontier Rare Earth's Zandkopsdrift mine, beneficiation and desalination facilities proposed in the Northern Cape province and the proposed Saldanha Separation plant, Chlor-Alkali Production Facility and Waste Water Treatment Works in the Western Cape Province. Apart from the SRMO Project, at a more strategic level, there is

No.	Issue	Raised by	Response
			clearly a need to establish a servitude corridor (i.e. for imported gas, desalinated water, waste brines emanating from the IDZ etc.) from Danger Bay to Saldanha Bay considering the range of development proposals in the area and the realisation of the Saldanha Bay IDZ. This demonstrates the broader need and benefits of this corridor for promoting socio-economic upliftment in the Vredenburg/Saldanha area. The SBM acknowledged in a letter dated 10 February 2015 (Appendix B6 of Volume I) that the project will contribute to the development of the Greater Saldanha industrial and commercial areas. The SRMO Project offers valuable industrial infrastructure to the Saldanha Bay area and is supported by institutions such as the Saldanha Bay Water Quality Forum Trust (SBWQFT) since the project can alleviate future effluent disposal within Saldanha, small bay, area. Please refer to Appendix B7 of Volume I of this FEIAR for a letter of support from the SBWQFT. The project is also supported by current industry within Saldanha as future disposal of salt or brine on land needs to be phased out within 8 years (initiated 2013, Government Gazette 23 August 2013) as noted in the Waste Disposal restrictions under the Norms and Standards for Waste Disposal to Landfill. Please refer to Appendix B8 of Volume I of the FEIAR for a letter of support from ArcelorMittal.
3	2. CapeNature considers the impacts on biodiversity which will result if the pipeline is constructed within the Western corridor to be of high negative significance even after mitigation. Although it may be possible to conduct a search and rescue for some of the SCC, the long term survival of these plants is questionable unless	Alana Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mailed letter, 01 December 2014.	Comment noted. Frontier Saldanha Utilities is willing to enter into an agreement with CapeNature or another relevant authority or institution (e.g. WWF) to provide an offset in the form of a financial contribution for the conservation and management of valuable land parcels as identified by CapeNature or another authority or institution. This option was discussed at the meeting which was held at the offices of DEA&DP in Cape Town on 12 March 2015

No.	Issue	Raised by	Response
	they can be placed in similar habitats within a protected environment nearby. Search and rescue also does not mitigate for the loss and degradation of habitat. If this route is authorised a conservation offset will need to be found. However, offset options for the vegetation types and habitats on site are extremely limited, especially given that there are other development applications also wishing to secure offsets for their proposals.		with representatives of Frontier, DEA&DP, CapeNature, CSIR and the ecological specialist, Mr Nick Helme (see meeting notes and the attendance register included in Appendix I1). The purpose of the meeting was to discuss the challenges associated with the Jacobsbaai Eastern Corridor and to provide motivation why the Jacobsbaai Western Corridor has become the only viable corridor alternative. It is the opinion of the EAP that the offset in the form of a financial contribution is appropriate considering the nature and the scale of the proposed development. It is recommended that it is not necessary for Frontier Saldanha Utilites to conduct a separate botanical offset study. Motivation to this effect is provided in Section 1.4.2 of Chapter 1.
4	3. The motivation behind the Eastern corridor no longer being an option is related to development rights purportedly granted for farm portions 892, 889 and 299. However, very little information has been provided as to exactly what the proposed development will entail. Detailed information regarding the size of the development and the approved layout needs to be provided. CapeNature has records of a botanical study conducted for Farm 299 which indicated that not all of the farm was suitable for development, nor was the entire property proposed for development. We do not unfortunately have records of the final layout submitted for approval. Alternatives need to be investigated within the Eastern corridor and further negotiations need to be had with the landowner/developer to determine if the	Alana Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mailed letter, 01 December 2014.	Comment noted. Please refer to item 2 above. The letter of objection received from Mr Smit (Appendix B2 (ii) of Volume I of the FEIAR) provides detail of the proposed development of Erf 299 incorporating properties 889 and 892.

No.	Issue	Raised by	Response
	pipeline could be laid in such a way that it will not affect the development proposal.		
5	4. Based on the current information available, CapeNature objects to the use of the Western corridor. Additional information needs to prove unless that all alternatives in the Eastern corridor (and elsewhere) have been fully investigated and dismissed for valid reasons which must be accompanied by the necessary documentation – approved plans, authorisations etc.	Alana Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mailed letter, 01 December 2014.	Comment noted. Please refer to item 2 above detailing all the alternatives assessed and conclusions drawn.
6	Impacts on marine ecology: 5. We note that two outfall scenarios have been investigated. The first is disposal before the desalination plant is commissioned and the second is disposal with brine from the desalination plant.	Alana Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mailed letter, 01 December 2014.	That is correct - two outfall scenarios were investigated in the EIA phase of the SRMO Project. It is however uncertain when the desalination plant and its associated pipeline will be constructed. However, the potential for the desalination plant pipeline to be constructed was considered and the potential for the SRMO Project to co-discharge with the pipeline of the WCDM desalination plant was investigated.
7	6. The preferred outfall location is within Danger Bay. Danger Bay is relatively pristine and changes in water quality need to be closely monitored. Chlorine is one of the most important chemicals to monitor and it is essential that the concentration remains below the “no observed effect” level. With the possible addition of effluent from a regional waste water treatment works, there may be an increase in chlorine quantities in the effluent.	Alana Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mailed letter, 01 December 2014.	Comment noted and was addressed in the EMP.
8	7. CapeNature remains concerned about the potential long-term impacts of all effluents and combinations thereof into the bay. From the	Alana Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-	Comment noted. Regular monitoring of the water and sediment quality in the bay would be undertaken over the long-term to ensure that potential cumulative effects remain within acceptable levels.

No.	Issue	Raised by	Response
	information and assessments provided it appears that should stringent monitoring be applied together with the other actions laid out in the EMP, the impacts of the effluent should be acceptable at least in the short-term. However, should there be any indication that the predictions of the original impact assessment were inaccurate and the discharge is having an unacceptable negative impact on biodiversity, the discharge should be ceased immediately until further studies have been done and additional mitigation can be implemented which will keep environmental impacts within acceptable levels.	mailed letter, 01 December 2014.	Water quality sampling in Danger Bay has already commenced. It is undertaken by the SBWQFT and was reported on in the state of the bay report 2013/2014 by Anchor Environmental Consulting.
9	CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.	Alana Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mailed letter, 01 December 2014.	Comment noted.
Department of Agriculture, Forestry and Fisheries			
10	Dear Shawn, Please find attached the DAFF:SAM comment letter regarding the DEIR of the proposed construction, operation and decommissioning of the Saldanha Regional Marine Outfall Project for Frontier Saldanha Utilities Saldanha Utilities at Danger Bay near Saldanha in the Western Cape (DEA&DP ref: 16/3/1/2/F4/17/3009/13. Kindest regards Michelle	Michelle Pretorius, Environmental Officer: Shellfish Production, Directorate: Sustainable Aquaculture Management, Department of Agriculture, Forestry and Fisheries, comment by e-mailed letter, 11 November 2014.	Dear Michelle Pretorius, Thank you for your e-mail and attached correspondence. I hereby acknowledge receiving the DAFF submission on the DEIR for the proposed Saldanha Regional Marine Outfall Project. Sincerely, Shawn Johnston

No.	Issue	Raised by	Response
11	In the Issues and Response report: in response to previous comments made by the DAFF, the report indicates that potential impacts on the aquaculture industry will be assessed in the scope of the Marine Ecological study: under "Impacts on beneficial Users". However, this section was not reflected in the Marine Ecological Study. It is noted however that the DEIR does state that there should be no impact on the mariculture industry due to the prevailing currents and distance from the outfall.	Michelle Pretorius, Environmental Officer: Shellfish Production, Directorate: Sustainable Aquaculture Management, Department of Agriculture, Forestry and Fisheries, comment by e-mailed letter, 11 November 2014.	There are currently no mariculture activities within Danger Bay, and plume modelling studies have indicated that the plumes remain confined to within the bay. An assessment of impacts of the effluent on mariculture activities was thus not considered necessary due to the spatial separation. Please refer to Annexure 2 of Volume III for the dispersion modelling report and Appendix A of Volume II for the Marine Ecology Specialist Study.
12	In the Marine Ecological Study the potential risk of heavy metal build up in marine invertebrates as a result of the effluent disposal is described. It is highlighted that "many benthic invertebrates feed on this suspended or deposited material, with the risk that metals are enriched in their bodies as passed on to higher trophic level. Such bio assimilation and bioaccumulation of metals in aquatic organisms can have potential long term negative implications for humans and ecosystem health. Furthermore, the movement of these persistent organic pollutants within environmental compartments, and the potential for long-range transport can result in serious threats not only at the point of release, but also to organism distant to the pollution source (Nergis et al. 2012)". Species such as mussels are commonly used as bio-indicators as they readily absorb heavy	Michelle Pretorius, Environmental Officer: Shellfish Production, Directorate: Sustainable Aquaculture Management, Department of Agriculture, Forestry and Fisheries, comment by e-mailed letter, 11 November 2014.	Frontier Utilities is a member of the SBWQFT. They have requested the Forum to extend their monitoring campaign to include the Danger Bay area. Water quality sampling in Danger Bay has already commenced. The Forum measures water and sediment quality. It is proposed that once the pipeline is operational, sampling of mussels is also undertaken to measure water quality. Heavy metal levels should therefore be checked in all three mediums, i.e. water, sediment and mussels. The mussel sampling would probably require the setting up of floating cages in which to keep the mussels. This is because it is unlikely that there are sufficient wild populations in the sediment-dominated bay to provide enough sample material over the longer term.

No.	Issue	Raised by	Response
	metals. It is not clear as to how heavy metals will be sampled i.e. from water samples or from mussels.		
13	It is recommended that both types of samples be taken so as to protect the mariculture industry in Jacobsbaai. Further to this it is noted that heavy metals will be measured every 6-12 months this frequency is acceptable but please note that since the frequency is low if a sampling period is missed this could prove to be potentially dangerous for the mariculture industry and ultimately for human consumption of mariculture products.	Michelle Pretorius, Environmental Officer: Shellfish Production, Directorate: Sustainable Aquaculture Management, Department of Agriculture, Forestry and Fisheries, comment by e-mailed letter, 11 November 2014.	Please see response to no 12 above regarding the monitoring of water, sediments and mussels. It should be stringently monitored every six months. Even if a sampling period was missed, and levels were above acceptable water quality limits within Danger Bay this is unlikely to affect the Jacobsbaai facilities which is some distance away.
14	Please note that Sub-Directorate: AAHEI: sub-unit Aquaculture Environmental Assessments still reserve the right to review/provide additional comments in future.	Michelle Pretorius, Environmental Officer: Shellfish Production, Directorate: Sustainable Aquaculture Management, Department of Agriculture, Forestry and Fisheries, comment by e-mailed letter, 11 November 2014.	Comment noted.
Department of Environmental Affairs: Oceans and Coasts			
15	Your application dated 8 September 2014 bears reference. This letter serves to acknowledge receipt of your application for a Coastal Waters Discharge Permit in terms of Section 69 of the National Environmental Management Integrated Coastal Management Act, 2008 (Act No. 24 of 2008). A further correspondence after the initial review	Nitasha Baijnath-Pillay, Control Environmental Officer: Grade B, Department of Environmental Affairs: Oceans and Coasts (DEA:O&C), comment by faxed letter, 22 October 2014.	Comment noted. The CSIR is currently awaiting further correspondence from DEA: Oceans and Coasts (DEA:O&C). DEA:O&C indicated that they will provide comments on the Coastal Waters Discharge Permit (CWDP) Application (DEA: O&C Ref: (2014/016/WC/Frontier Saldanha) which was submitted to them in September 2014.

No.	Issue	Raised by	Response
	of the application will be issued in due course detailing the way forward with regard to the application process. Please quote the above-mentioned reference (2014/016/WC/Frontier Saldanha) number for any future correspondence regarding this application. Should you have any queries please do not hesitate to contact us.		
Department of Environmental Affairs and Development Planning – Coastal Impact Management			
16	The integrated Coastal Management Act (Act No. 24 of 2008) ("ICM Act") is a Specific Environmental Management Act under the umbrella of the National Environmental Management Act (Act No. 107 of 1998) ("NEMA"). The Seashore Act (Act No. 21 of 1935) and subsequent amendment acts and the ICM Act sets out to manage the nation's coastal resources, promote social equity and best economic use of coastal resources whilst protecting the natural environment. The ICM Act established the coastal protection zone in order to manage, regulate and restrict the use of land adjacent to coastal public property, or land that plays a significant role in the coastal ecosystem for the purpose of, inter alia, protecting the ecological integrity and natural character of the coast and to protect people and economic activities from the risks or threats which may arise from dynamic coastal processes. In terms of Section 38 of the ICM Act, the Department of Environmental Affairs and Development	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	Comment noted.

No.	Issue	Raised by	Response
	Planning is the provincial lead agency for coastal management in the Western Cape as well as the competent authority for the administration of certain provisions of "The control of vehicles in the coastal zone regulations (GN No. 1399, 21 December 2001, as amended "ORV Regulations" and the Management of public launch sites in the coastal zone (GN No. 487, 27 June 2014) "Public Launch Site Regulations.		
17	The Coastal Impact Management Unit ("CIM") has reviewed the DEIR and has the following comments: The West Coast District Coastal Setback/Management Line ("CML"), coastal risk zones, coastal protection zone, amongst others, for the West Coast District coastline. The proposed development site is projected to fall within a high risk zone. It is acknowledged that this type of infrastructure is required to be on the seaward side of the Coastal Setback/Management Line. The CIM acknowledges that the alternative to dispose of the effluent into the sea, with appropriate mitigation measures and design, is a reasonable alternative.	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	The pipeline will need to cross the beach zone to dispose of effluent into Danger bay. The pipeline shore crossing is a crucial element of the pipeline design. A shoreline stability assessment will be undertaken as part of the detailed design and will include an assessment of the historical shoreline variability of Danger Bay, an assessment of short-term episodic erosion events as well as long-term trends, including those due to climate change. The study will also assist in determining an appropriate burial depth for the pipeline where it crosses the shore and surf zone. The pipeline design will also consider the pipeline stability and required erosion protection under incident and extreme wave and current conditions. Thus the pipeline will be buried and proper design and mitigation measures will be put in place to minimise or avoid environmental impacts.
18	The CIM highlights that the pump station E is proposed to be located in an area that is exposed to coastal processes, specifically wind-blown sand. Appropriate design of this infrastructure is essential for the long term functioning of this pump station.	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	The pump station will comprise of a concrete building. Each pump station will be investigated to ensure optimal design with minimal visual impact to the environment and will be enclosed to buffer exposure to coastal processes.

No.	Issue	Raised by	Response
19	All pump stations must have back-up electrical supply in order to prepare for the risk of power outages and associated spillage of effluent.	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	All the pump stations will have back-up electricity supply.
20	The Environmental Management Programme ("EMP") indicates that a dune restoration programme must be implemented after the construction period has started. The dune restoration programme must be implemented under the supervision of a dune ecologist and only indigenous plants should be used in the restoration process.	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	Comment noted. The dune restoration process will include the use of indigenous vegetation and a suitably qualified ecologist or specialist will be appointed to oversee the restoration process.
21	The EMP states that the pipeline must be excavated to the adequate depth and across the beach. The adequate depth needs to be determined and should be indicated in the EMP.	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	Comment noted. Please refer to item 17 above
22	The stormwater management plan should include measures to avoid increasing coastal erosion.	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	The storm water management plan will include measures to reduce coastal erosion. As noted in item 18 the pump stations and effluent transfer tanks will be enclosed and the pump stations footprint area is relatively small at an estimate of 400 m^2. All storm water runoff from "clean" areas is allowed to percolate into the ground. It is expected that the contractor will provide grading around the site to allow for channelling of storm water during the detailed design process. Although it can be argued that "clean" storm water can be collected and re-used, due to the low rainfall in the area, this may not be a practical option. To ease water

No.	Issue	Raised by	Response
			requirements for irrigation, and if economically feasible, collection of rain water into tanks connected to roof gutters could be considered.
23	All mitigation measures that have been indicated in the marine ecology specialist report and the terrestrial ecology specialist report must be implemented.	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	Noted. The mitigation measures contained in the marine and terrestrial ecological specialist reports will be implemented.
24	The CIM supports the recommended management action stated in the marine ecology specialist report with regards to the "Synergistic and antagonistic effects of a combined effluent" which states that a specialist study be commissioned to investigate potential synergistic and antagonistic effects of the effluents.	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	A marine chemist may be appointed to undertake such a chemical study during the detailed design to confirm acceptability prior to commissioning of the project. The study can be undertaken as part of a Risk Assessment in the post EIA phase as the proposed contributing industries have not been designed in detail nor commissioned.
25	The applicant is reminded of their general duty of care and the remediation of environmental damage, in terms of Section 28(1) of NEMA, which, specifically states that: "…Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment…" together with Section 58 of the ICM Act which refers to	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	Comment noted. The applicant takes due cognisance of their duty of care to avoid or reduce adverse effects to the environment.

No.	Issue	Raised by	Response
	ones duty to avoid causing adverse effects on the environment.		
26	The CIM reserves the right to revise or withdraw comments or request further information based on any information received.	Ms. Caren George, Western Cape Department of Environmental Affairs and Development Planning, Coastal Impact Management, 24 December 2014.	Comment noted.
Department of Environmental Affairs and Development Planning: Waste Management			
27	The Draft Environmental Impact Assessment ("EIA") Report dated October 2014 that was received by the Department on 17 October 2014 refers. The Directorate: Waste Management has no objection to the proposed project.	Lance McBain-Charles, Deputy Director: Waste Management Licencing, comment by letter, 28 October 2014.	The comment from the Waste Management Directorate that they do not object to the project is duly noted and welcomed.
28	The Directorate is satisfied that all waste related issues have been addressed in the above mentioned report, including the Draft Environmental Management Programme.	Lance McBain-Charles, Deputy Director: Waste Management Licencing, comment by letter, 28 October 2014.	Comment noted.
29	The Directorate reserves the right to revise its initial comments and request further information based on any new information received. Please contact Marius Venter should you have any enquiries on the above.	Lance McBain-Charles, Deputy Director: Waste Management Licencing, comment by letter, 28 October 2014.	Comment noted.
Heritage Western Cape			
	Dear Shawn Johnston, Thank you very much. Kind regards, Andrew September.	Andrew September, Heritage Western Cape, comment by e-mail, 21 October 2014.	Comment noted.
31	Kindly note that your application in terms of	A.B. Hall, Heritage Western	

No.	Issue	Raised by	Response
	Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) for the proposed regional marine outfall project was tabled at the meeting of the Impact Assessment Committee (IACom) of 17 November 2014. 1. A pre-construction palaeontological survey of chosen alignment should take place where the Velddrif and Prospect Hill Formations will be crossed. 2. Monitoring and site inspection must take place for Palaeontology during construction. 3. Archaeological test excavation must take place at JB001 and along the route within about 200 m of Danger Bay. 4. *In situ* recording of full excavation must take place at DB022 depending on the outcome of the test excavation, 5. Construction workers must be informed about the possibility of finding fossils, shell middens and human remains during excavation and must be instructed to protect and report these finds immediately and cease work until they have been assessed.	Cape, Comment by emailed letter and original letter, 10 December 2014.	1. A pre-construction palaeontological survey will be undertaken. 2. Monitoring and site inspection will be done for Palaeontology during construction. 3. Archaeological test excavation will be conducted at JB001 and along the route within about 200 m of Danger Bay. 4. *In situ* recording of full excavation will be conducted at DB022 depending on the outcome of the test excavation. 5. Construction workers will be informed about the possibility of finding fossils, shell middens and human remains during excavation and must be instructed to protect and report these finds immediately and cease work until they have been assessed.
Jacobsbaai Ratepayers & Residents Association			
31	Good morning Shawn Attached please find letter pertaining to the above for your attention (multiple scanner not working so attaching two separate pages). Mike	Mike Gregory, Jacobsbaai Ratepayers & Residents Association, comment by e-mail, 21 October 2014.	Comment noted.

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	will give you the original for your files at the meeting on Thursday. Regards Bev		
32	Dear Shawn, Thank you for the EIA report regarding the above and, on behalf of the residents of Jacobsbaai, I wish to comment as follows: We strongly object to the Jacobsbaai Western Corridor being the preferred route for the pipeline through our village for the following reasons: Construction Impact: a) heavy construction equipment will be used in site preparation, including bulldozers, grades, excavators, trucks and cranes. This will cause congestion on our Main Road and will damage and degradation to the tarred surface. b. Tourism is the major source of income in our village and, besides inconveniencing residents, the above activity will have a negative impact on tourism.	Mike Gregory, Jacobsbaai Ratepayers & Residents Association, comment by e-mail, 21 October 2014.	a. We note the concerns raised by Mr Gregory regarding the impact of the construction activities on Jacobsbaai and its residents in general. Heavy equipment and vehicles will be used during the construction phase estimated at 18 months. However, the construction period specifically through Jacobsbaai will be approximately four months. It will therefore not occur on a very long or permanent basis. Any degradation or damage to the roads as a result of the activities by Frontier Utilities will need to be addressed and rectified to the satisfaction of the relevant authorities (e.g. municipality or Provincial Roads Department). In addition these construction activities referred to could also be utilised in conjunction with the Saldanha Bay municipality to install the proposed sewer system that the Jacobsbaai residents so desperately require. This will therefore reduce the disturbance during construction for this proposed activity. b. As stated in (a) above, the construction period through Jacobsbaai will be an estimated four months. The impacts will therefore be only temporarily. The Economics specialist study that was undertaken rated the impacts on tourism during the construction phase as low to medium with mitigation (Appendix F of Volume II of the FEIAR). It is stated in the said study that the measures recommended in the visual, botanical, and marine specialist studies should be implemented and would minimise the impacts on tourism. Construction will not take place during the peak tourism season as this period coincides

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	c. It will increase human activity in an area with a low sensitivity population. d. There will be major increase in dust and noise pollution, which is totally unacceptable. e. Increase in light pollution if construction occurs at night.		with the annual shut down or holiday period in December of the construction companies. c. The increase in human activity will only be temporary during the construction phase. d. Mitigation measures to reduce noise and dust pollution were included in the EMP and will be adhered to during construction. e. Construction will only occur during the day and night light pollution is therefore very unlikely. Night lighting of the construction sites should be minimised within requirements of safety and efficiency.
33	Visual Impact: a. Expected soil/rock along the pipeline route, where vegetation is cleared and trenching occurs. b. Stockpiles of rock and soil to make the trench will be visible along the pipeline. c. Presence of construction workers along the route.	Mike Gregory, Jacobsbaai Ratepayers & Residents Association, comment by e-mail, 21 October 2014.	a. We acknowledge the concerns raised by Mr Gregory regarding the associated visual impact during construction. The potential visual impact of soil and rock along the pipeline route will occur, but once again it is reiterated that the impacts will be temporary as the construction will occur over approximately four months. Laydown areas and stockyards should be located in low visibility areas and existing vegetation should be used where possible. b. See response to (a) above. c. The construction phase is temporary. Construction workers will be present along the route. The construction workers will need to adhere to rules and requirements specified in their Environmental Health and Safety Plans.
34	Overhead Power Line Impact: a. Construction activity and equipment, e.g. jackhammers. b. Structures such as cables and pylons along	Mike Gregory, Jacobsbaai Ratepayers & Residents Association, comment by e-mail, 21 October 2014.	a. The construction phase is temporary. Best practice measures will be implemented during the construction phase of the power lines.

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	the route, adding to visual pollution. c. Removal of soil and vegetation during construction.		b. The visual specialist study rated the visual impact of the proposed 11 kV power line as medium before and after mitigation (Appendix D of Volume II of the FEIAR). There is an existing power line along the route and views along the road are complex and cluttered to an extent. Please note that the design of the proposed power line is exactly the same as the current power line installed in Jacobsbaai, i.e. a single pole carrying three conductors. However, the residents of Jacobsbaai will be affected by another power line through town. The visual impact will remain medium unless the power lines will be buried, which will reduce the visual impact to low. This option will be investigated by Frontier Utilities if deemed necessary. c. An ECO will be employed during the construction phase to manage construction activities, to mitigate vegetation disturbance and to guide the construction team to minimise environmental impact.
35	Fauna and Flora Impact: a. The Botanical Specialist originally considered Jacobsbaai Western Corridor as no-go area due to a number of rare and endangered species in this corridor, and that it would be transverse a sensitive limestone area. b. This area is home to the Black Girdled Lizard (amongst others) and Red listed as near threatened. This lizard is fairly common in the Jacobsbaai area, especially 400 m from the sea. c. Mortality impacts on power line infrastructure will particularly affect large	Mike Gregory, Jacobsbaai Ratepayers & Residents Association, comment by e-mail, 21 October 2014.	a. Please refer to item 2 above. b. The EIA assessed the potential impacts on fauna, including the Black Girdled Lizard (*Cordylus niger*) in the Ecology study. It was stated that *Cordylus niger* is present on rocky outcrops around Jacobsbaai, but none of the infrastructure is likely to be located within 20 m of any such outcrops, and thus impacts are likely to should be avoided. Potential impacts on fauna were assessed to be of medium significance before and of low significance after mitigation. The botanist recommended that no mitigation is required in areas with no rocks, or further than 500 m from the coast. No other mitigation is really possible other than avoiding rocky habitats in rocky areas close to the sea. c. The proposed power line will be 11 kV. The EMP states that only bird-friendly power infrastructure hardware should be

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	terrestrial birds such as Blue Cranes, Cape Eagle Owls, Falcons, etc. The Eastern Corridor was identified as having sandy soils suitable for underground pipelines as opposed to OHL's on the western side.		used. The entire length of the new power line will be marked with industry standard bird diverters or flappers. The option of an underground power line will be investigated by Frontier Utilities. Please note that the design of the proposed power line is exactly the same as the current power line installed in Jacobsbaai, i.e. a single pole carrying three conductors.
36	We will continue to strongly oppose the Jacobsbaai Western Corridor as the preferred route and urge that this be reconsidered.	Mike Gregory, Jacobsbaai Ratepayers & Residents Association, comment by e-mail, 21 October 2014.	Comment noted. Mr Daan Grobelaar attended the Public Open House meeting held on 13 November 2014 on behalf of the Jacobsbaai Ratepayers and Residents Association. The minutes of the Public Open House are included in Appendix H of Volume I of the FEIAR. At the Open House meeting Frontier Utilities noted that they would be keen to form a partnership with the Jacobsbaai Ratepayers and Residents Association that would benefit all in the area. They can only do this once they have received an Environmental Authorisation. The suggestions and recommendations by Mr Grobelaar relating to the servitude route were noted and it was reiterated that Frontier Utilities look forward to working with the Jacobsbaai Ratepayers and Residents Association.
Mr Brian Holridge (New Technology)			
37	Hi Shawn Thank you for this - however we do have a very environmentally friendly solution - ALTERNATIVE - as in Clean Water Energy CWE. See attached... As water will become increasing scarce we recommend that we can recycle this waste (polluted) water and generate electrical power and clean this water in a very safe manner to	Brian Holdridge, Interested Party, comment by e-mail, 20 October 2014.	Dear Mr. Brian Holdridge, Thank you for your e-mail. I hereby acknowledge receiving your submission and will pass it onto the developer and the CSIR. Sincerely, Shawn Johnston Response: Frontier Utilities met with Mr Brian Holridge on 29 January 2014 at a Focus Group Meeting to discuss the SRMO Project (Minutes of the meeting are included in Appendix I of the FEIAR). Mr Holridge noted

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	SANS standards for potable use. i.e. for 1ml of brine/salt/seawater per day will generate 3Mw of power and clean this waste water by only using 5% of the water in the process... no need to pump this water, at a great a cost, into the sea. Of interest as the polluted water volumes increase the power output increases exponentially so 8ml per day of polluted water will generate at least 20Mw of power. The system will be capitalized and run by CWE viz. in will be a BOO system Built, Operate, Own by CWE. I am prepared to present to all interested and concerned parties this new technology which is a very green and a viable alternative. Take Care. Brian Holdridge PS: As an agent for CWE if you have other challenges elsewhere I can also help solve them with this latest technology.		that he supports and is interested in rare earth projects. The email received from Mr Holridge afterwards on 20 October 2014 proposes an alternative technology which could be used by Frontier Saldanha Utilities to dispose of effluent in an environmentally friendly manner. Frontier Utilities is willing to discuss the Clean Water Energy system with Mr Holridge. However the SRMO Project needs to be executed within a predefined and the timeframe of the alternative Mr Holdrige is proposing will not fall within the predefined time period.
Saldanha Bay Municipality			
38	1. The Environmental Impact Assessment for	Nazeema Duarte, Saldanha Bay	Comments noted.

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	the proposed construction and decommissioning of the Saldanha Regional Marine Outfall Project of Frontier Saldanha Utilities (PTY) Ltd at Danger Bay in Saldanha Bay Region dated October 2014 refers. Pump stations: has slag been considered from road cover of the access roads instead of just gravel? 2. Relocation of plant species should preferably be in the surrounding area or in one of the local nature reserves best suited. 3. Cognisance should be taken of the MHI risk assessment for the Chlorine Caustic Soda and Hydrochloric Acid Facility with respect to the possible overhead power lines.	Municipality, comment by e-mail, 11 December 2014.	1. The option to use slag from road cover has not been investigated. Gravel is the preferred design base of the access roads at this stage, but slag could be investigated during the detailed design phase. 2. A plant rehabilitation programme, including a Search & Rescue Programme (S&R), will be undertaken by Frontier Saldanha Utilities as recommend by Mr Nick Helme in his Ecological specialist study. These recommendations are also included in the EMP of the SRMO Project. The S&R will be undertaken within the development footprint within areas of natural vegetation prior to any construction commencing. The S&R will involve translocation of selected succulents, shrubs and bulbs occurring in the pipeline footprint, with emphasis on any Species of Conservation Concern (SCC). The S&R will be undertaken just after flowering has been completed and not in the dry summer months. All plant species that were rescued should be bagged (and cuttings taken where appropriate) and kept in the horticulturist's nursery. The botanical specialist or a suitably qualified Environmental Control Officer (ECO) should confirm in writing that this process has been completed successfully. 3. Comment noted. Cognisance will be taken of the MHI risk assessment for the Caustic Soda and Hydrochloric Acid Facility with respect to the proposed overhead power lines of the SRMO Project.
Road Network Management			
39	The following correspondence refers: The letter of DEA&DP EIA Ref: 16/3/1/2/F4/17/3009/13 dated 20 October 2014 from Ms M Levendal of the CSIR and This Branch's letters 16/9/6/6/3-24/01 (job	M.L Watters, Chief Directorate: Road Network Management, Western Cape Government, comment by letter, 26 November 2014	The comment from the Road Network Management Directorate that they are not opposed to the project and will comment during the Land Use Ordinance and/or the construction drawing approval stage is noted and welcomed.

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	21858) dated 9 December 2013 and 16 April 2014. Comment is required on the Draft Environmental Impact Assessment Report: Proposed Construction, Operation and Decommissioning of the Saldanha Regional Marine Outfall at Danger Bay near Saldanha. This Branch's previous comments of 9 December 2013 and 16 April 2014 remain applicable. As stated previously, as this Branch is not opposed to the proposed project, it will comment in detail during the Land Use Ordinance and/or the construction drawing approval stage.		
Department of Environmental Affairs and Development Planning: Pollution Management			
40	Dear Shawn, I have faxed the completed comments to you earlier. Please note the DEA&DP Reference used in the faxed copy is wrong. Attached is the corrected one. Regards, Zayed Brown.	J.Leaner, Directorate: Pollution Management, Western Cape Government, comment by fax, 26 November 2014.	Dear Zayed, Thank you for your fax and e-mail. I hereby acknowledge receiving your correspondence and will process it further and pass it onto the CSIR Stellenbosch. Sincerely, Shawn Johnston
41	The above-mentioned documentation received by the Directorate: Pollution management (D:PM) refers. The D:PM has reviewed the report and notes that the comments provided during the scoping phase has not been addressed. The D:PM has the following inputs which need to be addressed: 1. A monitoring protocol needs to be	J.Leaner, Directorate: Pollution Management, Western Cape Government, comment by fax, 26 November 2014.	1. The monitoring protocol should reflect or build on those implemented by the SBWQFT for the Saldanha Bay and

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	described to ensure conformance of effluent to prescripts of Section 39, National Water Act (Act 36 of 1998) and Notice 169 of 2013 (Revision of general Authorisation in terms of NWA; 2. It is envisaged that many entities will use the pipeline to dispose effluent which ought to conform (as described under (1) above. A mechanism of apportioning responsibility to any entity discharging non-conforming effluent into the pipeline must be developed and described in the Environmental Authorisation (EA); 3. It is assumed that the owner/operator of the pipeline will deem to have ultimate accountability in the event non-conforming effluent is released to the environment; 4. In the event of discharge of non-conforming effluent to environment, Section 30 of the National Environmental Management Act (Act 107 of 1998) is triggered and the described obligations needs to be implemented; 5. It is advised that a leak detection system (e.g. mass balance) be implemented to		Langebaan area. The monitoring protocol will be provided and approved by the DEA:O&C as part of the CWDP Application. Frontier Saldanha Utilities applied for a CWDP during September 2014. The monitoring protocol will adhere to the relevant provisions of the National Water Act (Act 36 of 1998) and Notice 169 of 2013. 2. At this stage, the SRMO Project will be operated and maintained by one owner, Frontier Saldanha Utilities. One CWDP was applied for by Frontier Saldanha Utilities for the SRMO Project and thus only Frontier Saldanha Utilities will be held responsible and accountable for discharging effluent into Danger Bay via the SRMO Project. Frontier Saldanha Utilities will have commercial agreements with the various contributing entities to ensure that Frontier Saldanha Utilities operates within the provisions of the CWDP. Each contributor to the effluent needs to ensure that their specific discharge is compliant with the relevant Standards or they will not be allowed to contribute and utilise the SRMO system 3. Comment noted, please refer to item 2 above. 4. Comment noted. 5. A leak detection system will be implemented by Frontier Saldanha Utilities. Please refer to Section 2.4 of Chapter 2 of the FEIAR which provides details of the proposed system. 6. Comment noted.

No.	Issue	Raised by	Response
	ensure quantitative discharge of conforming effluent to the receiving environment; 6. Should, during the construction and operational phases, leaks or spills to environment of effluent happens, Section 30 (as described under (4) above is triggered. 7. Please contact Etienne Roux at the contact details indicated, should you have any enquiries regarding these comments.		7. Comment noted.
West Coast District Municipality			
42	Hi Shawn, Attached please find the West Coast District Municipality's comments on the Draft EIR for the proposal. The letter has also been mailed to your offices. Regards, Doretha Kotze	Doretha Kotze, West Coast District Municipality, comment by e-mailed letter, 25 November 2014.	Dear Doretha, Thank you for your e-mail and comments on the SRMO Project DEIR. Sincerely, Shawn Johnston
43	Your letter dated 20 October 2014 and the DEIR for the proposal refers. The following comments have been provided by the WCDM's Environmental Health Division: 1.1 The preferred option of a shared marine outfall pipeline at Danger Bay is supported. The alternative interim outfall solution must be avoided, if at all possible. 1.2 The preferred option for the outfall location is supported, however, additional numerical modelling of the effluent	Doretha Kotze, West Coast District Municipality, comment by e-mailed letter, 25 November 2014.	1.1 Noted. The shared marine outfall option with the proposed West Coast Desalination Plant is the preferred alternative. However, should the WCDM not be operational when the SRMO Project is required, an interim outfall position, as indicated in the DEIAR, was considered that will not affect the construction nor commissioning of the proposed WCDM desalination plant. 1.2 Detailed pipeline design and specifications will be submitted to DEA: O&C as part of the CWDP Application. Frontier Saldanha Utilities has investigated the risk of recirculation of effluent

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	dispersion is to be undertaken to refine the outfall location in order to minimize the risk of recirculation of effluent through the WCDM desalination plant (DP), especially before the Saldanha Separation Plant effluent is diverted and temporary outfall is decommissioned. 1.3 The proposed Saldanha Bay Municipality's regional WWTW effluent must comply with the so-called General Standard and permitted by DEA before being added to the WCDM DP and SRMO pipeline. 1.4 The effect of the individual and/or combined effluent on the marine environment must be monitored according to a DEA approved sampling program and the results must be made available to the general public on request.		through the desalination plant in the Dispersion modelling study that was undertaken. The modelling study includes the intake position of the WCDM desalination plant. Please refer to Annexure 2 of Volume III of the FEIAR. The results of the dispersion modelling study that were undertaken indicate that recirculation is not anticipated. 1.3 This goes without saying, but links back to the points made in no 41 above. Each contributor to the effluent needs to ensure that their specific discharge is compliant with the relevant Standards or they will not be allowed to contribute and utilise the SRMO system. 1.4 A monitoring protocol will be established and approved by DEA as part of the CWDP Application. The protocol should reflect or build on those implemented by the SBWQFT.

The section below provides the issues (and comments thereto) that were raised at the Focus Group Meetings and Public Open House held following the release of the Draft EIA Report. The Notes of the Public Open House Meeting and Attendance Register are included in Appendix H of Volume I of this report.The Focus Group Meeting Notes and Attendance Registers are included in Appendix I.

Focus Group Meeting Notes: Meetings were attended by the Project EIA Team (CSIR, Frontier and Shawn Johnston of Sustainable Futures ZA).			
Focus Group Meeting with Jacobsbaai Sea Products and Jacobsbaai Ratepayers & Residents Association on 30 October 2014. The meeting was attended by the EIA Project Team, Ms Andrea Pulfrich (*Pisces Environmental Services*), the specialist for the Marine Ecology study and Mr Francois Smit (*WorleyParsons RSA (WP)*), the specialist for the Marine Hydrodynamics Modelling study.			
1	Dr. Andrea Pulfrich presented the findings of the	Dr. Andrea Pulfrich, Pisces	Noted.

	Marine Ecology Specialist Study.	Environmental Services	
2	Dr. Sue Jackson: What are the storage volumes for bad quality water?	Dr. Sue Jackson, JSP Consulting	Derick de Wit (Frontier): Each unit will be responsible for storage of their own waste water on site. Storage would be for about 4hours, plus minus $15m^3$. Shut down would be at the source.
3	Jonathan Venter: What if the last quality check is not to spec, who takes responsibility?	Jonathan Venter, Jacobsbaai Sea Products	Derick de Wit: The shareholders and operators will be responsible for quality checks and monitoring.
4	Dr. Sue Jackson: Were rare earth elements included in the dispersion model?	Dr. Sue Jackson, JSP Consulting	Francois Smit (WP): Yes that is correct.
5	Dr. Sue Jackson: Are you saying that no rare earths will be discharged out to sea?	Dr. Sue Jackson, JSP Consulting	Derick de Wit: Correct, nothing will be send as waste to sea.
6	Dr. Sue Jackson: Effluent tables. Will you monitor in your receiving environment (Danger Bay)?	Dr. Sue Jackson, JSP Consulting	Derick de Wit: Yes we will and are currently doing monitoring in Danger Bay. Frontier Utilities is a member of the SBWQFT. They have requested the Forum to extend their monitoring campaign to include the Danger Bay area. The monitoring undertaken by the SBWQFT was reported on in the state of the bay report 2013/2014 by Anchor Environmental Consulting.
7	Jonathan Venter: Will you monitor the buildup of elements like cadmium?	Jonathan Venter, Jacobsbaai Sea Products	Derick de Wit: Yes we will be monitoring everything related.
8	Mike Gregory: From the residents and ratepayers we are concerned about the pipeline route and how it will affect our roads and other infrastructure through Jacobsbaai. I hereby submit to you our concerns and burning issues. We look forward to engage with you and the municipality on this.	Mike Gregory, Jacobsbaai Residents and Ratepayers Association	Derick de Wit: We would look at a partnership with the Saldanha Bay Municipality and the Jacobsbaai Residents and Ratepayers Association to resolve any issues relating to the pipeline servitude within the road reserve.
9	Dr. Sue Jackson: Will the pipeline be above ground crossing the beach or will it be underground? If	Dr. Sue Jackson, JSP Consulting	Francois Smit: We are currently looking at all options.

	underground, how deep will it be?		
10	Dr. Sue Jackson: How far out to sea will the pipeline go?	Dr. Sue Jackson, JSP Consulting	Derick de Wit: About 400-500m out to sea and it will be buried under the sand.
11	Jonathan Venter: What will happen after the 30-year period?	Jonathan Venter, Jacobsbaai Sea Products	Derick de Wit: The pipeline would be maintained long-term.
12	Dr. Sue Jackson: Our concern would be the long-term accumulation of elements and toxins in the marine system and sediments e.g. from the Waste Water Treatment Works.	Dr. Sue Jackson, JSP Consulting	Derick de Wit: The water from the Waste Water Treatment Works can be cleaned and polished for industry use and this is one option been explored.
Focus Group Meeting with Saldanha Bay Municipality on 13 November 2014. The meeting was attended by the Project EIA Team (Mr Pat Morant also attended as part of the CSIR representatives)			
13	Nazeema Duarte: Thank you for the update and feedback on the project. We received all of the documents and correspondence. We are currently reviewing and will provide comment in due course.	Nazeema Duarte, Saldanha Bay Municipality, 13 November 2014	Minnelise Levendal (CSIR): Thank you for the comment.
14	Nazeema Duarte: Our concern remains the discharge into the ocean at Danger Bay.	Nazeema Duarte, Saldanha Bay Municipality, 13 November 2014	Pat Morant (private consultant representing CSIR): We do not foresee any problem with the discharge into Danger Bay. The worst case scenario has been modelled and the modelling has indicated that there would not be any potential red flags. The footprint into the ocean is extremely small. Derick de Wit: As previously stated, we are a member of the SBWQTF and through the Forum we have started a monitoring programme for Danger Bay.
15	Nazeema Duarte: Please ensure that the results of the monitoring are made available to all interested and affected parties including	Nazeema Duarte, Saldanha Bay	Derick de Wit: We will do so.

	the Saldanha Bay Municipality.	Municipality, 13 November 2014	
16	Nazeema Duarte: Our team will review the Draft Environmental Impact Assessment Report and provide you will our comments as soon as possible.	Nazeema Duarte, Saldanha Bay Municipality, 13 November 2014	Derick de Wit: Thank you for the opportunity to once more clarify the project with you.
Focus Group Meeting with Tabakbaai Ward Councillor and Ward Committee on 13 November 2014 (Attended by the EIA Project Team and Mr Pat Morant)			
17	Simon Biko: What is the duration of the EIA process?	Simon Biko, Saldanha Bay Municipality Ward Councillor - Tabakbaai	Minnelise Levendal: Approximately eighteen months.
18	Simon Biko: How far will the pipeline go out to sea?	Simon Biko, Saldanha Bay Municipality Ward Councillor - Tabakbaai	Derick de Wit: Approximately 500 m .
19	Simon Biko: Where will the pump stations be?	Simon Biko, Saldanha Bay Municipality Ward Councillor - Tabakbaai	Derick de Wit: The pump stations will be along the pipeline route and at the proposed desalination plant.
20	Simon Biko: Will there be any safety and security issues for Tabakbaai?	Simon Biko, Saldanha Bay Municipality Ward Councillor - Tabakbaai	Derick de Wit: No, we do not foresee any safety and security issues for the users of Tabakbaai.
21	Simon Biko: Will the brine affect the sea? Will it kill off the sea?	Simon Biko, Saldanha Bay Municipality Ward Councillor - Tabakbaai	Derick de Wit: No, it will not, the brine will be mixed with the seawater.
22	Simon Biko: How many jobs will this project provide for the area?	Simon Biko, Saldanha Bay Municipality Ward Councillor - Tabakbaai	Derick de Wit: It would be approximately 8-10 permanent jobs and approximately 100 temporary jobs during the construction phase. The project would be a catalyst for other proposed industries and job creation in the area.
23	Simon Biko: What types of skills are required?	Simon Biko, Saldanha Bay Municipality Ward Councillor - Tabakbaai	Derick de Wit: These jobs would require technical skills and we would look at skills development as well.

24	Simon Biko: What is your company's social responsibility?	Simon Biko, Saldanha Bay Municipality Ward Councillor - Tabakbaai	Derick de Wit: The project in itself is an enormous social responsibility project.
25	Simon Biko: We have no major concerns about your project. Please keep us informed of the progress.	Simon Biko, Saldanha Bay Municipality Ward Councillor - Tabakbaai	Minnelise Levendal: Thank you for your comments and for the opportunity to meet with you.
Open House Event on 13 November 2014 (Attended by the EIA Project Team, Mr Francois Smit and Mr Pat Morant.			
26	Daan Grobelaar: Our biggest concern is the proposed pipeline route through the town of Jacobsbaai.	Daan Grobelaar, Jacobsbaai Ratepayers & Residents Association	Comment noted.
27	Daan Grobelaar: You have met with Mike Gregory of the Jacobsbaai Ratepayers and Residents Association and he has submitted our input.	Daan Grobelaar, Jacobsbaai Ratepayers & Residents Association	Comment noted.
28	Daan Grobelaar: We do not have sewage services within Jacobsbaai. It would be great if we can look at a partnership with your project to ensure that when you dig up the servitude for the proposed SRMO pipeline that we lay the sewage pipeline for the area at the same time with the help of the Saldanha Bay Municipality.	Daan Grobelaar, Jacobsbaai Ratepayers & Residents Association	Derick de Wit: We would be keen to form a partnership that would be of benefit for all in the area. We can only do this once we have an Environmental Authorisation for the proposed SRMO Project.
29	Daan Grobelaar: Lets follow-up and get all the relevant stakeholders around the table to make this a mutually beneficial partnership.	Daan Grobelaar, Jacobsbaai Ratepayers & Residents Association	Derick de Wit: We have noted your suggestions and recommendation relating to the servitude route and look forward to working with the Jacobsbaai Ratepayers and Residents Association.
Focus Group Meeting with Department of Environmental Affairs and Development Planning (DEA&DP), CapeNature, Mr Nick Helme of Nick Helme Botanical Surveys on 12 March 2015. The meeting was attended by the EIA Project Team, including Mr Paul Lochner of the CSIR.			
30	Purpose of the Meeting: To discuss the challenges associated with the Jacobsbaai Eastern pipeline corridor and to provide motivation why the Jacobsbaai Western Corridor is being proposed as the preferred alternative. These notes are intended as a summary of	Shawn Johnston (Sustainable Futures ZA – EIA Public Participation facilitator)	Noted.

	key points of discussion and outcomes of the meeting and not as detailed minutes.		
31	Project Overview: Frontier gave a slide presentation with an overview of the Frontier Rare Earths projects in the Western Cape and Northern Cape (near Garies), explaining the context of the pipeline within the overall rare earths project. He also presented the range of alternatives that was investigated that led to the identification of the marine outfall proposal as presented in this EIA process as the only reasonable and feasible alternative. He showed the three main pipeline routes that were investigated, i.e. AfriSam corridor, Jacobsbaai Western corridor and Jacobsbaai Eastern corridor. He explained why only the Jacobsbaai Western Corridor is a feasible alternative.	Drikus Janse van Rensburg (Frontier Utilities, Project Proponent)	Noted.
32	Alana explained that the remaining natural vegetation on the Vredenburg Peninsula is very sensitive and of high biodiversity value.	Alana Duffell-Canham, CapeNature	Noted.
33	Alana raised the issue that the housing development layout plan (from Mr Smit, Jacobsbaai landowner on the Eastern corridor) does not give him the full legal permission required to go ahead with the development. Drikus indicated that Mr Smit has a letter from Saldanha Bay Municipality granting development rights for erven 299, 892 and 889 that includes a layout plan (dated April 1994). He claims he has the development rights. Mr Smit says the Frontier pipeline will sterilize part of his land and stated that he will not agree to the pipeline servitude crossing his property. Derick conveyed that he expects Mr Smit to put this statement in a formal letter very shortly. Derick explained that even if Mr Smit does not have the full housing development rights, he nonetheless is the owner of the property and does not intend to agree to having the	Alana Duffell-Canham, CapeNature	Noted.

	pipeline servitude cross his property.		
34	Drikus explained that when negotiations for a servitude along the Eastern corridor were blocked by the landowners (Mr Smit) for the proposed desalination plant of the WCDM, Frontier re-visited the other routes. Frontier re-approached AfriSam, who insisted that a corridor through their land is not viable due to their mining and blasting operations and formally stated this in a letter dated 9 February 2015.	Drikus Janse van Rensburg (Frontier Utilities, Project Proponent)	Noted.
35	Drikus showed formal letters of support for the Saldanha Regional Marine Outfall Project from: • Saldanha Bay Water Quality Forum Trust (23 February 2015) – they see potential for the pipeline to improve water quality in Small Bay, as certain industries can use the new pipeline and dispose of effluent via Danger Bay instead of into Small Bay where the water circulation is poor. • ArcelorMittal letter of support as they can use this piprline for their brine (19 February 2015) • Saldanha Bay Municipality letter of support (10 February 2015)	Drikus Janse van Rensburg (Frontier Utilities, Project Proponent)	Noted.
36	Drikus indicated how the overall Frontier Rare Earths project would contribute to direct employment: • During construction, direct employment of approximately 2500 people in SA. • During operations, direct permanent jobs of approximately 500 people in SA. • In addition, there would be indirect jobs created for support services, suppliers etc.	Drikus Janse van Rensburg (Frontier Utilities, Project Proponent)	Alana Duffell-Canham: This is noted, but I would like to emphasise that the mandate of CapeNature is to conserve biodiversity and not economic development.

37	Minnelise explained the stages in the EIA process, i.e. that the Draft EIA Report was released in October 2014, and comments were received. CSIR will release the Final EIA Report for 30 days for comment and will then send the Final EIA Report with comments to DEA&DP for decision-making. The 2014 NEMA Appeal Regulations will apply. In response to the Draft EIA Report, CSIR received a letter from CapeNature opposing the western corridor, which gave rise to the need for this meeting with CapeNature and DEA&DP. This discussion will also inform the Amendment to the Environmental Authorisation requested by the WCDM so they can use the Western corridor and not Eastern corridor, as their negotiations with the landowner for use of the Eastern corridor were unsuccessful.	Minnelise Levendal (CSIR – Environmental Assessment Practitioner (EAP)	Noted.
38	Alana emphasised that the biodiversity in this area is very sensitive. AfriSam is looking at vegetation offsets and is currently undertaking an offset study. Alana also explained that she is concerned that approval may set a precedent for future development in the area.	Alana Duffell-Canham (CapeNature)	Noted.
39	Nick asked about the risk of extra pipelines being added to the servitude in future, leading to additional impacts.	Nick Helme (*Nick Helme Botanical Surveys* - Botanical specialist)	Derick de Wit: He explained that a 900 mm pipeline is proposed in order to accommodate other potential future users. Frontier only requires a 150 mm diameter pipe. In future, they may sell the pipeline to the Saldanha Bay Municipality who can use it for other effluents. He explained that concentrated brine from evaporation ponds at ArcelorMittal will in future not be allowed to go to waste sites, and they can then use this new pipeline for brine disposal. Derick explained that the proposed pipeline provides an integrated and medium to long-term solution aimed at meeting a variety of needs in the Saldanha area.

40	Derick asked what mitigation is required to avoid or reduce impacts to natural vegetation.	Derick de Wit (Frontier Utilities, Project Proponent)	Nick Helme: He responded that because the pipeline will be along an existing road, the impact would be less. The soil and excavations must be well managed. Nick added that if the pipeline is in the road servitude, then provincial roads can cause disturbance to vegetation anyway. Nick explained that, for the Western corridor, it is better to put the pipeline on the western (seaward) side of the road as this is already disturbed in places. There are succulents and bulbs that can be moved. The question is where to re-plant them, as the road servitude may be disturbed later. Derick de Wit: He explained that this is a $1bn project, and resources can be provided for the relocation of plants.
41	Drikus explained that Provincial Roads Department will not give "provisional approval" but will only approve the pipeline in the road reserve when they get a final design and once an Environmental Authorisation has been issued.	Drikus Janse van Rensburg (Frontier Utilities, Project Proponent)	Noted.
42	Alana asked if Frontier will be prepared to provide an offset which did not involve buying land? She explained that they have identified two properties not included in the AfriSam offset plans. CapeNature wants to tie in these properties into a consolidated Management Plan. The offset would be in the form of financial contribution to managing valuable land parcels identified by CapeNature.	Alana Duffell-Canham (CapeNature)	Derick de Wit: He indicated that this is certainly a possibility and that they would welcome the opportunity to discuss this further with CapeNature.
43	**Way Forward** Derick explains that he expects Mr Smit to provide a formal resolution from the Board of his property company that they will	Derick de Wit (Frontier Utilities, Project Proponent)	Noted.

	not allow a servitude. This is the final nail in the coffin for the Eastern corridor.		
44	Alana indicated she may need more than 30 days to comment on Final EIA Report to coordinate with AfriSam offsets study. Derick requested that the legally prescribed timeframes be adhered to, in order to avoid procedural objections later on.	Alana Duffell-Canham (CapeNature)	Derick de Wit: He requested that the legally prescribed timeframes be adhered to, in order to avoid procedural objections later on.
45	Alana indicated that she will discuss the potential for Frontier to provide financial contribution to the management of the land identified by CapeNature with her colleagues and members of the Stewardship Programme. This issue will hopefully be resolved before she comments on the Final EIA Report.	Alana Duffell-Canham (CapeNature)	Noted.
46	Nick will review the mitigation currently proposed in his ecological specialist report and update if needed.	Nick Helme (*Nick Helme Botanical Surveys* - Botanical specialist)	Noted.
47	CSIR to release the Final EIA Report in the first week of April 2015 for a 30 days comment period, and thereafter submit the Final Report with any comments received (and associated responses) to DEA&DP for review and decision-making.	Minnelise Levendal (CSIR - EAP)	Noted.

6.2.2 Issues submitted after the release of the Final Scoping Report and the responses thereto by the EIA Project team

No.	Issue	Raised by	Response
INTEGRATED COASTAL MANAGEMENT, COASTAL PUBLIC PROPERTY, COASTAL PROTECTION ZONE & COASTAL ACCESS			
1	Your correspondence and DSR dated 15 October 2013 and received by the Department on the 18 October 2013, your presentation at the Department and the email dated 20 February 2014, refer. The integrated Coastal Management Act (Act No. 24 of 2008) ("ICM Act") is a Specific Environmental Management Act under the umbrella of the National Environmental Act (Act No. 107 of 1998) ("NEMA"). The ICM Act sets out to manage the nation's coastal resources, promote social equity and best economic use of coastal resources whilst protecting the natural environment. The ICM Act established the coastal protection zone in order to manage, regulate and restrict the use of land adjacent to coast public property, or land that plays a significant role in the coastal ecosystem for the purpose of, *inter alia*, protecting the ecological integrity and natural character of the coat and to protect people, property and economic activities from the risks or threats which may arise from dynamic coastal process. In terms of Section 38 of ICM Act, the Coastal Management Unit ("CMU") is the provincial lead agency for coastal management in the Western Cape as well as the competent authority for the administration of certain provisions of "The control of vehicles in the coastal zone regulations (GN No 1399 , 21 December 2001, as amended) "ORV Regulations".	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning Western Cape, comment by letter, 28 February 2014.	Comment noted.

No.	Issue	Raised by	Response
2	The Coastal Management Unit ("CMU") has reviewed the DSR and has the following additional comments: The West Coast District Coast Management /Setback Line project is currently underway. This project is run by the Coastal Management Unit and Royal HaskoningDHV is the consultant for this project. The project identifies risk zones and will also delineate to Coastal Management Line along the West Coast district. This information should be used to inform the decisions of where infrastructure is located. This information can be obtained from the CMU or via the following websites: www.eadp.westerncape.gov.za/calender/month www.rhdhv.com/pages/services/environmental/current-projects.php	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning Western Cape, comment by letter, 28 February 2014.	Comment noted. The project team has consulted the study which is currently being undertaken by Royal HaskoningDHV on behalf of DEA&DP: "Coastal Management/Setback lines for the West Coast District, Western Cape." Frontier Utilities has confirmed that the draft coastal setback line report will be taken into account by their engineering team in the final design of the proposed pipeline and associated infrastructure. To this effect, Frontier Utilities stated that it would not build Pump Station E within the coastal setback line which is usually within 150 meters from the coast line. Pump station E will be built more than 200 m from the coast line.

No.	Issue	Raised by	Response
3	Your correspondence and FSR received by this Department refers. The integrated Coastal Management Act (Act No. 24 of 2008) ("ICM Act") is a Specific Environmental Management Act under the umbrella of the National Environmental Act (Act No. 107 of 1998) ("NEMA"). The ICM Act sets out to manage the nation's coastal resources, promote social equity and best economic use of coastal resources whilst protecting the natural environment. The ICM Act established the coastal protection zone in order to manage, regulate and restrict the use of land adjacent to coast public property, or land that plays a significant role in the coastal ecosystem for the purpose of, inter alia, protecting the ecological integrity and natural character of the coast and to protect people, property and economic activities from the risks or threats which may arise from dynamic coastal process. In terms of Section 38 of ICM Act, the Coastal Management Unit ("CMU") is the provincial lead agency for coastal management in the Western Cape as well as the competent authority for the administration of certain provisions of "The control of vehicles in the coastal zone regulations (GN No 1399, 21 December 2001, as amended) "ORV Regulations".	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning Western Cape, comment by letter, 28 February 2014.	Comment noted.
4	The Coastal Management Unit ("CMU") has reviewed the FSR and has the following comments: Our previous comments remain relevant and must be considered.	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning Western Cape, comment by letter, 19 May 2014.	Comment noted. See Response to no 2 above for the comment relating to the West Coast District Coastal Management/Setback Line project.

No.	Issue	Raised by	Response
	We also re-iterate that the West Coast District Coastal Management/Setback Line project is currently underway and indicates coastal risk along the West Coast District. This matter was raised at the focus group meeting and was subsequently raised again in our additional comments on the Draft Scoping Report. The latest information on this project can be viewed at the following website: http://www.rhdhv.co.za/pages/services/environmental/current-projects.php Please note that there is a large littoral active zone present in the Danger Bay area, and this is not a favourable location for infrastructure development. The location of the pipeline should therefore be informed by this risk and if there is no alternative location to place the pipeline, appropriate mitigation, informed by specialist studies, must be implemented.	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning Western Cape, comment by letter, 19 May 2014.	The location of the pipeline was informed by the technical and environmental Screening Study that was undertaken by WorleyParsons (Annexure I of Volume III). It was also informed by the Marine Hydrodynamic Modelling study that was undertaken for this SRMO Project (Annexure 2 of Volume III).
5	The CMU reserves the right to revise or withdraw comments or requests further information based on any information received.	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning Western Cape, comment by letter, 19 May 2014.	Comment noted.

No.	Issue	Raised by	Response
6	The Final Scoping Report for the above-mentioned activity has reference. The Department of Environmental Affairs (Branch Oceans & Coasts (O&C): Chief Directorate: Integrated Coast Management (ICM) appreciates the opportunity to comment on this Final Scoping Report. The Branch O&C: ICM Chief Directorate has identified issues that need to be considered in terms of the Integrated Coastal Management Act, 2008 (Act No.24 of 2008) (ICM Act), which are summarised below. Due to the fact that the proposed construction, operation and decommissioning of the Saldanha regional marine outfall will be taking place in the coastal zone, the applicant must consider all relevant factors stipulated under section 63 of the ICM Act, which the competent authority must take into consideration. These include assessing whether the project will have impacts on coastal public property, coastal protection zone or coastal access land. If these are affected, the following must be considered: • The assessment of the proposed project impacts on the coastal public property. • The potential impacts of the proposed project on the coastal protection zone and the coastal access land. • The applicant should provide prevention and mitigation measures, where applicable.	Andre Share, Chief Director: Integrated Coastal Management, Department of Environmental Affairs Oceans and Coasts, Cape Town, comment by letter, 20 June 2014.	The pipeline to the outfall will be buried through the surf and beach areas. Some excavation of underlying rock may be required for the burial of the pipeline through the beach, surf and offshore areas, which may necessitate the use of blasting methods. The EMP provides mitigation measures to prevent impacts to the coastal public property and coastal access (Table 5). These include active rehabilitation following completion of construction activities (i.e. remove all artificial constructions or beach modifications created during construction from above and within the intertidal zone). No accumulations of excavated beach sediments should be left above the high water mark. Any substantial sediment accumulations below the high water mark should be levelled. Furthermore, an adjacent portion of undisturbed beach should be allocated where populations of macrofaunal species can survive and supplement recolonisation in impacted areas. A visual specialist study has been undertaken which addressed visual impact to coastal users. The proposed SRMO pipeline will be buried and will therefore only have a visual impact on sensitive visual receptors during the construction phase. The only pump station that will potentially cause significant visual intrusion is Pump Station E in Danger Bay but careful siting among the dunes can reduce the impact.

No.	Issue	Raised by	Response
7	The applicant must take note of section 58 of the ICM Act, considering that the proposed construction, operation and decommissioning of the Saldanha regional marine outfall can cause negative impacts on the environment, therefore it is recommended that the proposed project must be carried out in a responsible manner.	Andre Share, Chief Director: Integrated Coastal Management, Department of Environmental Affairs Oceans and Coasta, Cape Town, comment by letter, 20 June 2014.	Comment noted. A marine specialist study was undertaken (see Appendix A of Volume II of the DEIR) to identify and assess potential impacts on the marine ecology during construction, and operation. A number of specialist studies has been undertaken to identify and assess potential impacts associated with the proposed SRMO Project. These studies are included in Appendices A-E of Volume II of the DEIR.

No.	Issue	Raised by	Response
8	The following measures must be taken into consideration in order to minimize and mitigate environmental impacts that may result from the proposed construction, operation and decommissioning of the Saldanha regional marine outfall: • During operation phase of the proposed project the quality of the brine effluent stream must be monitored on a regular basis to ensure the effluent is within the acceptable standards. • Marine impact analysis must be conducted prior to the excavation of underlying rock during the burial of the pipeline through beach, surf and offshore areas. • The amount of biocides, nutrients, co-pollutants and rare earth elements must be reduced to a minimal, to prevent any impacts associated with these constituents. • The effects of elevated salinities on marine biota altered dissolved oxygen concentrations in the discharged plume must be addressed in detail in an Environmental Management Plan. • Radioactive monitoring must be performed on the effluent stream from the Saldanha separation plant before it is transferred to the proposed effluent pipeline. • Construction vehicles and machineries that will be used during proposed construction of a marine outfall and associated infrastructure must be cleaned, maintained and monitored regularly to reduce environmental impacts caused by fuel spillages. • Danger Bay area is open to recreational use, particularly fishers and the area is in close proximity to numerous conservation areas, in light of the above, the applicant must put measures in place, to ensure that recreational use and conservation areas are not compromised.	Andre Share, Chief Director: Integrated Coastal Management, Department of Environmental Affairs: Oceans and Coasts, Cape Town, comment by letter, 20 June 2014.	• The quality of the effluent will be monitored continually as part of the Monitoring Programme and as indicated in the EMP. • A baseline assessment will be done on marine ecology and water quality prior construction as indicated in the EMP. • Radioactive monitoring is undertaken through-out the project. It starts from mining at the Zandkopsdrift Mine, through the Separation plants' processing steps and as a final measure at the SSP effluent feed to the SRMO Project. Please refer to sections 2.4.1 & 2.4.7 in Chapter 2 with regard to the continuous monitoring of the effluent discharge. • Construction vehicles and machineries will be cleaned and monitored regularly to detect fuel spillages. • Impacts on recreational users have been identified and assessed in the Economics Chapter (Appendix F of Volume II). Mitigation measures are also proposed to minimise or avoid these risks.

No.	Issue	Raised by	Response
9	The proposed Saldanha regional marine outfall will discharge industrial treated effluent into coastal waters, in Danger Bay, in terms of ICM Act; anyone who wishes to discharge any effluent into the coast must apply to DEA for coastal waters discharge permit. The applicant is therefore advised to take note of Section 69 of the ICM Act. For more information regarding the above-mentioned permit, please contact Mr Mulalo Tshikotshi on 021 819 2455 or via email: mtshikot@environment.gov.za	Andre Share, Chief Director: Integrated Coastal Management, Department of Environmental Affairs Oceans and Coast Cape Town, comment by letter, 20 June 2014.	Comment noted. CSIR has submitted an Application for a Coastal Waters Discharge Permit dated 10 September 2014 to DEA:O&C on behalf of Frontier Utilities. A copy of the application form and proof of submission via courier is provided in Annexure 4 of Volume III of this DEIR. DEA: O&C has assigned Reference number: 2014/016/Frontier Saldanha to the application.
10	For all materials that will be generated during the proposed construction, operation and decommissioning of the Saldanha regional marine outfall, that will need to be dumped at sea, a fully completed application form for a dumping at sea permit (sec) have to be submitted to our offices before any dumping at sea can commence. In this regard, the applicant is also advised to take note of section 71 of the ICM Act. For more information regarding the above-mentioned permit, please contact Miss Nokuzola Sukwana on 021 819 2446 or via email: nsukwana@enironment.gov.za	Andre Share, Chief Director: Integrated Coastal Management, Department of Environmental Affairs Oceans and Coast Cape Town, comment by letter, 20 June 2014.	Frontier Utilities has applied for a Coastal Waters Discharge Permit in terms of section 69 of the ICM Act as indicated in no 9 above. DEA: O&C has assigned Reference number: 2014/016/Frontier Saldanha to the application.
11	In terms of Regulation 6 of the National Environmental Management Act: Control of use of vehicles in the coast zone (GN Regulation 1399 of 21 December 2001), any person intending to drive on the coastal zone should lodge an application for a vehicle access permit to the department of Environmental Affairs (Oceans and Coasts), before driving on the coastal zone. For more information on the application forms you can go to the department's website http:/www.environment.gov.za or contact Ms Tandiwe Njajula on 021 819 2442 or via email: tnjajula@environment.gov.za	Andre Share, Chief Director: Integrated Coastal Management, Department of Environmental Affairs Oceans and Coast Cape Town, comment by letter, 20 June 2014.	Frontier Utilities will apply to DEA:O&C for a vehicle access permit before driving on the coast.

No.	Issue	Raised by	Response
12	Nitasha Baynath-Pillay: What colour will the brine be?	Nitasha Baynath-Pillay, Department of Environmental Affairs (DEA): Oceans and Coasts (O&C), comment at focus group meeting, 04 August 2014.	The brine salt water solution will be clear and no visual (discolouration) impact at the discharge point is expected.
13	Nitasha Baynath-Pillay: Have you taken the environmental cost into account? The salt impurities would be of concern.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	The environmental cost has been taken into account and was addressed in the specialist studies that were undertaken as part of the EIA (Appendices A-F of Volume II).
14	Nitasha Baynath-Pillay: Every alternative needs to be viable. We would like to see all alternative being reviewed and studied.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	The viable alternatives have been identified and assessed in the DEIR. These include two marine outfall alternatives. These were assessed in the Marine Ecology Specialist Study.
15	Nitasha Baynath-Pillay: This department did not comment on the West Coast District Municipality desalination plant environmental impact assessment. This is a great concern for the Department.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Noted. This point was raised with the project manager of the WCDM desalination plant EIA. A Focus Group Meeting was subsequently held with DEA:O&C and members of the desalination plant EIA on 20 August 2014 to discuss this EIA and the proposed co-disposal option with the SRMO Project. Members of the SRMO Project EIA also attended this meeting. DEA:O&C will comment on the Coastal Waters Discharge Permit Application once this is submitted to them.
16	Nitasha Baynath-Pillay: What are the impurities within the salt that will be disposed of in the ocean?	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	All the impurities in the salt will be removed at the Zandkopsdrift mining site. Please refer to Chapter 2 of the DEIR for the detailed impurities lists.
17	Nitasha Baynath-Pillay: Please ensure that your specialist utilise the DEA: Oceans and Coast assessment criteria. We would like to see our criteria being used.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted. The criteria have been incorporated into the Marine Specialist study.

No.	Issue	Raised by	Response
19	Nitasha Baynath-Pillay: All environmental impact assessment reports need to go to the DEA: Oceans and Coasts internal review committee and to our international peer review specialist.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted.
20	Nitasha Baynath-Pillay: Please note, for the coastal discharge permit you need to submit an application and conduct a public participation process according to our regulations and our assessment criteria.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted. An application for a Coastal Waters Discharge Permit dated 10 September 2014 has been submitted to the DEA: O&C. A copy of the permit application and proof of sending it via courier are attached as Annexure 4 of Volume III. The following reference number was allocated to the project: 2014/016/Frontier Saldanha. A Public Open House is scheduled for the 13th of November 2014.
21	Nitasha Baynath-Pillay: We would like to know how the receiving environment would be affected by your project.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted. A number of specialist studies were undertaken as part of the EIA process to identify potential impacts of the SRMO Project on the environment (specialist studies are included in Appendices A-F in Volume II). These include impacts on marine ecology, terrestrial ecology, wetlands, visual, heritage and socio-economics. The significance of these impacts was assessed and mitigation measures were proposed to avoid or minimise negative impacts and to enhance positive impacts. Chapter 8 of the DEIR contains a summary of the impacts identified, their significance ratings and proposed mitigation measures to avoid or reduce those impacts.
22	Nitasha Baynath-Pillay: All cumulative and synergistic impacts need to be considered within your environmental impact assessment study.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted. The cumulative impacts were addressed in the Marine Ecology specialist study.

No.	Issue	Raised by	Response
23	Nitasha Baynath-Pillay: This Department needs to understand the West Coast District Municipality desalination plant and the Saldanha Regional Marine Outfall Projects dispersion into Danger Bay. We would have to study your modelling study.	Nitasha Baynath-Pillay, D DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted. A Marine Hydrodynamic Modelling Study was undertaken by WorleyParsons for the SRMO Project. The actual marine modelling study is included as Annexure 2 of Volume III. The modelling study included both development scenarios; i.e. Scenario 1 and Scenario 2. Scenario 1 considers no WCDM desalination plant, with the SRMO effluent to be disposed of via an interim sea disposal option. Scenario 2 assumes the completed construction of the WCDM desalination plant, with the SRMO effluent to be disposed of in combination with the brine return from the proposed WCDM desalination plant. The results of the modelling study were incorporated into the Marine Ecological Study (Appendix A of Volume II).

No.	Issue	Raised by	Response
24	Nitasha Baynath-Pillay: We would be concerned about the two pipelines into the sea. We can only authorize one pipeline. We need to obtain clarity on the various options for pipelines and how the two projects would integrate.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted. Two pipelines will not be constructed in Danger Bay. It is currently planned that the effluent will be disposed via the brine return disposal infrastructure of the proposed WCDM desalination plant. However, the possibility exists that construction of the desalination plant might be delayed. Consequently, this EIA for the proposed SRMO Project investigates an alternative sea disposal option for interim effluent disposal (Scenario 1) until the WCDM desalination plant is commissioned (Scenario 2) — after which it is envisaged that one shared outfall pipeline will be utilised by the SRMO Project and the WCDM desalination plant in Danger Bay.
25	Nitasha Baynath-Pillay: What type of radioactive particles will be released into the ocean?	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Radioactive material will be removed at the source and radioactive material will not be brought to Saldanha Bay. It is anticipated that a clear brine salt water solution will be released without radioactive particles. Please refer to sections 2.4.1 & 2.4.7 of Chapter 2 with regard to the continuous monitoring of the effluent discharge.
26	Nitasha Baynath-Pillay: Please submit your discharge permit application soon as it can take up to eighteen months to be processed.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted. CSIR has submitted a Coastal Waters Discharge Permit to DEA:O&C. A DEA reference number has been assigned to the application: 2014/016/Frontier Saldahna.
27	Nitasha Baynath-Pillay: What will the visual impact of the brine plume be on Danger Bay?	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	. The brine salt water solution will be clear and no visual (discolouration) impact at the discharge point is expected.

No.	Issue	Raised by	Response
28	Nitasha Baynath-Pillay: Please combine the marine ecology, marine modeling and hydrodynamic studies into one report when you submit it to the Department.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted. All the studies have been included in the DEIR. The Marine Ecology Specialist study is included in Appendix A of Volume II. The Marine Hydrodynamics Modelling study prepared by WorleyParsons is included in Annexure 1 of Volume III of the DEIR. A hard copy of the report will be submitted to DEA: O&C.
29	Nitasha Baynath-Pillay: We would like the West Coast District Municipality team to come and present their project to the Department of Environmental Affairs: Oceans and Coast. We will then invite the other directorates to be present for that meeting. It would be good for the Frontier team to be present at that meeting.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	A Focus Group Meeting with these relevant parties were subsequently held on 20 August 2014.
30	Nitasha Baynath-Pillay: Thank you for the presentations and the opportunity to engage with the team form the Saldanha Regional Marine Outfall Project.	Nitasha Baynath-Pillay, Department of Environmental Affairs, Oceans and Coast, comment at focus group meeting, 04 August 2014.	Comment noted.
31	Alvan Gabriel: The Department is busy with a hands on approach to evaluating all project applications and we welcome your willingness to engage and brief us. Please take into account the Coastal Setback Line Project and other initiatives and projects currently underway by the Department.	Alvan Gabriel, Department of Environmental Affairs and Development Planning, comment at focus group meeting, 13 August 2014.	Comment noted. The Coastal Setback Line Project was taken into account in this project.
32	Alvan Gabriel: Please also provide input to and consult the generic EMP for the Saldanha Bay Area.	Alvan Gabriel, Department of Environmental Affairs and Development Planning, comment at focus group meeting, 13 August 2014.	The generic EMP was consulted during the compilation of the EMP for this project.

No.	Issue	Raised by	Response
33	Nitasha Baynath-Pillay: The proposal for co-disposal is of concern to the Department. We need to understand how it will work. The issue of two pipelines into the ocean is also of concern. We now have an overview of the Frontier and the West Coast District Municipality projects, however the issue still remain how will co-disposal work.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Once the pipeline of the desalination plant becomes operational, the effluent from the SRMO Project will be co-disposed with that of the desalination plant.
35	Nitasha Baynath-Pillay: Co-disposal needs to be clarified within the environmental impact assessment report and within the disposal applications of the two projects.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted. The co-disposal option was included and explained in the DEIR and the Coastal Waters Discharge Permit Application.
36	Nitasha Baynath-Pillay: Please note that this department will not authorize projects like these if all regulations and criteria has been incorporated into the assessment. Your projects will be forwarded to a review committee and to our external review panel.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted.
37	Nitasha Baynath-Pillay: This Department will not authorize two pipelines next to each other into Danger Bay. We require clarification from both projects how their co-disposal will work.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted.
39	Nitasha Baynath-Pillay: Please factor into your project and application the coastal use permit and the coastal lease permit.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted.
40	Nitasha Baynath-Pillay: Other fees include your discharge fee.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted.
41	Nitasha Baynath-Pillay: By when will you have the detailed design for the West Coast District Municipality desalination plant?	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	The design is ongoing and expected to be completed in 2015 subject to municipal approvals and funding.

No.	Issue	Raised by	Response
42	Nitasha Baynath-Pillay: Completed applications for your coastal discharge permits should be in by 31 March 2015 for the next round of applications.	Nitasha Baynath-Pillay, DEA: O&C, comment at focus group meeting, 04 August 2014.	Comment noted. A Coastal Waters Discharge Permit Application dated 10 September was already submitted to DEA:O&C. The following reference number was allocated to the project: 2014/016/Frontier Saldanha.
WATER			
43	This letter refers to your request for comments from this Department, dated 24 March 2014 with DEA &DP reference number 16/3/1/2/F4/17/3009/13.	N.Ndobeni & M. Strauss, Department of Water Affairs, Western Cape Region, comment by letter, 13 May 2014.	Comment noted.
44	The Department has assessed your submitted report for the proposed construction, operation and decommissioning of the Saldanha Regional Marine Outfall project. Please note that the application triggers a Water Use Authorisation in terms of section 21 (c) and (i) of the National Water Act, 1998 (Act 36 of 1998). This is because the development falls within 500m from the boundary of a wetland.	N.Ndobeni & M. Strauss, Department of Water Affairs, Western Cape Region, comment by letter, 13 May 2014.	Comment noted. A Water Use Licence Application (WULA) will be submitted in terms of Section 21(c) (impeding or diverting the flow of water in a watercourse) and 21(i) (altering the bed, banks, course or characteristics of a watercourse). AGES will submit a WULA on behalf of Frontier Utilities with the submission of the FEIR to DWA.
45	Please advise your client to apply for a Water Use Licence before construction commences of the proposed marine outfall project as mentioned in the Final Scoping Report.	N.Ndobeni & M. Strauss, Department of Water Affairs, Western Cape Region, comment by letter, 13 May 2014.	Comment noted. AGES will submit a WULA to DWA on behalf of Frontier Utilities.
46	Please feel free to arrange a pre- Water Use Licence Application meeting with the Department that will enable submission of a completed Water Use Licence Application. Kindly contact the following official: Mr Warren Dreyer 021 941 6185, dreyerw@dwa.gov.za	N.Ndobeni & M. Strauss, Department of Water Affairs, Western Cape Region, comment by letter, 13 May 2014.	Comment noted. Mr Herman Gildenhuys of contact has subsequently contacted Mr Warren Dreyer at DWA to discuss the WULA.

No.	Issue	Raised by	Response
47	Etienne Roux: How will the various detection systems work?	Etienne Roux, Department of Environmental Affairs and Development Planning, comment at focus group meeting, 13 August 2014.	It will be a real time online detection system which will receive data from various sensors throughout the pipeline network. It will be a computerised system.
48	Etienne Roux: Will the samples taken throughout the system be verified independently?	Etienne Roux, Department of Environmental Affairs and Development Planning, comment at focus group meeting, 13 August 2014.	Yes it will be verified by independent third parties. All samples will also be sent to the National Nuclear Regulator for testing and verification of radioactive material.
49	Etienne Roux: Will the Saldanha Bay Regional Municipal Waste Water works be an upgrade or a new facility?	Etienne Roux, Department of Environmental Affairs and Development Planning, comment at focus group meeting, 13 August 2014.	It is a new proposed facility with a possible water polishing plant to supply recycled water back to local industry.
50	Etienne Roux: How many mega liters per day will the new wastewater treatment plant discharge?	Etienne Roux, Department of Environmental Affairs and Development Planning, comment at focus group meeting, 13 August 2014.	This need to be established, some of the water will be polished for industrial use. So the volume released into the Saldanha Regional Marine Outfall pipeline might be far less.
51	Ieptiesaam Bekko: The Saldanha Bay Municipality should be able to obtain municipal support grants to design and construct the proposed new regional wastewater treatment works. They need to consult with the Department of Environmental Affairs and Development Planning's development facilitation unit.	Ieptiesaam Bekko, Department of Environmental Affairs and Development Planning, comment at focus group meeting, 13 August 2014.	Comment noted.

No.	Issue	Raised by	Response
HERITAGE			
52	The matter above has reference. Your NID dated 1 August 2014 was tabled and the following was discussed: 1. HWC discussed the proposed industrial effluent pipeline (SRMO) on erf 325 – 1135, off R85, Saldanha Bay. 2. HWC agreed with the consultant that further studies is required. 3. HWC felt that an archaeological and palaeontological study is required. Requirement: 1. Since there is reason to believe that heritage resources will be impacted upon, HWC requires an HIA in terms of S. 38(3) of the NHRA (Act 25 of 1999) assessing the impacts on the following heritage resources which it has identified; archaeological and palaeontological study. 2. An HIA is required consisting of an archaeological and palaeontological study. Terms and conditions: Heritage Western Cape reserves the right to request additional information as required. Should you have any further queries, please contact the official above and quote the case number above.	Andrew B. Hall, Heritage Western Cape, comment by letter, 13 August 2014.	Comment noted. A Notification of Intent to Develop (NID) dated 1 August 2014 was submitted to Heritage Western Cape (HWC). A reference number was assigned to the project, i.e. 14070705AS0707E. Heritage Western Cape responded to the NID and requested the undertaking of a Heritage Impact Assessment (HIA) that includes specialist studies of archaeological and palaeontological resources (letter from HWC dated 13 August 2014). A HIA was undertaken by ASHA Consulting which includes an Archaeological and a Palaeontological Assessment (Appendix E of Volume II of this DEIR).

No.	Issue	Raised by	Response
COMMENTS FROM THE DEPARTMENT OF ENVIRONMENTAL AFFAIRS & DEVELOPMENT PLANNING FOLLOWING THE RELEASE OF THE FINAL SCOPING REPORT			
53	The Scoping Report (dated March 2014) and your correspondence dated 24 March 2014 and received by this Department on 01 April 2014, this Directorate's acknowledgement and rejection thereof dated 09 April 2014, and the final Scoping Report (dated March 2014) and your correspondence dated 09 May 2014 and received by this Department on 14 May 2014, refer. This letter serves as an acknowledgement of receipt of the abovementioned document by this Directorate. This Directorate will now review the Final Scoping Report and notify you of the outcome within the legislated timeframe. Kindly quote the abovementioned reference number in any future correspondence in respect of the application. Please note that the activity may not commence prior to an environmental authorisation being granted by this Directorate. The Department reserves the right to revise or withdraw comments or request further information based on any information received.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 May 2014.	Comment noted.
54	The Scoping Report ("SR") (dated March 2014) and your correspondence dated 24 March 2014 and received by this Department on 01 April 2014, this Directorate's acknowledgement and rejection thereof dated 09 April 2014, and the Final Scoping Report (dated March 2014) and your correspondence dated 09 May 2014, the final SR and your correspondence dated 09 May 2014 and received by this Department on 14 May 2014 and this Directorate's acknowledgement thereof dated 26 May 2014, refer.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	Comment noted.

No.	Issue	Raised by	Response
55	This letter serves to inform you that the abovementioned document has been accepted by this Directorate. 1. The following information must be included in the Environmental Impact Assessment Report ("EIAR"): 1.1 Applicable listed activities: 1.1.1. As indicated in this Directorate's correspondence dated 08 August 2013, applicability of each listed activity with respect to the proposed development must be clearly indicated. You are therefore required to provide a list of the applicable listed activities and a description of how the proposed development triggers the relevant listed activity. A direct link between the listed activity and the proposed development must be clearly indicated.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	Comment noted. The table of Listed Activities, Table 1.4 in Chapter 1, has been updated to include a description of how the proposed development triggers the relevant listed activities.
56	1.2 Activity Description: 1.2.1. The activity description (i.e. the terrestrial and marine components) must include a description of all associated infrastructure required for the proposed development as well as the respective development footprints; and 1.2.2. A description of the proposed access road (i.e. length and width) and the volume of each diesel storage tank.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	1.2.1 The project description is provided in Chapter 2. It contains a description of the associated infrastructure and access roads. The volume of each diesel storage tank is approximately 600l. Please refer to Appendix B4 in Volume I of the DEIR for the proposed layout and dimensions of a pump station and transfer tank.
57	1.3 Alternatives: 1.3.1. It is noted that 2 marine outfall areas will be assessed as part of the Environmental Impact Assessment ("EIA") phase. It is recommended that the authorised outfall area (authorised as part of the West Coast District Municipality's desalination plant) be investigated as an alternative outfall area given that an environmental authorisation has already been granted.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	Comment noted and described in the DEIR report as Scenario 1 and Scenario 2. Both Scenarios, i.e. Scenario 1 and 2 were assessed in the EIA.

No.	Issue	Raised by	Response
58	1.4. Need and Desirability: 1.4.1. It is noted that the need and desirability of the proposed development is motivated in terms of the users that will be linked to the pipeline transfer system. However, the motivation provided with respect to the proposed development itself is inadequate. Therefore, a motivation with respect to the proposed development must be provided. You are advised to consider this Department's Guideline on Need and Desirability (dated March 2013).	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	Comment noted. The section on need and desirability in section 1.5 of Chapter 1 has been updated to address the comments raised in this regard. The Department's Guideline on Need and Desirability has been considered and the relevant comments are included in Table 1.3 of Chapter 1.
59	1.5 Special input: 1.5.1. Reference is made to a study undertaken by WorleyParsons and the CSIR to identify the 3 marine outfall alternatives. However, this study has not been included in the final Scoping Report. A duly dated and signed copy of the study must be included in the EIAR; and 1.5.2. Reference is made to a desk top study undertaken by Process Projects (dated August 2013) to identify technological alternatives for the proposed development. A duly dated and signed copy of the study must be included in the EIAR.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	1.5.1 The Screening Study undertaken by WorleyParsons and the CSIR is included as Annexure 1 of Volume III of this DEIR. 1.5.2 The Trade-Off study undertaken by Process Projects for the disposal of effluent is included as Annexure III of Volume III of this DEIR.

No.	Issue	Raised by	Response
60	1.6. Plan of Study: 1.6.1. The terms of reference of the marine ecology specialist study must include the cumulative impacts that may occur. 1.6.2 Furthermore, the study must indicate what the maximum effluent disposal quantity may be prior to the water quality of the Bay becoming unacceptable/affect other users in close proximity to the outfall pipe; 1.6.3. Given that the electrical corridor may consist of overhead power line cables, a visual statement (or visual impact assessment if required) must be included in the EIAR; and 1.6.4. An Effluent Monitoring Plan must be compiled and form part of the draft Environmental Management Programme which must be submitted with the EIAR.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	1.6.1 The Marine Ecology study has addressed cumulative impacts associated with the proposed SRMO Project. It was however noted that it is difficult to predict what the cumulative impacts will be without knowledge of proposed future developments in the immediate vicinity of the bay. It is further stated that if the various effluent streams contributing to the outfall are regularly checked and stringently controlled to ensure compliance with water quality guidelines, and the state of the receiving environment is monitored, potential cumulative impacts should be avoidable. If any additional effluents from future developments are proposed for the outfall, this should be thoroughly investigated to ensure that the quality of the water and sediments within the bay remain within acceptable limits.
			1.6.2 The Marine Ecology and Marine modelling studies include the cumulative impact of all the proposed contributors for the SRMO Project with disposal of the WCDM desalination plant's brine effluent and the area that will be affected. The proposed outfall plume varies between marine, seasonal and weather conditions and thus please refer to the Marine Ecology study Appendix A of Volume II and the Marine modelling report (Annexure 2 of Volume III) for a more detailed description of the area affected.

No.	Issue	Raised by	Response
			1.6.3 A visual specialist study was undertaken by Mr Henry Holland of Mapthis. The study identified and assessed the visual impacts associated with the proposed project. The visual specialist study is included as Appendix D of Appendix II of this DEIR.
			1.6.4 A EMP has been compiled and is included in Section B of Volume I. The EMP contains monitoring requirements prior and after the construction of the pipeline.
61	1.7. Public Participation: 1.7.1. You are advised to consult with this Department's Directorate: Pollution Management during the EIA phase of the proposed development; and 1.7.2. Written comment from the Department of Environmental Affairs: Oceans and Coasts must be obtained.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	1.7.1 Mr Etienne Roux of the Directorate: Pollution Management attended a Focus Group Meeting with representatives of the project team and DEA&DP on 13 August 2014 (see Appendix for the relevant meeting notes and the attendance register of the meeting).
			1.7.2 The DEA:O&C has commented on the SRMO Project in a letter dated 20 June 2014. The letter is attached in Appendix G. The comments raised and responses thereto are included above in this Comments and Issues Trail. CSIR has also submitted a Coastal Waters Discharge Permit to DEA:O&C on behalf of Frontier. DEA: O&C will also comment on this application. A Coastal Waters Discharge Permit Application dated 10 September 2014 has already been submitted to the DEA:O&C. The following reference number was allocated to the project: 2014/016/Frontier Saldanha.

No.	Issue	Raised by	Response
62	1.8. General: 1.8.1. Reference is made a Memorandum of Understanding (dated 20 November 2013) between the applicant and the West Coast District Municipality regarding the co-disposal of effluent into Danger Bay. A copy of the document must be included in the EIAR; 1.8.2. Figure 1.1 refers to the Jacobs Bay Western and Eastern Corridors. Please note that numbers 13-21 (indicating the Western Corridor) are not displayed. 1.8.3. Page 2-18 of the final SR indicates that Eskom has provided confirmation of spare, unallocated capacity to supply electricity from the Langebaan Feeder no.2. However, written confirmation from Eskom is not included in the final SR. Written confirmation must therefore be obtained and included in the EIAR. 1.8.4. page 2-19 of the final SR indicates the Saldanha Bay Municipality has provided confirmation of spare, unallocated capacity to supply electricity from the Transnet Feeder. However, written confirmation from the Saldanha Bay Municipality is not included in the final SR. Written confirmation must therefore be obtained and included in the EIAR; and 1.8.5. Please note proof of the Coastal Waters Discharge Permit and the Water Use Licence Application must be submitted with the EIAR; and 1.8.6. Please note that this Department' guidelines have been revised. The guidelines dated March 2013 must be referred to in the EIAR. The guidelines are available and can be downloaded from the Department's website (hhtp://www.westerncape.gov.za/eadp).	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	1.8.1 A copy of the Memorandum of Understanding (signed Heads of Agreement) is provided in Appendix B1 of Volume I of this DEIR. 1.8.2 The omission is noted. An updated map with routing corridor coordinates is provided in Figure 2.1a of Chapter 2 of this report. 1.8.3 A copy of the letter from Eskom to confirm spare, unallocated capacity from the Langebaan Feeder 2 is provided in Appendix B3 of Volume I of the DEIR. 1.8.4 A copy of the letter from the Saldanha Bay Municipality to confirm spare, unallocated capacity to supply electricity from the Transnet Feeder is provided in Appendix B2 of Volume I of the DEIR. 1.8.5 A Coastal Waters Discharge Permit dated 10 September 2014 has been submitted to DEA: O&C for the proposed SRMO Project. A copy of this Application and Proof of the submission via courier are included in Annexure 4 of Volume III (Reference number: 2014/016/Frontier Saldanha). 1.8.6 The guidelines of DEA&DP were consulted and are referred to in section 4.1.1.20 of Chapter 4.

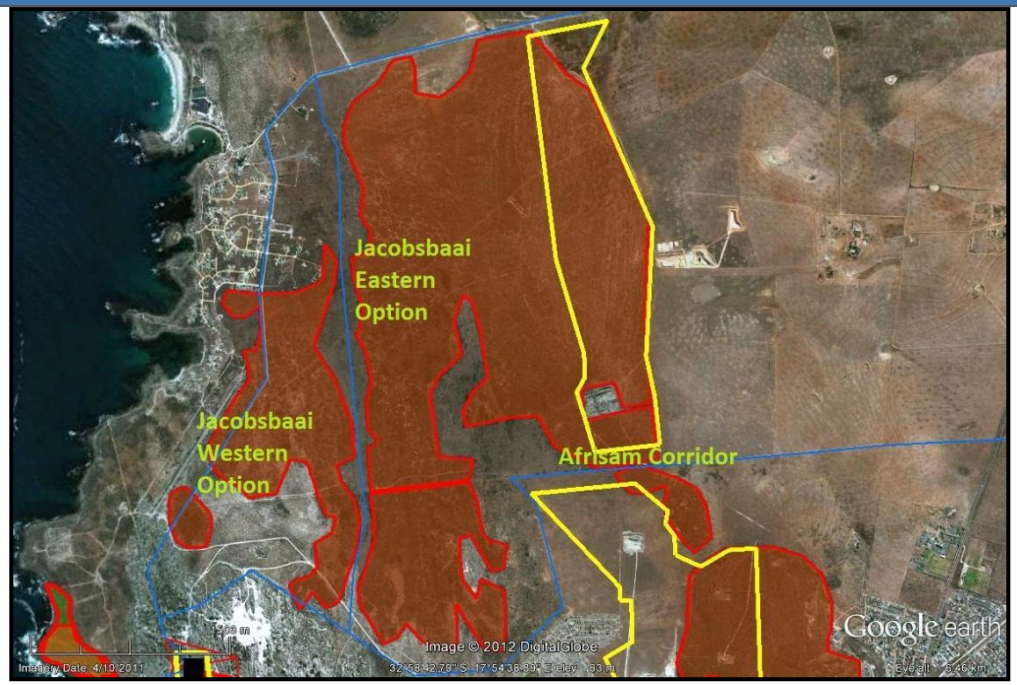
No.	Issue	Raised by	Response
63	2. Public Participation: 2.1. You are hereby reminded that the Public Participation Process to be followed in the Environmental Impact Reporting phase must comply with Regulations 54 of the NEMA EIA Regulations, 2010 as well as this Departments' Guidelines on Public Participation (dated March 2013); and 2.2. Please be advised that the Draft EIAR must first be submitted to this Directorate whereafter it must be made available to the registered I&AP's, including all the relevant State Departments that administer laws relating to a matter affecting the environment, for comment for a period of 40 days. The applicant/EAP is required to inform this Directorate in writing upon submission of the Draft EIAR to the relevant State Departments. Please be further advised that, unless otherwise indicated by this Directorate, a commenting period of at least 21 days must be provided to registered I&APs, including the relevant State Departments, to comment on any final reports, additional information or documentation.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	2.1 Comment noted. The Public Participation Process undertaken for the EIA of the proposed SRMO Project will comply with the relevant NEMA Regulations and well as the Department's Guidelines on Public Participation. Section 5.3 of Chapter 5 lists the approach and process followed for the Public Participation Process (PPP) during the Scoping Phase. Section 7.3 of Chapter 7 lists the PPP to be followed during the EIR phase. 2.2 Comments regarding approach, the release and time frames for the commenting periods of the Draft and Final EIRs are noted and will be adhered to.
64	3. In addition to the above, you must clearly show how the proposed development complies with the principles contained in section 2 of the NEMA and must also show how the proposed development meets the requirements of sustainable development.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	Section 4.1.1.2 of Chapter 4 contains a table that shows how the proposed development complies with the principles of NEMA and how it meets the requirements of sustainable development.

No.	Issue	Raised by	Response
65	4. This Directorate awaits the submission of the final EIAR as prescribed by the NEMA EIA Regulations, GN.R 543 of 18 June 2010. Your attention is further brought to Regulations 67 (1) of GN.R. 543 of 18 June 2010 which states that "An application in terms of these Regulations lapses if the applicant, after having submitted the application fails, for a period of six months , to comply with a requirement in terms of these Regulations." As such, should there be no substantial activity on file regarding your pending application within a period of six months, your application will lapse. You will then be required to resubmit and application, should you wish to proceed with your activity.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	Comment noted. The Draft EIR will be submitted within the prescribed six months, thereby avoiding the lapsing of the application.
66	5. If you, however, have been complying with the requirements of the NEMA EIA Regulations and have progressed with the application process, but for some reason will not be able to submit the final EIAR within the six months period, you must inform this Directorate as such before the end of the six month period. You will be required to submit a concise motivation why the final EIAR will not be submitted within the six month period. The motivation must include that tasks that have been performed to date (including the proof thereof), the reasons for the delay in submission and an indication when the final EIAR will be submitted to this Directorate. Such motivation must reach this Directorate before the end of the six month period. This Directorate will consider your motivation and inform you of its decision whether or not to continue with the processing of the current application. Should no motivation be provided, your file will be closed for administrative purposes. As such, a new application process will have to be initiated with a new application form to be submitted if you wish to again pursue your proposed development.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	Comment noted. It is anticipated that the Final EIA Report will be submitted to DEA&DP within the 6-month period to avoid the lapsing of the application.

No.	Issue	Raised by	Response
67	6. You are reminded that the final EIAR must include duly dated and originally signed declaration forms including the environmental assessment practitioner and all specialists.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	The declarations forms of the Environmental Assessment Practitioner (EAP), the applicant and the specialists are included in Appendix A2 of Volume I. The specialist studies also include the signed declaration forms (Appendices AF of Volume II).
68	7. Furthermore, on 28 February 2014 the Minister of Environmental Affairs gazetted Fee Regulations in terms of section 24(5) (c) (i), 24(5) (j) and 44(i) (a) and (b) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") (Government Notice No. R.141 in Government Gazette No. 37383 of 28 February 2014) which introduce a fee structure fir the consideration and processing of applications for environmental authorisations. The Fee Regulations came into effect on 01 April 2014. Therefore, should your application lapse in terms of Regulations 67 (1) of GN No. R 543 of 18 June 2010, please note that the Fee Regulations will be applicable to all new applications.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	Comment noted.
69	Kindly quote the abovementioned reference number in any future correspondence in respect of the application. Please note that the activity may not commence prior to an environmental authorisation being granted by this Directorate. The Department reserves the right to revise or withdraw comments or request further information based on any information received.	K. Adriaanse, Case Officer, Department of Environmental Affairs and Development Planning, comment by letter, 26 June 2014.	Comment noted.

6.2.3 Issues submitted before the release of the Final Scoping Report and the responses thereto by the EIA Project Team (up to September 2013)

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
1.	Critical Biodiversity Areas (CBAs). Although portions of the proposed pipeline routes are located within disturbed areas, there are sections which will pass through natural vegetation, some of which has been determined as Critical Biodiversity Areas (CBAs) and has been confirmed to be of high conservation value. It would be considered undesirable to have to disturb areas several times to lay two sets of pipelines (and possibly decommission one) when one pipeline is already undesirable from a biodiversity perspective in these areas. This applies in particular to the south-western most sections of pipeline.	Alana Duffell-Canham, CapeNature Scientific Services, comment by letter, 26 September 2013	Within the identified CBA, there are also scales of sensitivity or conservation value — with some areas representing a higher conservation priority than others that may have been previously disturbed. In this regard, Mr Nick Helme, the botanical and faunal specialist for the West Coast District Municipality (WCDM) desalination EIA assisted in 'ground-truthing' the CBA area and in formulating the proposed pipeline and electrical corridor routes for the desalination plant potable water pipeline, namely: the "*Jacobsbaai Road Corridor Eastern Option*" shown in Figure 3.4 of Chapter 3: Affected Environment of this report (and below). The *"Jacobsbaai Western Option"* was ruled out on ecological criteria while the "*Afrisam Corridor*" was excluded on environmental and technical criteria.

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
			 The Environmental Authorisation for the WCDM desalination plant and associated linear development was granted by Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) (Application Ref No. E12/2/4/2-F4/16-3037/11) on 13 August 2013. All high sensitivity areas (highlighted in red) shown in Figure 3.4 are regarded as "*No-Go*" areas for pipeline and electrical corridor development. These areas are all known to support in excess of 12 plant Species of Conservation Concern (SCCs) — most of which are associated with surface rock in either granite or limestone (alluded to in the CapeNature comment as the "south-western most sections of pipeline").

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
			Rehabilitation potential will be substantially better in areas with deep, sandy soils, and hence the "*Jacobsbaai Road Corridor Eastern Option*" — which follows a valley with deeper, sandy soils — was proposed as the only feasible corridor in the WCDM desalination EIA and thus this corridor has been carried forward into the Saldanha Regional Marine Outfall EIA (this particular EIA). These deeper soils also support far fewer plant SCCs, often because these areas have in fact been previously cultivated (often more than thirty years ago). While it is undesirable to have pipelines crossing demarcated CBAs, it should be noted that the CBA areas within the proposed corridor: - Are not "No-Go" areas and represent previously disturbed areas; - Have a reasonable chance of effective rehabilitation in deeper, sandy soils than the shallower granite and limestone vegetation; and - Focus on the strategic alignment of existing development proposed within the area (*i.e.* the WCDM desalination plant) in order to minimise development footprints and mitigate multiple pipelines and linear corridors running through the region. With reference to decommissioning of the pipeline, please note that the decommissioning of the SRMO sea outfall (from position E to sea disposal point indicated below) is only applicable when Scenario 2 would be implemented and the WCDM's desalination plant's effluent and SRMO effluent are disposed of via the WCDM's desalination plant's brine return discharge pipeline. The SRMO sea disposal pipeline utilised in Scenario 1 would not be utilised and thus decommissioned from position E to the discharge point and rehabilitation would be completed for this section of the disposal pipeline (please refer to the figure below).

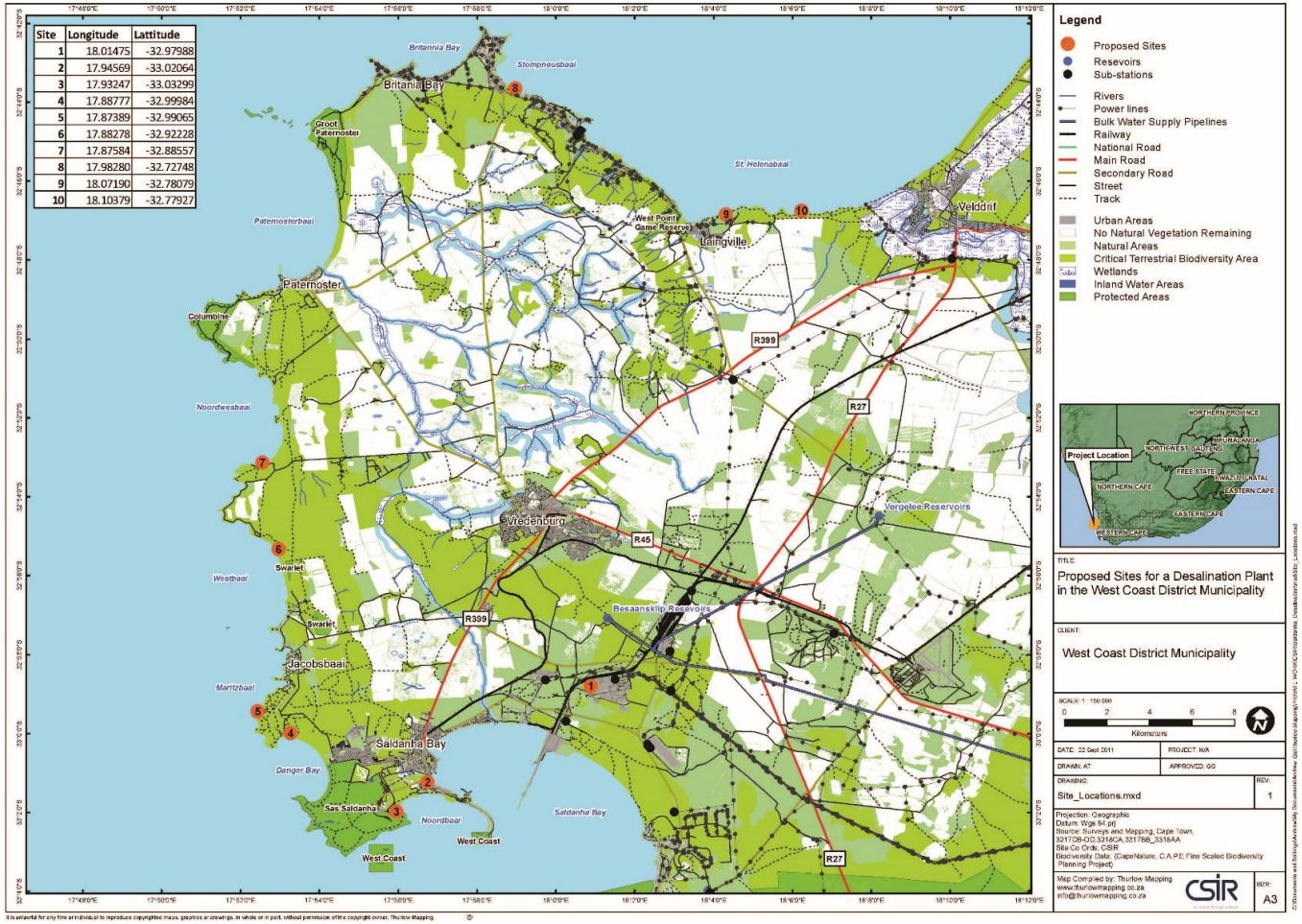
No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
			 **Note: Subsequent to the release of the DSR, the Jacobsbaai Western Corridor was included as a pipeline routing alternative in the Final Scoping Report.** In the WCDM desalination plant EIA the 'Jacobsbaai Road Western Corridor' was determined to be a no-go area by the botanical specialist Nick Helme due to its botanical sensitivity, as it traverses a surface limestone area which is known to support at least 12 threatened plant species. The SRMOP Draft Scoping Report therefore did not include this corridor as an alternative pipeline routing option. Subsequent to discussions between WorleyParsons (on behalf of the WCDM) and landowners along the Jacobsbaai Eastern Corridor it has emerged that certain landowners will not be amiable to negotiate the potential for registering a servitude over their properties. The WCDM (as the project proponent) has no option but to find an alternative corridor route around these properties. In light of this and following discussions with the WCDM and botanical specialist Nick Helme, it was decided that the 'Jacobsbaai Road Western Corridor' should be re-evaluated as a potential alternative in light of the fact that the proposed 'Jacobsbaai Road Eastern Corridor' has proven technically unfeasible. The Jacobsbaai Road Western Corridor will be re-evaluated as part of the WCDM EA Amendment Application to DEA&DP, however, this EA Amendment Application has not yet been

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
			submitted to the department and the status of its authorisation is not known at this stage. While the proposed 'Jacobsbaai Road Western Corridor' was initially established as a no-go area when investigating corridor routing alternatives, it has to be considered that no-go areas (like any sensitivity mapping process) is about balancing trade-offs of environmental impact. As the 'Jacobsbaai Road Eastern Corridor' and 'Afrisam Corridor' have proved unfeasible, during the EIA for the WCDM desalination plant, the botanical specialist has agreed to reconsider the no-go status on the 'Jacobsbaai Road Western Corridor' as part of the proposed EA Amendment. In light of this, an additional alternative, the Jacobsbaai Western Corridor, is included in this Final Scoping Report (see Figure 1.1 in Chapter 1). Frontier Utilities and the WCDM wish to have their pipelines within the same corridor for environmental and technical reasons.
2.	Water Quality. Although the volume of water which it is proposed to discharge is less than for the desalination plant our concerns are similar. In terms of short-term physical impacts on marine biota, placing of pipelines in Saldanha Bay would be preferable as the marine environment is already heavily disturbed. However, the long term effects of discharging brine into Saldanha Bay cannot be fully predicted. The dispersion rate of discharge in Danger Bay is predicted to be higher and therefore preferred from a water quality perspective. However, the exact composition of the discharge is not clear at this stage and it is possible that the discharge could be more toxic to marine life than the effluent which was assessed for the desalination plant.	Alana Duffell-Canham, CapeNature Scientific Services, comment by letter, 26 September 2013	A technical study on marine modelling and hydrodynamics will be conducted by WorleyParsons SA. This study will be used to inform the marine ecology specialist study to be undertaken by Dr Andrea Pulfrich (Pisces Environmental Pty) and will also inform the project planning and design. Concerns regarding the toxicity of the discharge in the marine environment from the SRMO project are noted and it is agreed that this effluent must be investigated separately from the brine effluent that was investigated as part of the WCDM desalination modelling and marine ecology studies. In terms of the long-term strategic planning: the WCDM Desalination EIA identified the Danger Bay area as the most suitable option for the location of the WCDM desalination plant for a number of reasons that included technical, financial and environmental criteria. As already noted disposal of brine into Danger Bay, from the WCDM's desalination plant has already received Environmental Authorisation from DEA&DP. It would thus be prudent to align future industrial requirements of the Industrial Development Zone (IDZ) region (regarding marine effluent disposal) with the marine outfall planned for the WCDM desalination EIA in Danger Bay as it would be highly undesirable to have a marine outfall located in Danger Bay (*i.e.* for the WCDM desalination plant) and then an additional outfall for the SRMO located in Saldanha Bay. As part of the pre-EIA phase of the WCDM desalination EIA, the CSIR was commissioned to undertake an Environmental Screening Study (ESS) between Saldanha Bay and St Helena Bay.

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
			The ESS had the following objectives: • To assess 10 initial sites in terms of risks to the ecological sensitivity of the receiving marine and terrestrial environments; therefore, minimising the risk of irreversible environmental harm and a negative project authorisation; and • To provide a tool to the project proponent that can be used to plan proactively for the incorporation of ecological and social considerations into the planning and design of the project prior to the commencement of the public EIA process. The screening criteria included: • Planning constraints such as municipal spatial zoning and proximity to residential areas, access to infrastructure and services, costing etc.; • Terrestrial ecology (e.g. conservation/biodiversity value of habitat on the site, based on factors such CBAs and other South African National Biodiversity Institute (SANBI) biodiversity related data; • Social impacts such as the effects of noise and visual aesthetics or impacts to the local economy such as mariculture and brine discharge. The effects of disrupting one's 'sense of place' was also considered; • Heritage (cultural, archaeological and paleontological) aspects; • Marine hydrodynamics and water quality (e.g. brine dispersion and ecological effects – high energy zones, implications for resource users such as mariculture, and other technical criteria such as quality of feedwater); and • Marine ecology (e.g. organism entrainment/impingement, effects of brine). The general recommendation of the ESS determined that site locations on the open west coast north of Jacobsbaai from Trekoskraal to Groot Paternoster would place take place within "No-Go" vegetation and highly sensitive terrestrial environments. In addition, access to applicable services and infrastructure would be extremely expensive to construct and ultimately put increased pressure on the natural terrestrial environment e.g. extending pipelines, roads and electrical corridors. The sites located in the St. Helena Bay region were determined inappropriate for the site location owing to the distance from existing infrastructure and the municipal bulk storage

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
			reservoir. Other criteria such as the proximity to holiday homes and residential areas proved to be important in excluding the St. Helena Bay area as a potential site location. Most notably — St Helena Bay is very shallow with a gentle gradient and would not permit adequate brine dispersion. Other concerns relating to St. Helena Bay were the proximity of the intake structure to the Berg River estuary (*i.e.* suspended solids), general water quality in the bay and severe and regular oxygen deficits. Sites 2 and 3 in the vicinity of Noordbaai proved unsuitable as they did not have sufficient 'land-space' and were in close proximity to marine (Marcus & Malgas) and terrestrial protected areas (SAS Saldanha), had unsuitable zonings (military) and were too close to port infrastructure and other port related activities in the immediate region. It was thus determined that Site 1 (at ArcelorMittal) and Site 4 (at Danger Bay) were considered within the scope of the WCDM desalination EIA. For a number of reasons, the Site proposed at Danger Bay was selected to receive EA within the scope of that EIA.

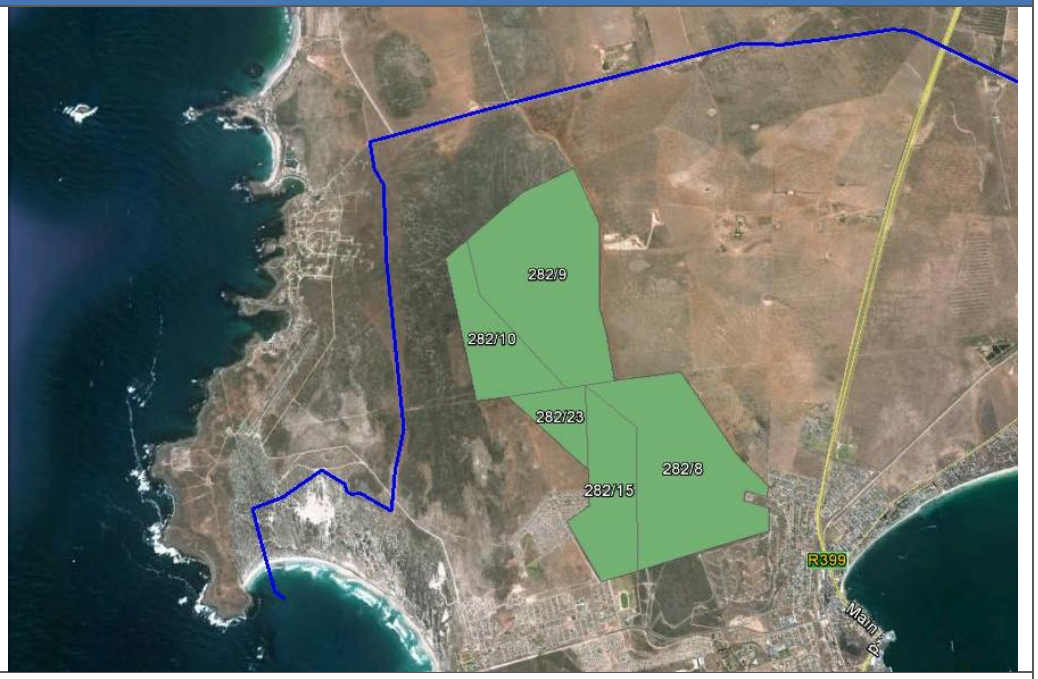
No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities



No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
3.	Water Quality. Assessment of Phase 2 (accommodating effluent from the rare-earth separation plant with the brine from the desalination plant) must consider cumulative impacts resulting from combining the effluent as this was not assessed as part of the impact assessment process undertaken for the WCDM desalination plant.	Alana Duffell-Canham, CapeNature Scientific Services, comment by letter, 26 September 2013	Hydrodynamic modelling will be undertaken for both Scenario 1 (No WCDM desalination plant) and the combined effluent for Scenario 2 (SRMO co-disposal with WCDM desalination plant). During the current EIA the marine ecologist will interrogate the modelling studies for both scenarios and make recommendations based on potential cumulative impacts of the proposed disposal in line with the requirements of the NEMA (Act. 107 of 1998) regarding cumulative impacts. However, application for this EIA will be limited to only Scenario 1, with the foresight of fully assessing the impact and the required mitigating factors of Scenario 2. At this stage it is not certain when the WCDM desalination plant will be commissioned. Should the plant be commissioned and the co-disposal option is pursued, Frontier Utilities will apply for an amendment to the Coastal Waters Discharge Permit (CWDP) that will be obtained from the DEA: Oceans and Coast (DEA: O&C). Frontier Utilities will also apply for an amendment to the Environmental Authorisation that needs to be obtained from the DEA&DP (this will have to be done on behalf of the WCDM, as the applicant). Formal written agreement on this process is currently being pursued by Frontier Utilities with the WCDM.
4.	General. We trust that the application will be receptive to recommendations made by the relevant specialists. We may comment in more depth once detailed reports and specialist studies have been received. CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.	Alana Duffell-Canham, CapeNature Scientific Services, comment by letter, 26 September 2013	**Comment noted**. The recommendations made by the specialists on the project team will be implemented.
5.	Water Quality. With reference to the above, please register the Jacobsbaai Ratepayers Association as an interested and affected party. At this stage, our main area of concern is possible pollution of all the small bays along the Jacobsbaai coastline, being Moerie-se-baai,	M. B. Gregory, Chairperson, Jacobsbaai Residents and Ratepayers Association,	The Jacobsbaai Ratepayers Association was registered on the project database. Initial results of the hydrodynamic modelling studies thus far undertaken (and the studies within the WCDM EIA) indicate that the Jacobs Bay region will not be affected by water quality issues as it is too far from the proposed outfall location. Having said that, this question will fall within the scope of the marine ecology impact assessment. A component of this study will also include a dedicated section on the “Impacts on Beneficial Users”, where the impacts on

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
	Kwaaibaai, Smalbaai, Bamboesbaai and Jacobsbaai with the prevailing summer South-Easterly winds. This could possibly affect our local abalone aqua-culture and crayfish factory, as well as being detrimental to recreational fishermen and our tourist industry.	comment by letter, 09 September 2013.	industries such as fisheries and mariculture will be assessed.
6.	Water Quality. The environmental impact of the marine outfall pipeline and associated infrastructure on marine life/environment near Jacobsbaai.	Bernard Miles, Jacobsbaai Resident, comment by e-mail, 13 September 2013.	Please see response to no.5 above.
7.	Water Quality. Yes, our business could potentially be influenced by the authorisation. Danger Bay is located approximately 5km south of our inlet pipes. Our Abalone farm pumps approximately 1500 cubic meters of seawater per hour for our facility currently, with the potential of expansion to 2500 cubes/hour in the near future. Our concern is that with prevailing South-Easterly winds and ocean currents the effluent from the proposed marine outfall pipeline will reach Jacobsbaai and our suction lines. What are the potential harmful substances (*i.e.* sodium hydroxide, hydrochloric acid, waste from water treatment works etc.) that might enter the effluent and what effect will it have on marine life? What mitigating processes will be in place to	Jonathan Venter, General Manager, Jacobsbaai Sea Products, comment by registration form, 13 September 2013.	Please see response to no.5 above. Prevailing winds and ocean currents will aid in the dispersion of the effluent at Danger Bay. Initial results of the hydrodynamic modelling studies thus far undertaken (and the studies within the WCDM EIA) indicate that the Jacobs Bay region will not be affected by water quality issues as it is too far from the proposed outfall location. Having said that, this question will fall within the scope of the marine ecology impact assessment. For a full list of the constituents of the effluent, please refer to Chapter 2: Project Description, of this report The extent to which these substances will be harmful to “marine life” will fall within the scope of the marine ecology impact assessment. A component of this study will also include a dedicated section on the “Impacts on Beneficial Users”, where the impacts on industries such as fisheries and mariculture will be assessed. All recommendations of the marine ecology impact assessment report will be utilised for the drafting of the Environmental Management Plan (EMP) for the EIA where detailed mitigation measures will be proposed. These will include, for example, design aspects such as the utilisation of diffuser nozzles located at intervals along the pipeline to facilitate effluent dispersion in the water column; and other construction and operational mitigation measures. All mitigation measures can only be fully developed once environmental impacts are well understood. However, that said, the initial mitigating control measures proposed by Frontier Utilities to include:

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
	prevent any harmful substances entering the effluent? We pride ourselves in the quality of seawater used to grow our Abalone thus these concerns need to be understood and addressed in detail.		- The continuous monitoring (by analysis instrumentation) of critical chemical and water quality parameters as determined through the EIA process for the effluent produced by the SSP, CAPF and WWTW. Should the continuous monitoring system detect that parameters set are not met (off specification effluent), valves allowing SSP, CAPF or WWTW to utilise the SRMO system would close and the storage of the off specification effluent would have to be corrected prior to being allowed to utilise the SRMO system, - Manual effluent samples will be taken daily for laboratory analysis to ensure that the quality of effluent is within the set parameters as determined through the EIA. The samples would also be utilised as a control measure to ensure that the online instrumentation used to monitor the effluent is effective and aligned with the laboratory results; and - The possibility exists that the SRMO would be operated and maintained by a water quality trust with industrial partnerships from all parties that would be utilising the facility.
8.	Pipeline routing and servitudes. Business interests regarding land issues. Proposed effluent disposal pipeline is indicated as traversing our company's mining area which is not possible	Quinton Dollman, Afrisam, comment by registration form, 17 September 2013.	**Comment noted**. However, it is our understanding that the proposed Afrisam mining area comprises the properties 282/9, 282/10, 282/23, 282/15 and 282/8 (as indicated in Green in the figure shown below) which would be unaffected by the proposed SRMO pipeline. If this is contrary to Afrisam accounts we would encourage you to engage CSIR at the public open day scheduled to be undertaken on 30 October at the Saldanha Bay Protea Hotel or at any other convenient time (focus groups meeting will be arranged at the request of Afrisam).

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
			
9.	Pipeline routing and servitudes. Yes, Afrisam is building a cement plant in the area. Afrisam has mining rights and servitudes running through vast areas in Saldanha. It is important that these areas are identified upfront and avoided, as mining will be taking place and blasting will be expected in these areas. Afrisam needs to be consulted if routes running through its property are considered for this project.	Nivashni Govender, Afrisam, comment by registration form, 17 September 2013.	**Comment noted**. Please see response to no. 8 above.
10.	Regarding your letter dated 12th of June 2013 I would like to inform you that next to erf 125 I	Robert Groeninx van Zoelen,	**Comment noted**. You will be registered as and I&AP and informed of all EIA developments.

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
	am also the representative/director/shareholder of the adjacent erf 124.	Development Director Solar City, comment by e-mail, 15 July 2013.	
11.	Pipeline routing and servitudes. Regarding the Draft Scoping Report, as the landowner, development director of Solar City and as development director for the Pienaar Trust (farm 957) I would like to comment on your BID. The proposed pipeline for the liquid effluent as mentioned in your BID is supposed to run along/over farm 957, 124 and 125 (Philipskraal). Since there are developing plans for the mentioned farms in the near future, would such a pipeline have any consequences for other (future) bulk services running along a part of the proposed liquid effluent pipeline from Frontier; for example legal separation distances horizontal as vertical distances between pipes for different usage? Please advise.	Robert Groeninx van Zoelen, Development Director Solar City, comment by e-mail, 11 September 2013.	It is currently proposed that the SRMO pipeline will run within the same servitude as the proposed WCDM desalination plant potable water supply pipeline (estimated at 20 m wide). At this stage it is uncertain what technical requirements there are that restrict *e.g.* horizontal and vertical distances between bulk services and an effluent pipeline. However, in order to make any conclusions on this matter – it would be important for the engineering design team to obtain a clear understanding of what is referred to by "developing plans for the mentioned farms in the near future". In this regard, the I&AP is encouraged to engage Frontier Utilities at the public open day scheduled to be undertaken on 30 October 2013 at the Saldanha Bay Protea Hotel. In addition, a focus group meeting will be arranged in due course.
12.	Pipeline routing and servitudes. I received your letter on this Frontier project to discharge effluent into the sea. It shows that you want to cross two of my property's with this pipeline. I would appreciate if you could be more specific on the pipeline layout from the plant to sea. On figure 1 it crosses Seawind Ind 15 PTY and Money Line 344 PTY.	Reon van der Merwe, VDM Transport, comment by e-mail, 15 July 2013.	Your comment is noted. CSIR and the technical design team would be most interested in discussing the proposed pipeline route with you. You are encouraged to attend the public open day scheduled to be undertaken on 30 October 2013 at the Saldanha Bay Protea Hotel. Additional information requested regarding the "specifics" of the pipeline routing can also be found within the contents of Chapter 2: Project Description of this Draft Scoping Report. In addition, a focus group meeting will be arranged in due course.
13.	General. May impact on the environment. West Coast District Municipality are responsible for	Doretha Kotze, West Coast District	A number of environmental specialists have been appointed to assess potential impacts on the environment and to provide recommendations to avoid or minimise potential these

No.	Issue	Raised by	Response from CSIR EIA team or Frontier Utilities
	environmental health and integrity in West Coast.	Town Planner, comment by registration form, 12 September 2013.	impacts. The specialist studies will be included in the Draft EIA Report which will be sent out for public comment at a later stage. The WCDM is a key authority or role player on this project and will be consulted through-out the EIA process. A focus group meeting will be held with the WCDM after the release of the Draft Scoping Report.
14.	General. Supplies of aggregates, readymix concrete.	Pooban Naidu, Lafarge Industries, comment by registration form, 11 September 2013.	Noted.

6.2.4 Issues submitted before the release of the Final Scoping Report and the responses thereto by the EIA Project Team (up to February 2014)

Note: The CSIR has subsequently added a note to the end of the response to number 1 of the previous Issues and Responses Trail (for inclusion in the Draft Scoping Report) following changes in the Final Scoping Report that affect this response previously provided. Please refer to this note for more details.

No.	Issue	Raised by	Response
GENERAL			
1	We trust that the applicant will be receptive to recommendations made by the relevant specialists. We will provide additional comment once detailed reports and specialist studies have been received. CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.	Alana-Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mail, 01 November 2013.	**Comment noted**.
2	I refer to the letter from the CSIR dated 15 October 2013 and the DSR for the proposal. The West Coast District Municipality has no comments at this stage and awaits the EIR phase of the assessment.	Doreta Kotze, West Coast District Municipality, comment by letter, 22 November 2013.	**Comment noted**.
3	I have scanned through the summary of the Draft Scoping Report that you sent and we will reserve official comments for either the Final Scoping Report or the Draft EIR. I don't have any comments based on the summary to date but await the specialist marine studies from the DEIR, etc. Please ensure that we are kept up to date on this EIA. In future, DAFF (specifically Fisheries) should be treated as an automatically interested and affected party for EIA's that affect the marine environment. Our unit only reviews EIA's that may impact Aquaculture specifically, but there is the fisheries management branch that deals with potential impacts on fisheries. Kindly forward any documentation to the following Chief Director: Sue	Andrea Bernatzeder, Department of Agriculture Forestry and Fisheries, comment by e-mail, 02 January 2014.	**Comment noted**. Further correspondence will be delivered to Ms Sue Middleton.

No.	Issue	Raised by	Response
	Middleton (SueM@daff.gov.za) for input from any of the other directorates in Fisheries Management.		
4	There does not seem to be public participation with communities of Diazville and Middelpos.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 26 November 2013.	**Comment noted**. However, the community leadership and ward councillors for Diazville and Middelpos areas received background information documents. The public participation team will have additional focus group meetings and a public open day with stakeholders in this community before and during the environmental impact assessment phase.
5	The updated census information is available for possible inclusion in the report for relevance.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 26 November 2013.	**Comment noted**.
6	It is recommended that the environmental specialist informs the Global Biodiversity Information Facility or any other free and open access database of plant and animal species as identified if it has not already been done.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 26 November 2013.	**Comment noted**.
7	The relevant reports dated October 2013, November 2013 and the meeting conducted on 29 January 2014 refers. The Department: Land Use and Development Control appreciates the clarity provided at the above mentioned meeting.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 18 February 2014.	The CSIR EIA team and Frontier Utilities appreciated the opportunity to meet with the team of the Department: Land Use and Development Control of the Saldanha Bay Municipality to clarify all questions listed in your letter dated 26 November 2013. For the process, all of the Saldanha Bay Municipality concerns and questions were clarified at the meeting dated, 29 January 2014. Please refer to the notes of the meeting as attached in Annexure G.
8	Further comments are reserved until the determination, from the specialist reports, can be made regarding the combined impact of the marine outfall pipeline specialist reports.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 18 February 2014.	**Comment noted**.

No.	Issue	Raised by	Response
WASTE AND WASTE WATER MANAGEMENT			
9	CapeNature would like to thank you for the opportunity to comment on this proposed activity and wish to make the following comments: We would like to reiterate our previous comments and state that the proposal to dispose waste water via a marine outfall remains of a high concern. We are pleased however, that the Scoping Report acknowledges that although it is planned to ensure that the water is treated to certain standards, accidental contamination remains a risk and must be assessed. We are also pleased that the various effluents as well as combinations thereof will be assessed during the EIA phase of the project.	Alana-Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mail, 01 November 2013.	The risk of "accidental contamination" will be assessed in the EIA as part of the Marine Ecology specialist study in light of the proposed control (mitigation) measures proposed by the project applicant, namely, that effluent will be transferred from each independent facility to the SRMO pipeline infrastructure via pumps. An online quality control instrument will be used to continuously monitor the quality of each facility's effluent. If the effluent of a particular facility/ies does not meet the required quality standards and requirements an automated valve will close to prevent the effluent from entering the SRMO transfer tank. Effluent that does not comply with the relevant standards will therefore not be pumped and disposed of at Danger Bay. It is therefore crucial that each facility that intends to use the SRMO pipeline must have its own effluent storage tank on site to ensure that it will be able to store effluent that is non-compliant. Ideally with the development of the proposed Saldanha Bay industrial development, industries woud be able to reuse WWTW effluent as an industrial water source and thus the need to dispose of the effluent via the SRMO project would not be required as such.
10	The projects that will be disposing of waste water via the proposed marine outfall are dependent on the success of this application in order to operate. Furthermore, the primary motivation for the	Alana-Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mail, 01 November	The CSIR EIA Team and Frontier Utilities conducted focus group meetings with the Saldanha Bay Municipality, the Department of Water Affairs

No.	Issue	Raised by	Response
	proposed chlorine, caustic soda and HCl facility is to supply the proposed rare earth separation plant. Therefore all three of these applications should be assessed jointly as their viability is inter-dependent.	2013.	(DWA) and the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP). The purpose of these meetings was to present these different projects to them and to explain that although separate EIAs are conducted for each of them, the projects are inter-linked and that the EIA processes will run in parallel to ensure better alignment and coordination. The notes from the Focus Meetings are included in Appendix G. This FSR is however for the SRMO Project as proposed by Frontier Utilities and as such, Frontier Utilities will be responsible for the effluent quantity and quality to be discharged as per the requirements set by this EIA application. From the perspective of Frontier Separation the required reagents by CAPF can be imported and as such the EIA for SSP is not interdependent on a positive Environmental Authorisation by CAH, however Frontier Separation agree that a positive Environmental Authorisation for this project is required to proceed with the SSP.
11	The disposal of waste to the marine environment has potential negative impacts on marine ecology and will also impact on terrestrial biodiversity. CapeNature cannot support any of the above-mentioned applications until the full extent of the impacts resulting from the rare earth separation plant and disposal of waste are fully understood and mitigated. How will findings of this study be fed into the other applications in terms of acceptability of impacts?	Alana-Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mail, 01 November 2013.	The projects “viability” (as referred to previously in comment 10) may be interconnected but the environmental impacts of the Saldanha Separation Plant (SSP) (Application Reference Number: 16/3/1/2/F4/17/3004/13), a Chlor-Alkali Production Facility (CAPF) (Application Reference Number: 16/3/1/2/F4/17/3053/12), and Saldanha Regional Marine Outfall (SRMO) will be significantly different. During the conceptualisation of these projects it was determined that given the fact that the SRMO was a

No.	Issue	Raised by	Response
			linear development with predominantly marine impacts (in contrast to the SSP and CAPF plant), it could be better investigated as a separate EIA application i.e. with a specific focus on hydrodynamic modelling of various effluent discharge scenarios and the associated marine impacts. Having said that, there may be important information that emerges from the EIAs for the SSP and the CAPF that needs to be investigated in the SRMO EIA (e.g. a change to effluent composition/volumes). In this regard the EIA Project Team has been working closely with AGES and Chlor-Alkali Holdings (Pty) Ltd (CAH) in a way that provides efficient communication and sharing of information. We have been at Stakeholder meetings with AGES and CAH and the applicant has aligned the EIA processes so that they are running concurrently. From the perspective of Frontier Separation the required reagents by CAPF can be imported and as such the EIA for SSP is not interdependent on a positive RoD by CAH, however Frontier Separation agree that a positive RoD for this project is required to proceed with the SSP.
12	Thank you for the Draft Scoping Report regarding the above, which leads to further questions, i.e. The draft report states that effluent will predominantly be a brine solution. This is rather vague and we would like to know exactly what the other components of the effluent will be and whether any heavy minerals will be part of it.	Mike Gregory, Chairperson Jacobsbaai Residents and Ratepayers Association, comment by e-mail, 28 October 2013.	For a full list of the constituents of the effluent, please refer to Chapter 2: Project Description, of this report.

No.	Issue	Raised by	Response
13	What would the volume of these components be i.e. daily litres per component.	Mike Gregory, Chairperson Jacobsbaai Residents and Ratepayers Association, comment by e-mail, 28 October 2013.	Please refer to section 2.4 in Chapter 2 for the volume of the components of the effluent for the proposed SSP, the CAPF and the WWTW.
14	From past experience in Saldanha Bay, if the sewerage treatment plant is overloaded, untreated waste water is occasionally discharged. What measures will be put in place to prevent this?	Mike Gregory, Chairperson Jacobsbaai Residents and Ratepayers Association, comment by e-mail, 28 October 2013.	The new proposed municipal WWTW will have an effluent storage tank on-site. It is proposed that the WWTW effluent will be transferred from each independent facility to the SRMO pipeline infrastructure via pumps. An online quality control instrument will be used to continuously monitor the quality of each facility's effluent. If the effluent of a particular facility/ies does not meet the required quality standards and requirements an automated valve will close to prevent the effluent from entering the SRMO transfer tank. Effluent that does not comply with the relevant standards will therefore not be pumped and disposed of at Danger Bay. It is therefore crucial that each facility that intends to use the SRMO pipeline must have its own effluent storage tank on site to ensure that it will be able to store effluent that is non-compliant. In terms of the required quality standards and requirements an automated valve will close to prevent the effluent from entering the SRMO transfer tank. Effluent that does not comply with the relevant standards will therefore not be pumped and disposed of at Danger Bay. It is therefore crucial that each facility that intends to use the SRMO pipeline must have its own effluent storage tank on site to ensure that it will be able to store effluent that is non-compliant.
15	Will sea water quality checks be done regularly northwards from	Mike Gregory, Chairperson Jacobsbaai	Frontier Utilities is a member of the Saldanha Bay

No.	Issue	Raised by	Response
	Danger Bay to ensure that all pollutants have been sufficiently diluted so as to pose no danger to coastal marine life? The Benguela Current flows northwards and winter north-westerly winds could drive polluted water into our bays.	Residents and Ratepayers Association, comment by e-mail, 28 October 2013.	Water Quality (SBWQ) Forum and discussions are underway with the Forum to extend their monitoring campaign to include the Danger Bay area. The conditions of authorisation (should the project be provided Environmental Authorisation) contained within the EMP will provide a monitoring regime developed by the Marine Ecologist Specialist that the applicant will have to adhere to in terms of the Environmental Authorisation issued by DEA&DP. The conditions of the Coastal Water Discharge Permit (CWDP) will also have to satisfy marine water standards and guidelines as developed by DEA: Oceans and Coasts. The findings from the Marine hydrodynamic modelling study will also be used to determine whether additional sea water quality monitoring north of Danger bay will be required.
16	The draft scoping report dated October 2013 that was received by the Department on 16 October 2013 refers.	Lance McBain-Charles, Deputy Director: Waste Management Licensing, Western Cape Government, comment by letter, 09 December 2013.	**Comment noted**.
17	The Directorate: Waste Management has no objection, in principle, to the proposed project. The following comment on the information stated in the draft scoping report is however offered: • Letter(s) from the applicable Municipality confirming that sufficient air space exists at the waste disposal facility for the disposal of the waste must be included in the final environmental impact assessment report. • The removal of waste must be managed in such a way to avoid any contamination of the ground and surface water.	Lance McBain-Charles, Deputy Director: Waste Management Licensing, Western Cape Government, comment by letter, 09 December 2013.	**Comment noted**. Please note however that for the effluent, a Waste Licence is not required. A Coastal Waters Discharge Permit (CWDP) is applicable and will be applied for.

No.	Issue	Raised by	Response
	• All waste must be removed to a licenced waste disposal facility and proof of disposal certificates must be made available to the Department upon request.		
18	The Directorate reserves the right to revise its initial comments and request further information based on any new information received. Please contact Marius Venter should you have any enquiries on the above.	Lance McBain-Charles, Deputy Director: Waste Management Licensing, Western Cape Government, comment by letter, 09 December 2013.	**Comment noted**.
19	The Department does not object to the proposed project from going ahead provided that the following conditions are taken into consideration prior to commencement of the activity: No pollution of surface water or ground water resources may occur due to any activity.	N.Ndobeni, Department of Water Affairs Bellville, comment by letter, 26 November 2013.	**Comment noted**. The effluent will be transported via the SRMO pipeline. Effluent that does not comply with the relevant standards will be stored in storage tanks on site of the respective facilities. It is not anticipated that the effluent will contaminate the surface or ground water resources. Flow and pressure instruments will be installed on the pipeline and monitored continuously via a programmable logic control (PLC) system. Software will be utilised to compute a real time mass flow measurement and a compensated volume balance of the system will be determined. The volume balance will be continuously monitored to determine any loss of volume of the system. Thus a real time leak detection system will be established. A similar leak detection system is utilised in the petroleum industry for buried pipelines. Furthermore, a scheduled maintenance pressure test will be performed as an additional preventative measure to detect any leaks.
20	The evaporation ponds must be registered with the Department in terms of the Waste Discharge Charge System (WDCS) that was	N.Ndobeni, Department of Water Affairs Bellville, comment by letter, 26	The option to dispose the effluent via evaporation ponds was investigated as an alternative disposal

No.	Issue	Raised by	Response
	gazetted in the Government Gazette No. 32209 of May 2009.	November 2013.	option. However, this option was deemed unviable as Vissershok is not willing to accept the waste material because the salt will negatively impact on the leachate system which is currently in place. Consequently no evaporation ponds are planned as part of the SRMO Project.
21	All waste generated during the construction phase should be kept in appropriate containers and be disposed of at an appropriate and permitted site.	N.Ndobeni, Department of Water Affairs Bellville, comment by letter, 26 November 2013.	**Comment noted**. The constructed waste will be disposed of at a registered landfill site.
22	All the requirements of the Minimum Requirements for Handling, classification and Disposal of Hazardous Waste, second edition, 1998 must strictly be adhered to.	N.Ndobeni, Department of Water Affairs Bellville, comment by letter, 26 November 2013.	**Comment noted**. The requirements of the Minimum Requirements for Handling, classification and Disposal of "Hazardous Waste" will be adhered to.
23	Storm-water runoff must be controlled to ensure that on-site activities do not culminate into off-site pollution.	N.Ndobeni, Department of Water Affairs Bellville, comment by letter, 26 November 2013.	**Comment noted** and will be adhered to.
24	No abstraction or any use of surface or groundwater may be done without prior authorisation from this Department, unless it is a Schedule 1 Use or an Existing Lawful use.	N.Ndobeni, Department of Water Affairs Bellville, comment by letter, 26 November 2013.	**Comment noted** and will be adhered to.
25	All the requirements of the National Water Act, 1998 (Act 36 of 1998) must be adhered to at all times.	N.Ndobeni, Department of Water Affairs Bellville, comment by letter, 26 November 2013.	**Comment noted** and will be adhered to.
26	Your application with DEADP REF NO 16/3/1/2/F4/17/3004/13 dated 15 October 2013 has reference. This Department has reviewed the information submitted and has determined that the pipeline carrying hazardous waste which will cross several watercourses requires a Water Use Licence. You are therefore required to apply for a Water Use Licence in terms of Section 21© an d(i) of the National Water Act, 1998 (Act No. 36 of 1998) before commencing with the proposed development. Commencement without this Authorisation will be deemed unlawful and measures will be taken against all parties involved.	Warren Dryer, Department of Water Affairs Bellville, comment by letter, 23 January 2013.	**Comment noted**. The applicant will apply for the relevant Water Use Licences as indicated by Mr Warren Dreyer.

No.	Issue	Raised by	Response
27	Please note that a pre-consultation meeting should be arranged prior to submission of your Water Use License application to ensure that you are informed of the necessary procedures and processes which will apply to your application and what information must be submitted with your application. The following water use forms must be completed and submitted to the Department as part of the application: i. DW758 ii. DW901 iii. DW902 iv. DW763 v. DW768 vi. DW775 + DW781 For your convenience, the above mentioned forms have been attached and may also be obtained from the Department's website at the following link/address: http:/www.dwa.gov.za/Projects/WARMS/Registration/registration1.aspx The request should be submitted to : The Chief Director Department of Water Affairs: Western Cape Region 52 Voortrekker Rd BELLVILLE 7530 for the attention: Mr W. Dreyer	Warren Dryer, Department of Water Affairs Bellville, comment by letter, 23 January 2013.	**Comment noted**. Thank you very much for this information and for supplying these forms. The project applicant will contact Mr Warren Dreyer to set up a pre-consultation meeting to discuss the requirements and processes of the Water Use Licence Application Applications.
28	It is a major concern (as outlined in the report) for the Department: Land Use and Development Control that accidental discharge with radioactive metals will lead to contamination of Danger Bay.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 26 November 2013.	**Comment noted**. Any impurities (including potential radioactive materials) will be removed at the Zandkopsdrift mine site operation (Garies), prior to transporting the REE Salts to the SSP (Saldanha Bay). The Zandkopsdrift mine & minerals processing plant falls

No.	Issue	Raised by	Response
			within the scope of a separate company and EIA (EIA reference number NC/EIA/NAM/KAM/ZAN/2012). The Saldanha Separation Plant falls within the scope of a separate company and EIA (EIA reference number 16/3/1/2/F4/17/3004/13). In order to monitor radioactivity in the REE salts produced at Zandkopsdrift minerals processing plant, three separate monitoring systems are planned: • Firstly, real time online radioactive monitoring will be conducted to ensure that REE salts produced at the mine, prior to shipment to the SSP, are within legislative and acceptable limits determined during the EIA. Should the online monitoring system determine that radio activity levels are not within specification, the REE salts produced will automatically be rejected at the Zandkopsdrift minerals processing plant and not be allowed to move to the packing and transport facility. • Secondly, manual samples will be taken of the REE salts produced at the mine during each operating shift, at predetermined intervals, and tested at a laboratory (to be determined) to confirm the results of the real time monitoring instrumentation. • Thirdly, REE salt samples will be tested for radioactivity at the National Nuclear

No.	Issue	Raised by	Response
			Regulator (NNR). The frequency of the different radioactive assessments (real time monitoring, manual sampling and NNR assessment) will be determined during the EIA. On receipt of a REE Salt shipment at the SSP, additional radioactive tests will be completed to confirm that the product is within the required pre-determined specification limits: • Firstly, real-time radioactive monitoring will be installed on the materials offloading system at the SSP. Any material found not to meet the specifications will automatically be diverted for return to the Zandkopsdrift Processing Facility, thereby not being processed any further at the SSP. • Secondly, manual samples will be taken at the SSP of the REE salts received during each operating shift, at predetermined intervals, and tested at a laboratory (to be determined) to confirm the results of the real time monitoring instrumentation. In summary it is not expected that radioactive material will be received by the SSP and if any does it will be returned to the Zandkopsdrift minerals processing plant. The final radioactive monitoring will be performed by real time monitoring on the brine effluent

No.	Issue	Raised by	Response
			stream from the SSP to the SRMO brine transfer tank (see Figure 2.5 in Chapter 2). This is to ensure that the brine effluent entering the SRMO system is within the prescribed limits of the Environmental Authorisation. Should the limits be breached the system will automatically prevent the brine from entering the SRMO system. Thus the risk if any accidental discharge is obsolete due to the number of control systems at both the supply and receiving portions of the projects. In addition it is expected that any radioactive elements that may be present will not report to the brine produces but rather the REE oxide product that will affect the quality of the SSP's production. Thus any radioactive material will depreciate the quality of REE produced which would lead to revenue losses and thus is not beneficial to Frontier Separation to allow any radioactive material into the SSP and thus the reason for the control over radioactive limits. Effluent will be transferred from each independent facility to the SRMO pipeline infrastructure via pumps. An online quality control instrument will be used to continuously monitor the quality of each facility's effluent and although no radioactive materials will be processed at the SSP as a final precaution a continuous radio activity detector would be installed on the SSP effluent feed lines to the SRMO system as a precautionary measure.

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			The detailed mitigation and prevention measures to be implemented to ensure no Radio Active materials enters the SRMO Project was presented at the focus group meeting completed on 29 January 2014 at the Saldanha Bay Municipality offices. Notes to the meeting are attached as Appendix G.
29	Another concern is the unknown effect of the Rare Earth Elements on marine species and its interaction with natural organic compounds.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 26 November 2013.	**Comment noted**. The impacts of rare earth elements on marine ecology will be assessed in the EIR phase by Dr Andrea Pulfrich (Pisces Environmental Pty) in the Marine Ecology Specialist study.
30	Please provide the reasons why Vissershok is not willing to accept the waste material.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 26 November 2013.	The Saldanha Bay Municipality accepts the explanation provided at the Focus Group Meeting on 29 January 2014 (i.e. subsequent to this initial comment raised) that Vissershok is not willing to accept the waste salt material because the salt will negatively impact on the leachate system which is utilised at Vissershok. Formal correspondence has been received from City of Cape Town indicating their inability /unwillingness to accept the salt waste from the SSP.
31	Explain what mitigation measures will be in place in the event of a leakage in the buried pipeline.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 26 November 2013.	Please refer to section 2.4.1 of Chapter 2 of the FSR as well as the response of no 19
32	The management of equipment which will monitor the brine effluent for radioactive metals and Rare Earth Elements were discussed at the meeting and this Department is satisfied with the information provided. However, the extent and guarantees of the monitoring, management and equipment should be provided in the	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 18 February 2014.	**Comment noted**. The conditions of authorisation (should the project be provided Environmental Authorisation) contained within the EMP will provide a monitoring regime developed by the Marine Ecologist Specialist that the applicant will

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	subsequent reports upon which further comments will be provided.		have to adhere to in terms of the Environmental Authorisation issued by DEA&DP. The conditions of the Coastal Water Discharge Permit (CWDP) will also have to satisfy marine water standards and guidelines as developed by DEA: Oceans and Coasts.
33	In addition to the requirements of the Saldanha Bay Water Quality Trust, it must also be provided with the Nuclear Regulators monitoring results when the plant is operational.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 18 February 2014.	**Comment noted**. As part of the EMP these results from the NNR will be reported.
34	The general monitoring data should be made available to the municipality quarterly.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 18 February 2014.	**Comment noted**. As part of the EMP the monitoring results will be reported.
35	Access to the monitoring data should be made available on an ad-hoc basis to any interested and affected parties.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 18 February 2014.	**Comment noted**. As part of the EMP the monitoring results will be reported.
36	The calibration certificates of the monitoring equipment must also be made available to the municipality.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 18 February 2014.	**Comment noted**. As part of the EMP the calibration certificates will be reported.
ROAD NETWORKS			
37	Your correspondence DEA&DP EIA Ref:16/3/1/2/F4/17/3009/13 received by this Branch on 21 November 2013, refers. Comment is required on a Draft Scoping Report for the proposed Regional Marine Waste Outfall running from Saldanha Industrial Corridor into Danger Bay, The proposed pipeline will be running parallel with Trunk Road 85/1, crossing Main Road 238 and then running parallel for a substantial length of Minor Road 7647.This Branch, a Road Authority of various roads in the vicinity of the project, has the following comment: • There is a possibility that Trunk Road 85/1 with an existing proclaimed width of 40 metres may be increased in width; • In terms of Section 9A of Act 21 of 1940 (Ribbon	M.L. Watters, Executive Manager; Road and Transport Management, Western Cape Government, comment by letter, 09 December 2013.	**Comment noted**. Regarding comment 3: While this EIA evaluates a potential effluent discharge scenario including the proposed municipal WWTW effluent flow, this EIA is not evaluating the implementation of an actual WWTW (the EIA is for the SRMO Project DEA&DP Number (DEA&DP EIA Reference Number: 16/3/1/2/F4/17/3009/13). In the future, when the municipality decides that they want to construct a new WWTW, a new EIA application will have to be lodged with DEA&DP.

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	Development Act) 500m building restriction lines are applicable as measured from the centre line of the intersections of trunk, main and divisional roads as well as where these roads intersect with any other road; and, • The proposed future Waste Water Treatment Works (WWTW) at the intersection of Trunk Road 77/1 and Trunk Road 85/1 would thus need to be located at least 500m from the intersection. The proposed outfall main will start at the WWTW.		
38	In terms of Section 17 of Roads Ordinance 19 of 1976, there is a statutory 5 metre building line applicable along all proclaimed roads. The 5m is measured from the statutory boundary of all of the above roads.	M.L. Watters, Executive Manager; Road and Transport Management, Western Cape Government, comment by letter, 09 December 2013.	**Comment noted**.
39	This Branch must approve of all wayleaves for all services running parallel with or crossing any proclaimed provincial road and in terms of Roads Ordinance 19 of 1976 no new accesses may be built or existing access layouts or access uses changed without the approval of this Branch.	M.L. Watters, Executive Manager; Road and Transport Management, Western Cape Government, comment by letter, 09 December 2013.	**Comment noted**. After the finalisation of the SRMO pipeline corridor as part of the EIA process, applications for way leaves will be submitted to the relevant authorities, including the Provincial Roads Department.
40	As this Branch is not opposed to the proposed project, it will comment in detail during the Land Use Ordinance and/or the construction drawing approval stage.	M.L. Watters, Executive Manager; Road and Transport Management, Western Cape Government, comment by letter, 09 December 2013.	**Comment noted**.
41	Kindly provide the service road layout plan when it is available.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 26 November 2013.	**Comment noted**. The detailed service road layout plan will be submitted to Ms Duarte as soon as it is available.
PIPELINE ROUTE			
42	Although much of the pipeline corridor was assessed during the EIA process for the WCDM desalination plant, any new areas to be impacted by the pipeline, pumpstations, powerlines, holding tanks	Alana-Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mail, 01 November	**Comment noted**. Any new areas that will be impacted upon will be assessed, including the Jacobsbaai Western Corridor which was included as

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	etc. must be fully assessed during this EIA process.	2013.	a pipeline routing corridor alternative following the release of the Draft Scoping Report.
43	The scoping report mentions that the pipeline will be wide enough to accommodate additional effluent feeding in from "other sources". If these "other sources" are not known at this stage and not assessed (as individual effluents and as a component of a combined effluent) as part of this EIA, the pipeline should not be allowed nor built in such a way to accommodate additional effluent.	Alana-Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mail, 01 November 2013.	**Comment noted**. However, in terms of promoting strategic and integrated planning for a newly formed IDZ, it would be prudent to design an effluent pipeline with additional discharge capacity to allow for additional industrial development in the IDZ. Having said that, each party that intends to use the proposed SRMO pipeline in future will have to apply for a **separate** Environmental Authorisation for the disposal of additional effluent streams and will require an updated CWDP from DEA: Oceans and Coasts. Additional hydrodynamic marine modelling studies will then need to be undertaken as part of the EIA processes for the individual and combined effluent streams. Consequently, this EIA excludes all "other sources".
AQUACULTURE AND MARINE ECOLOGY			
44	We note that according to the terms of reference provided, the marine ecology study will be purely desktop based. Are the marine specialists of the opinion that sufficient data was obtained during the EIA process for the WCDM desalination plant and that no further sampling or assessment of marine habitat is required of the preferred outfall site in Danger Bay, especially in light of the fact that additional chemicals may be released that were not assessed previously?	Alana-Duffell-Canham, CapeNature Scientific Services Jonkershoek, comment by e-mail, 01 November 2013.	A desk-top approach to the Marine Ecology Study, using existing information and the results of the detailed hydrodynamic modelling was utilised for the WCDM desalination EIA, which included brine discharge to the marine environment. The EAP has recommended that this approach be replicated for the SRMO Marine Ecology Study, utilising the SRMO effluent constituents as per chapter 2, however, should the Marine Ecology Specialist determine that further baseline information is required before an impact statement (of relatively high confidence) can be made, then additional sampling may be

No.	Issue	Raised by	Response
			requested at the expense of the applicant. The Saldanha Water Quality Trust will commence in April 2014 to include monitoring of DangerB ay on request of Frontier Utilities for this project. In addition Frontier Utilities has authorized the collection of additional metocean data for the 2014 autumn season to be used as supplement data for the marine model. The new data will be used to ensure that the existing marine model is representative with the latest data captured.
45	Concerns 1 and 2 are specific to both the abalone farming operation just north of the proposed outfall, and to marine plants and animals in the receiving environment. Concern 3, the risk posed by coastal erosion to the outfall pipe in Danger Bay, is a fundamental issue that should be identified as a stand-alone item in the Final Scoping Report: it influences safety and the engineering costs of the marine outfall pipeline, and thus environmental impacts of the project. Concern 4 is probably a matter of presentation and clarity, but it also potentially of fundamental concern for aquaculture and the marine ecosystem if not satisfactorily and clearly addressed in the Final Scoping Report.	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	Please see comments addressed below.
46	1. Abalone susceptibility to changes in seawater pH Mollusc shells are made of calcium carbonate. Consequently abalone, particularly larvae and newly-settled juveniles, are highly susceptible to changes in ocean pH. Should the proposed effluent outflow cause pH disturbances and eutrophication of inshore waters to the north of Danger Bay, the water intake for JSP will be fundamentally compromised and its hatchery and grow-out operations threatened. Another concern is long term build-up of possibly harmful REE's in abalone flesh, as the abalone growing	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	This concern can only be suitably addressed within the Marine Ecology Specialist Study informed by hydrodynamic dispersion modelling studies. The assessment of this impact will be done in the Marine Ecology Specialist study. Hydrodynamic Marine modelling includes parameters such as salinity and temperature levels for various seasons experienced throughout the year and a total of five different modelling scenarios pertaining to effluent

No.	Issue	Raised by	Response
	phase is between 4 and 6 years, during which time they might accumulate high concentrations of REE's.		volume, quality and salinity will be assessed.as part of the Marine Ecology Specialist Study.
47	2. Lack of information about inshore currents flowing north from the proposed outfall Long-term fine-scale oceanography datasets are lacking for Danger Bay and its near-shore surroundings. The wave direction and current roses (Figs 3.8 & 3.9) are based on a total of 2 summer and 2 winter months more than thirteen years ago (1999-2000). Consequently, confidence in the predictive hydrodynamic dispersion modelling of the marine footprint of the outfall is likely to be low. At this stage in the process, concerned local business-owners and residents must take on faith statements such as "Initial results of the hydrodynamic modelling studies thus far undertaken (and the studies within the WCDM EIA) indicate that the Jacobs Bay region will not be affected by water quality issues as it is too far from the proposed outfall location" (p. 5-12) and "In general, WorleyParsons expect effective dispersion of the effluent from Option 1 and Option 2" (p.1-15). Models are as good as the data they are based on. Assessments of the impact of the effluent outflow on marine organisms (p. 5-13) will rely on footprint sizes estimated during this modelling. Given the above-noted fact that abalone are highly sensitive to pH disturbance and elevated ammonia concentrations, as are many other marine plants and animals, we look forward to clear explanations of how the marine hydrodynamic dispersion modelling by WorleyParsons takes into account this lack of data. The endpoint of the marine pipeline at 10m depth (p. 2-5) places it between 250 and 500m from the shoreline of Danger Bay (Fig. 3.7). Surely this is very short for effective dispersion.	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	**Comment noted.** The wave and current roses that were presented in the DSR are indeed based on measurements captured in 1999-2000. It is further acknowledged that long-term nearshore data sets for the general area outside Saldanha Bay and in particular for Danger Bay are virtually non-existing. As part of the WCDM desalination plant studies, hydrographic, geophysical and shore topographic surveys as well as on site measurements of metocean conditions (currents, waves, water temperature and turbidity) in Danger Bay were undertaken during winter 2012 and summer 2012/13. Figures 3.8 to 3.10 of Chapter 3 of the FSR has been updated with the latest wave and current roses. These data sets were made available by WCDM to WorleyParsons for use in the calibration of the hydrodynamic model established for the Frontier Utilities SRMO in Danger Bay. Therefore the most recent and relevant information available for Danger Bay will be used. In addition Frontier Utilities has authorized the collection of additional metocean data collection for the 2014 autumn season to be used as supplement data for the marine model. The new data will be used to ensure that the existing marine model is representative with the latest data captured.

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			The Saldanha Water Quality Trust will commence in April 2014 to include monitoring of Danger bay on request of Frontier Utilities for this project. The outfall termination location will only be finalized during design, once the dispersion studies have been completed and offshore geotechnical data obtained. The location at 10 m below chart datum shown in Fig. 3-7 is the shallowest being considered and the final location could well end up further from shore in deeper water.
48	3. Coastal erosion stresses on outfall pipeline Lack of any reference to coastal erosion in the DSR is of great concern. The proposed marine disposal pipe runs under and across the dynamic, high wave-action sandy beach of Danger Bay. The 20-year horizon for this beach is an extremely high risk of erosion and storm surge. Pipeline structures crossing it will be seawards of the coastal setback line predicted by a recent modelling exercise for the West Coast, commissioned by the Western Cape Government http://www.rhdhv.co.za/pages/services/environmental/current-projects.php (Google Earth overlays for each scenario: yellow lines = 20-year hazard setback lines, orange = 50-yr and red = 100-yr. Modelling by RoyalHaskoningDHV.) Given the 30+-year lifespan predicted for the outfall (p. 2-19), the risks associated with the marine disposal pipe suggested by this exercise should form part of the Scoping Exercise. The setback lines will inform zoning laws and therefore the location of the final pump station, but supports for the pipe itself will need to be seawards of these boundaries. Should pipeline supports subside or the pipe itself be exposed, and breaks result, diffuser structures will cease to function and concentrated effluent will spill	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	A report on the Shoreline Dynamics of Danger Bay was prepared by WorleyParsons and reviewed by the CSIR as part of the WCDM desalination EIA process (CSIR, 2012). The study investigates the potential impacts to shoreline dynamics associated with a pipeline outfall in Danger Bay. The detailed study finds that Danger Bay is headland bay type of coastal configuration. As such, the bay is expected to be in static equilibrium, meaning that the platform shape may change slightly according to the predominant wave climate but, as it is an independent sediment cell with no source of sediments, no major shoreline changes occur. This was confirmed by the analysis of the historical aerial imagery. It is expected was that only short-term, localized impacts related to construction activities such as trenching and sheet pilling will cause some temporary coastline changes. However, the impacts

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	in a solid stream across the beach and into the surf zone. The acid and alkali components of the effluent will no longer be buffered at depths of 10m as per the original design. The consequences for marine life will be severe.		of the pipelines over the design lifetime of the structure were expected to be Low (pre- and post-mitigation) as the pipeline will be buried beneath sand. It was from the basis of this Shoreline Dynamics report that significant or detailed shoreline impacts were not mentioned in the DSR, however, a thorough description of the shoreline dynamics in Danger Bay are presented for the readers. Impact mitigation for coastal erosion during the Construction Phase will still be included in the EMPr and may make any of the following requirements: • Minimize the construction period as much as possible, including removing the temporary sheet-piles and jetty (maximum of 2 - 4 months after the start of trench excavation); • Keep construction activities to the smallest area possible; • Undertake a dune restoration after construction is finalized; and • Monitoring the beach changes during and after construction. The setback lines study undertaken the Western Cape Government in collaboration with RoyalHaskoningDHV to determine west coast setback lines should have no significant influence on the planning of buried, linear infrastructure into the sea. However, these setback lines should be considered for the positioning of the pump stations,

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			as mentioned. Should there be unforeseeable damages to the pipeline and effluent is discharged into the marine environment in a manner that contravenes the regulations of the Coastal Waters Discharge Permit, then DEA: Oceans and Coasts will have the right to suspend industrial operations in terms of the Integrated Coastal Management Act and advancing the remit of Section 24 of the Constitution of South Africa.
49	4. Effluent composition and volumes unclear: Tables 2.4 – 2.6: Rare Earth Elements: Estimates of actual daily flows are not provided in Table 2.3. Should the given flow rates per hour or per day be sustained continuously for 24h per day, extremely high amounts of rare earth elements are projected to be entering the environment from the SSP. This is not credible. Table 2.4: Multiplication of concentrations (mg/L) given here by effluent flow rates (million L/day, Table 2.3) gives the following total discharges per day: La 530kg, Ce 890kg, Pr 94kg, Nd 316kg, Sm 44kg Eu 11kg, Gd 26kg, Tb 3kg, Dy 14kg, Ho 2.4kg The huge monetary value of these losses suggests one of two mistakes: either the units for REEs in Table 2.4 are wrong and should be micrograms (µg), not milligrams (mg), or key information	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	**Comment noted:** Table 2.4 in Chapter 2 has been updated to this extent and quantities updated as obtained from the latest test work. Table 2.4 displays the maximum allowable limits per element for a monthly and annual disposal limit. In addition please note that excluding Sodium and Chloride, the absolute total monthly and total annually amounts of all the other individual elements, as presented in Table 2.4, will not be more than 6 000 kg and 18 000 kg, respectively.

<table>
<tr><th>No.</th><th>Issue</th><th>Raised by</th><th>Response</th></tr>
<tr><td></td><td>about actual pumping hours per day is missing.
To assess biological effects, the form in which these REE will be discharged should also be given, please. Some, such as Cerium, are strong oxidising elements that damage cell membranes, and so are particularly toxic to aquatic organisms.</td><td></td><td></td></tr>
<tr><td>50</td><td>Chlor Alkali production facility
Tables 2.3 and 2.5: total amounts to be discharged into the sea per unit time are not presented. Concerned readers of the DSR (and eventually, the EIA report) should not have to calculate these for themselves by multiplying up flows for each module and then summing these. For each module, are the total dissolved solids, total suspended solids, Na and Ca (last 4 rows) given per volumes of water listed in the first 2 rows of the table? Also, will these rates of flow to be continuous? If these are 24h production rates, then please tell us what the proposed discharge of (our calculations) 11.9 tons per day of TDS consists of. This is clearly NOT all sodium and calcium.</td><td>Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.</td><td>Comment Noted.
All the CAPF effluent streams will be collected in a day tank where the pH will be adjusted to approximately 7 before discharging it into the SRMO System. The discharge can be continuous over 24 hours or in batches depending on what will be acceptable for the system. As all the different CAPF effluent streams will be combined in a day tank Table 2.5 of the DSR is no longer needed and it was thus replaced with Table 2.5 in Chapter 5 of this FSR-see below.

<table>
<tr><th colspan="3">EFFLUENT GENERATED BY THE PROPOSED CHLOR-ALKALI PRODUCTION FACILITY</th></tr>
<tr><td>Volume effluent</td><td>Ml/d</td><td>0.2</td></tr>
<tr><td>TDS</td><td>t/d</td><td>11.9</td></tr>
<tr><td>NaCl in effluent</td><td>t/d</td><td>7 to 9</td></tr>
<tr><td>NaSO4 in effluent</td><td>t/d</td><td>1 to 3</td></tr>
<tr><td>CaCl2 in effluent</td><td>t/d</td><td>0.2 to 1</td></tr>
</table>

The TDS is made up of most of the salts in the water supplied by the municipality which was removed by water softeners and released in concentrated form during regeneration with NaOH and HCl which forms NaCl when neutralised. Sodium chloride is</td></tr>
</table>

No.	Issue	Raised by	Response
			the basic raw material used in the CAPF. CAH is not planning to use any nitrogen compounds or ammonia on its site and none of these will be present in the CAH effluent stream.
51	Waste Water Treatment Works The heading of Table 2.6 is misleading: it does not present the "Composition of the effluent generated from the proposed regional WWTW", as stated. It lists the regulatory limits in general authorizations under the National Water Act – this needs to be clearly explained and contextualized. If actual projected totals to be discharged are as yet unknown, then a clear statement to this effect, and a description of how these will be complied with and where monitoring points will be located in the effluent stream, is required.	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	**Comment Noted.** As the proposed WWTW has not been constructed or operational the only guidance on what the constituents from such a treatment facility would be is the general limit as referred to. Frontier Utilities foresee that the quality of the effluent to be discharged into the pipeline will be subject to General Limit. This will be finalized as part of the EIA process of the WWTW by the DEA&DP. The quality of the effluent from the WWTW will however remain the responsibility of the Saldanha Bay Municipality. Chapter 2 of the FSR also noted the control measures which the WWTW would need to maintain to utilise the SRMO system. The use of on line, continuous quality assessment instruments will ensure that only effluent within specification will be allowed to be disposed of via the SRMO system via the control of automated shut off valves. Ideally with the development of the proposed Saldanha Bay industrial development, industries would be able to reuse WWTW effluent as an industrial water source and thus the need to dispose of the effluent via the SRMO project would

No.	Issue	Raised by	Response
			not be required as such.
52	Presentation of regulatory limits instead of actual estimated quantities does not inspire confidence. Over the nine years from 2003 to 2012, faecal coliforms and total suspended solids discharged by two WWTWs into Saldanha Bay frequently exceeded regulatory limits. Very importantly for abalone culture, ammonia nitrogen exceeded limits for 95% of this period, and free active chlorine for 47% of the time (Saldanha Bay WWTW, Clark et al. 2013, State of the Bay Report, Saldanha Bay & Langebaan Lagoon). Results for Langebaan WWTW are similar. It is understood that these facilities are overloaded, precisely the reason for the new WWTW. But projected population growth in the area because of the IDZ and developments just such as the one proposed by Frontier Rare Earths, will place a huge load on the new WWTW. We hope the EIA will address modern safeguards to prevent violation of regulatory limits such as those currently occurring at WWTWs in the regions.	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	Comments noted, please see response in No 51 above.
53	General emphasis on land rather than marine impacts in Need and Desirability Guidelines, Section 1.5.6, Table 1.2 This preliminary need and desirability analysis focuses on Western Cape Provincial guidelines, which are a good start and probably adequate for terrestrial impacts. The terrestrial impacts of the pipeline are chiefly construction-phase. The marine impacts of the project are on-going, sustained for the life of the outfall, and potentially severe. However, marine environmental management priorities are almost completely omitted from Chapter 1. These are well-legislated, in the Integrated Coastal Management Act and the Marine Living Resources Act (referenced in Chapter 4 but not here in Chapter 1). Indeed, guidelines specific to water use in coastal areas of the Benguela Ecosystem were prepared by CSIR (Report No CSIR/NRE/ECO/ER/2006/0011/C). Surely Dr Susan Taljaard's input is	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	The CSIR Guidelines mentioned have been included in Chapter 4 of the Final Scoping Report. The potential impacts on the marine and coastal environment are included in Chapter 6 of this report.

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	of great relevance here? Exclusion of guidelines for marine impacts in the opening chapter of the DSR, where justification for the project is given, currently creates an impression of bias in weighing up needs and desirability of the project. The CSIR guidelines are also not referred to in Chapter 4 on relevant legislation and guidelines (p. 4-9).		
54	Marine impacts are potentially of broad national significance, because they may well be much greater and more long-term than the terrestrial impacts of the project. They will influence livelihoods dependent on marine aquaculture, and the potential opportunity costs relating to livelihoods in the marine environment – chiefly aquaculture – should not ignored as they currently are in the Introductory chapter. Neither should potential costs to marine biodiversity.	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	The assessment of the impacts on beneficial users and on marine biodiversity will be completed as part of the Marine Ecology Specialist Study.
55	The proposed outfall is close to the only Marine Protected Areas on the west coast of South Africa, those of Langebaan Lagoon and the Saldanha Bay islands (particularly Marcus and Malgas islands). Long-term ecological effects might include reduction in kelp cover as crustose algae are favoured by changes in pH and nutrient concentrations resulting from the outfall.	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	This concern can only be suitable addressed within the Marine Ecology Specialist Study informed by hydrodynamic dispersion modelling studies. The assessment of this impact will be completed as part of the Marine Ecology Specialist Study. Frontier Utilities is a member of the Saldanha Bay Water Quality Trust. The Saldanha Water Quality Trust will commence in April 2014 to include monitoring of Danger Bay on request of Frontier Utilities for the SRMO project. In addition Frontier Utilities has authorized the collection of additional metocean data for the 2014 autumn season to be used as supplement data for the marine model. The new data will be used to ensure that the existing marine model is representative with the latest data captured.

No.	Issue	Raised by	Response
56	Specific comments: Fig 2.2 contains symbols that are not explained in the legend. It is therefore not clear enough for a public participation document, which should be understandable by non-specialists. Please explain all symbols.	Jonathan Venter, Jacobsbaai Sea Products, comment by reply form, 22 November 2013.	**Comment noted.** The figure legend was updated for clarification in the FSR, please refer to Chapter 2.5 in Chapter 2.
57	Potential pollution impacts on the current aquaculture in the bay.	Andrea Bernatzeder, Department of Agriculture Forestry and Fisheries, comment by reply form, 29 October 2013.	The potential pollution impacts on aquaculture in the bay will be assessed within the scope of the marine ecology impact assessment. A component of this study will also include a dedicated section on the "Impacts on Beneficial Users", where the impacts on industries such as fisheries and mariculture will be assessed. Frontier Utilities is a member of the Saldanha Bay Water Quality Trust. The Saldanha Water Quality Trust will commence in April 2014 to include monitoring of Danger bay on request of Frontier Utilities for the SRMO project. In addition Frontier Utilities has authorized the collection of additional metocean data for the 2014 autumn season to be used as supplement data forthe marine model. The new data will be used to ensure that the existing marine model is representative with the latest data captured.
58	Your correspondence and DSR dated 15 October 2013 and received by the Department on 18 October 2013, refers. The Integrated Coastal Management Act (Act No. 24 of 2008) ("ICM Act") is a Specific Environmental Management Act under the umbrella of the National Environmental Management Act (Act No. 107 of 1998) ("NEMA"). The ICM Act sets out to manage the nation's coastal resources, promote social equity and best economic use of coastal resources whilst protection the natural	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning, Western Cape Government, comment by letter, 05 December 2013,	**Comment noted.**

No.	Issue	Raised by	Response
	environment. The ICM Act established the coastal protection zone in order to manage, regulate and restrict the use of land adjacent to coastal public property, or land that plays a significant role in the coastal ecosystem for the purpose of, inter alia, protecting the ecological integrity and natural character of the coast and to protect people, property economic activities from risks or threats which may arise from dynamic coastal processes. In terms of Section 38 of ICM Act, the Coastal Management Unit ("CMU") is the provincial lead agency for coastal management in the Western Cape.		
59	The Coast Management Unit ("CMU") has reviewed the DSR and has the following comments: • The Marine Ecological Specialist Report must include the following: A comprehensive analysis of the current state of the bays in terms of the marine ecology, this will inform a baseline for monitoring of impacts on the bay. • An analysis of the possible impacts on the marine ecology, including the entire coastal environment (including shore) from the potential effluent discharges related to the proposed activity, the construction of the pipeline and the different pipeline locations. • A detailed list of possible mitigation measures in order to address the impacts mentioned above. • Recommendations on the placement of the outfall pipeline in order to minimise the impact on the marine ecology It must be noted that the West Coast National Park, SAS Contractual Nature Reserve and Marine islands are in close proximity to Danger Bay. A circulation study must be commissioned for the bays in order to	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning, Western Cape Government, comment by letter, 05 December 2013,	**Comment noted.** The terms of reference provided for in the Marine Ecology Specialist Study include the issues raised by the CMU.

No.	Issue	Raised by	Response
	fully understand the residence time of the water in the bays/frequency of flushing of the bays and include the dispersion rates of the effluent. Furthermore, the regional oceanography and the local circulation in the bays must also be included in this report. This information will enable the competent authority to make an informed decision.		
60	Under no circumstances must there be a release of radioactive waste into the marine environment. Appropriate measures must be put in place, at the source of the waste generation, in order to prevent any chance of radioactive waste entering the marine environment.	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning, Western Cape Government, comment by letter, 05 December 2013,	**Comment noted.** See response in no 28 above.
61	Please note that the following provisions in the ICMA should be considered in the assessment process: • Section 2 – Objects of Act: • Section 7 – Composition of coastal public property; • Section 16 – Composition of coastal protection zone; • Section 17 - Purpose of coastal protection zone; • Section 58 – Duty to avoid causing adverse effects on coastal environment; • Section 62 – Implementation of land use legislation in coastal protection zone; and • Section 63 – Environmental authorisation for coastal activities.	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning, Western Cape Government, comment by letter, 05 December 2013,	**Comment noted**. These provisions in the ICMA will be considered in the assessment process.
62	Your are reminded of your general duty of care and the remediation of environmental damage, in terms of Section 28(1) of NEMA, which, specifically states that :"*…Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify*	Caren George, Coastal Management Unit, Department of Environmental Affairs and Development Planning, Western Cape Government, comment by letter, 05 December 2013,	**Comment noted.**

No.	Issue	Raised by	Response
	such pollution or degradation of the environment….” Together with Section 58 of the ICM Act which refers to ones duty to avoid causing adverse effects on the coastal environment.		
	The CMU reserves the right to revise or withdraw comments or request further information based on any information received.		**Comment noted.**
RARE EARTH			
63	I have perused this EIA as presented and it has in essence some of the salient issues glanced over as there are a few incorrect data that could be misleading to those who are not familiar with the Rear Earth challenges. In short: Rare Earth known as lanthanides elements atomic number 57 - 71 of the periodic table plus 21 and 39 - it has mainly magnetic properties. Rare Earth because of its mainly magnetic properties is used in most modern electronic equipment and energy efficient lighting. China did control 97% of the market after America closed their mine (Molycorp at Mountain Pass, California) due to China flooding the market thereby making it unproductive to mine including an incident that polluted the Ivanpah Valley dumping 5m litres of radioactive waste owing to a burst pipeline that caused the spillage. The reason why China can produce Rare Earth "cheaply" is because they do not have very strict environmental controls and are polluting their rivers and underground water, with due concern. China in 2010 exported 65 600 tons of Rear Earth but has slashed this to 30 300 tons in 2011 - thereby forcing the world to buy their finished product, an issue as Rear Earth is used in defence / military	Brian Arthur Holdridge, Retired Civil Engineer, Interested Party, comment by e-mail, 08 November 2013.	**Comments noted.** All the concerns and questions raised by Mr. Brian Arthur Holdridge’s were clarified at the focus group meeting held with him on Wednesday, 29 January 2014. See attached notes of focus group meeting, Appendix G

No.	Issue	Raised by	Response
	equipment. In 2010 Japan had a skirmish and held a Chinese ship found in its "waters" including its crew and the captain and in short China stopped supplying Japan with Rare Earth - so Japan released the Ship with its staff. This woke-up the world and America started to realise the Chinese could hold them to ransom. Rare Earth is not rare and is more available then say copper or lead. The challenge is that rare earth is difficult to process (10-15% is the mining part the rest is refining). It is a chemical process using a lot of acid and base. The known world reserves are as follows China (mainly in Mongolia) 36% - America 13% - Commonwealth states 19% - the remainder is the rest of the world including South Africa. The America mine known as Molycorp is in California at a place called Mountain Pass and was closed in 1996 (for reasons as mentioned above)-- is now open and productive; producing 40 000 tons of Rare Earth i.e. 1/3 of the world's needs - and this is also followed by other countries. So China no longer produces 95% of the world supply but near to 50% and this is dropping. The main issue is that the Rare Erath process requires vast amount of water, acid and base mainly salt and the waste produced is dirt and radioactive waste. The new Molycorp mine uses a process known as Project Phoenix and will no longer pipe the radioactive waste but deal with it on site by recycling the salt, acid and water with radioactive waste turned into a paste (similar to toothpaste consistency) thereby being safely dumped on tailings to form small		

No.	Issue	Raised by	Response
	hills that are covered over with vegetation and fenced off as a hazardous waste sites that will be registered and monitored. This is what I understand and what is misleading in this report is: China no longer produces 95% of Rear Earth but it is nearer to 50% and it is dropping. There is no mention of the radioactivity or high acid content of the waste. Brine may be salt but from experience from our Iron Ore Line boreholes or no doubt this Rear Earth process the brine waste will never be used as table salt as hinted in the EIA report ("brine is merely table salt"). The thought of dumping rare earth waste into the sea is criminal as Saldanha has a thriving fishing industry that includes crayfish, oysters, mussels etc., all these sea creatures will be affected. Lastly this pipeline will crossover Transnet's land and if there is a spillage it will place Transnet at risk.		
64	Please take into consideration the setback/hazard line studies conducted by Royal Haskoning DHV for the West Coast.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 26 November 2013.	**Comment noted.** The CSIR will follow-up with Caren George at the Coastal Management Unit. Ms George made reference to these guidelines during the Focus Group Meeting on 30 January 2014. This study has not been completed yet.
HERITAGE			
65	Any fossil finds should also be reported to the Saldanha Bay Municipality.	Nazeema Duarte, Environmental Officer, Saldanha Bay Municipality, comment by letter, 26 November 2013.	**Comment noted.** Any fossil finds will be reported to the Saldanha Bay Municipality and Heritage Western Cape.