I&AP	COMMENT	RESPONSE
COMMENTS RECEIVED FROM I&APs ON THE NOTICE OF REACTIVATION OF THE EIA PROCESS IN 2016 BY CEN INTEGRATED ENVIRONMENTAL UNIT		
Jeanne Vorsatz - Aurecon	What type of marine dispersal studies will be done and what is the duration of the studies	Anchor Environmental are doing the marine specialist study and dispersion model. The study will include the following (this is extracted from terms of reference for their study): 1. Description of the affected hydrographical and geophysical environment 2. Detailed description of the hydrodynamic processes (i.e. currents, water column stratification, water temperature variability and turbulence) for a range of environmental conditions (i.e. for various tides, waves, winds and air-sea fluxes as experienced in the affected marine environment) 3. Detailed description of the biogeochemical processes (water column and sediment) 4. Modelling: The behaviour of the effluent plumes for discharge points will be evaluated and modelled under various scenarios using a near-field dilution model (most probably with the software program CORMIX, MixZon Inc., USA) and a far-field dispersion model (most probably the Regional Ocean Modelling System, Shchepetkin and McWilliams 2005). Modelling studies will be used to determine the nearshore and farfield ocean circulation patterns under a variety of wind conditions, the main driver of surface currents in the ocean. The dispersion and advection of the effluent will be simulated using a passive tracer approach, which will serve as proxy for the effluent. In addition, the dispersion and advection of temperature and salinity will also be simulated since the effluent will contain fresh water at a temperature different from that of the receiving marine environment. The three dimensional model will include the oceans response to, wind, tides, temperature stratification, salinity as well as heat fluxes to account for air-sea interactions. It is proposed that the behaviour of the effluent be simulated for a representative range of environmental conditions. Moreover, experiments will be conducted, where the effluent is released at different locations in the model domain, for example closer vs. further away from shore. The model will be validated against available observations deployed in the region, including temperature, salinity and current measurements, as well as historical data and previously documented studies of the area. Twelve scenarios will be simulated: The plume dimensions will be determined based on exceedance of water quality target values pertinent to the effluent to be discharged. These water quality target values will be decided in consultation with the specialists undertaking the ecological assessments. The results of the modelling exercises will inform the best
Jeanne Vorsatz - Aurecon	What type of studies are proposed for determining existing marine taxa in the marine environment that are likely to be affected by the servitude	

I&AP	COMMENT	RESPONSE
		location of the pipeline along the coast and at what depth the effluent would be best discharged. It is also envisaged that this will provide information on dilution rates and the spatial and temporal footprint of the effluent plume. **Note** that since the original terms of reference of was approved, the volumes of effluent to be discharged and abstraction volumes of seawater have increased substantially. A midfield model will also be done to determine possible interactions between the discharge plumes (if more than one servitude is proposed) and also between the plume and abstraction points 5. Marine ecological assessment: a. Desktop study: • Production of a geo-referenced map showing the distribution of the various habitat types and the associated biological resources that highlights areas with: o Biological resources of conservation importance o Biological resources targeted for exploitation o Biological resources that have been lost, or are stressed, as a result of anthropogenic influence o Biological resources endemic to that area. • A list of dominant species, species of particular conservation importance and species targeted for exploitation, with best estimates of spatial and temporal variability. • Likely migration routes and patterns of above mentioned species in relation to estuary mouths in the region (Coega, Sundays, and Swartkops estuaries) • List of biological resources that are potentially sensitive to anthropogenic influences already present in the area and/or that may be sensitive to constituents present in the proposed wastewater discharge, and quantification of cause-and-effect relationships as best as possible (i.e. to refine the ecological quality objectives). • Assessment of the likely impacts of the proposed discharge on the habitat of the species identified above **Please note that the above studies were completed as part of the EIA process undertaken in 2016.* *In 2016 PRDW undertook marine effluent dispersion modelling for 12 potential discharge scenarios, to inform the movement of the discharge plumes and possible interactions with planned abstraction points (PRDW, 2016). PRDW has modelled*

I&AP	COMMENT	RESPONSE
		additional scenarios in 2020 based on the updated effluent characterisation and refined intake and outlet locations obtained from the results of the previous modelling exercise. In addition, as part of wider assessments on the proposed marine pipeline servitude, PRDW contracted Lwandle Technologies (Pty) Ltd (Lwandle) to conduct an ecological risk assessment of the effects on the receiving environment. This report provides the environmental context in which the proposed discharges will operate based on existing survey information and scientific publications, specify receiving water quality guidelines that should apply in the water body, define mixing zone dimensions where effluent constituent chronic toxicity levels may exceed water quality guideline thresholds, and conduct toxicity effects evaluations on predicted effluent constituent distributions in the receiving environment of the discharges. The report produced by Lwandle should be read in conjunction with the PRDW (2020) report: Marine Pipeline Project for the Coega Special Economic Zone, Marine Effluent Dispersion Modelling, PRDW Report No. S2001150-CE-001-R1, which provides the simulation modelling on which the interpretations and findings of the current report are based. These reports have now been finalised and are appended to this Final Scoping Report as Appendix 5 & 6. *Furthermore, the existing Baseline Marine Ecology Report will be updated with additional dispersion modelling results, undertaken by PRDW in 2020. This report is currently in progress and will be submitted to the DEFF as part of the EIR submission.*
Jeanne Vorsatz - Aurecon	Are there any alternative process treatments that are being investigated instead of marine discharge	At this stage, the idea is that the marine model will set standards that need to be met by investors prior to discharge. It will be up to individual industries to decide what treatment methods to employ to meet standards. However, depending on the outcomes of the midfield model, it may be necessary to implement pre-treatment of effluent prior to discharge. This will be reported on in the EIA phase ** Best practise will be to use as much of the seawater for other activities as possible prior to discharging back to the marine environment. For example, the brine from a desalination plant will ideally not be discharged but could be supplied to an off-taker for use in salt or chlorine manufacturing. Similarly, (some) seawater from the abalone farms could be diverted to a desalination plant. As such, alternatives to discharges are being considered, however, this EIA will be assessing the worst case scenario, i.e. all effluents generated to be discharged to the marine environment.* *In addition, modelling undertaken in 2020 showed that both wastewater options should have restricted effluent concentrations based on the achieved dilutions obtained from the model (i.e. treated on land prior to discharge).*

I&AP	COMMENT	RESPONSE
Jeanne Vorsatz - Aurecon	What type of emergency/mitigation measures are being investigated in the event of a discharge pipeline breach	The Scoping Report has identified risks/environmental impacts for further assessment at EIA stage. Emergency/mitigation measures will be listed at EIA stage. **Mitigation measures currently include the following:* *The pump stations will have a built-in safety mechanism in the event of loss of pressure.* *Regular maintenance inspections* *Additional emergency / mitigation measures will be explored in the EIA Phase if required.*
Dan Abraham - Aurecon	Interested in the project, and request to be registered as an IAP	Registered on the IAP database for the project and will be kept updated of the process and all further documentation **Dan Abraham has been included in the revised list of I&APs*
Chris Albertyn - LAQS	Request to be registered as an IAP	Registered on the IAP database for the project and will be kept updated of the process and all further documentation **Chris Albertyn has been included in the revised list of I&APs.*
Dave Louw - Cerebos	Our interest in the matter arises in that we currently pump seawater from the immediate vicinity of the proposed abstraction and effluent discharge areas, for purposes of salt manufacture, and wish to ensure the continued quality of such supply, especially with regard to possible pollution concerns of discharging effluent to these areas	Noted, thank you. This information has been sent to the marine specialist for consideration in the dispersion model. The Saltworks will be regarded as an existing 'beneficial user', where water quality of the user cannot be compromised by the proposed discharge servitude **Please note that the Cerebos intake located in the Port of Ngqura has been taken into consideration in the dispersion modelling undertaken for the project both in 2016 and in 2020. Due to the high number of dilutions required for the worst-case waste water effluent, the expected waste water effluent conditions were also tested. Under expected waste water effluent conditions, the dilutions (and therefore the environmental guidelines) are achieved for all the proposed seawater intake locations except for the Cerebos seawater intake inside the port. For other effluents, good dilutions are achieved at the proposed intake locations. As such, any waste water discharge via the Coega River will have to be treated on land to meet the required water quality guidelines prior to being discharged.*
Marisa Bloem - DWS	Requested a hard copy of the Draft Scoping Report for commenting purposes	Noted. A hard copy of the DSR will be delivered to DWS's offices **DWS is included in the stakeholder database.*

I&AP	COMMENT	RESPONSE
Huldah Solomon - GMS	General Motors SA has an effluent discharge permit from the NMBM. Request to be registered as an IAP	Noted, thank you. Registered on the IAP database for the project and will be kept updated of the process and all further documentation **Huldah Solomon has been included in the revised list of I&APs.*
Mulalo Tshikotshi – Oceans and Coasts	Requested additional information on the option of positioning the discharge servitude on the Port of Ngqura breakwater. Indicated that as long as the discharge does not compromise water quality for aquaculture or any surrounding sensitive ecosystems, it will be acceptable	A copy of the BID was sent to Oceans and Coasts that identified possible alternative positions of the discharge servitude. **Oceans and Coasts is included in the stakeholder database.*
Paul Martin – Environmental Control Officer for the IDZ and Port of Ngqura	Please ensure that I am registered as an I&AP and throughout the EIA process please supply full electronic copies (e.g. including specialist reports) of whatever documents become available	Registered on the IAP database for the project and will be kept updated of the process and all further documentation. **Paul Martin has been included in the revised list of I&APs.*
Paul Martin – Environmental Control Officer for the IDZ and Port of Ngqura	Presumably dispersion modelling will be done to look particularly at the possible effect on Jahleel Island. Note that Stellenbosch University is modelling the currents and sand movements with respect to the sand by-pass at present and there will be synergies with this project (Nomkhitha Kwinana, Enviro Manager at the Port is the contact at TNPA[1]). There seems to be a build-up of sand between Jahleel and the E Breakwater due to the sand by-pass discharge - this may have an influence (e.g. the pipe entrance could get buried in sand eventually).	** The dispersion modelling conducted by PRDW (2020) has investigated physical and chemical dispersion impacts on Jahleel Island. The ecological specialist study by Anchor Environmental will address the ecological impacts based on the physico-chemical projections per the dispersion modelling.*
Paul Martin – Environmental Control Officer for the IDZ and Port of Ngqura	You are obviously aware of the Damara Tern breeding colony (South Africa's rarest breeding seabird)	**We are aware of the Damara Tern population in Zone 10 of the SEZ. This has been included in the sensitivity map available as Figure 2.21 in Chapter 2 of this report.*

[1] Note that the current contact at TNPA is Mandilakhe Mdodana

I&AP	COMMENT	RESPONSE
Paul-Pierre Steyn - NMMU	I am a lecturer in the NMMU Botany Department and a researcher with the NMMU Institute for Coastal & Marine Research. I am involved in marine research in Algoa Bay, Hougham Park, and the inshore islands. I would like to register as an I&AP in order to remain informed of the process and the issues that arise	Registered on the IAP database for the project and will be kept updated of the process and all further documentation. **Paul-Pierre Steyn has been included in the revised list of I&APs.*
Melinda Labuscagne and R Le Roux – NMBM Waste Management	Request to be registered as an IAP	Registered on the IAP database for the project and will be kept updated of the process and all further documentation. **Melinda Labuscagne and R. le Roux has been included in the revised list of I&APs.*
COMMENTS RECEIVED FROM I&APs ON THE PRE-APPLICATION NOTICE OF THE EIA PROCESS IN 2016 BY CEN INTEGRATED ENVIRONMENTAL UNIT		
Carmen Barends – Leads 2 Business	Request to be registered as an IAP and a copy of the BID	Registered on the IAP database for the project and will be kept updated of the process and all further documentation. Copy of BID provided. **Carmen Barends has been included in the revised list of I&APs.*
John Geeringh - ESKOM	No comments but request to be registered and kept informed	Registered on the IAP database for the project and will be kept updated of the process and all further documentation. **John Geeringh has been included in the revised list of I&APs.*
Ronald Smith – Digistics (Zone 1, Coega IDZ)	Request to be registered as an IAP	Registered on the IAP database for the project and will be kept updated of the process and all further documentation. **Ronald Smith has been included in the revised list of I&APs.*
Mandilakhe Mdodana - TNPA	Requested clarity on the date when comments on pre-application notice should be submitted as Pg 11 of the BID stated 7 September. Noted that TNPA is the holder of an environmental authorisation for the Port and may be affected by the proposed servitude. The Port has an obligation of ensuring its activities do not affect the natural environment negatively and all impacts associated with its activities are kept at minimal levels.	Confirmed that the closing date for comments is 7 October 2016 as indicated in the body of the email notice and the front page of the BID Noted. Impacts of construction of infrastructure related to the proposed discharge and abstraction servitudes, as well as that of discharge of effluent and potential impact on water and sediment quality in the Port will be assessed in this EIA process.

I&AP	COMMENT	RESPONSE
		** This issue related to the EIA process and timelines related to the application submitted in 2016 and is thus not relevant here. The CDC (the applicant) owns the majority of the land on which the development is proposed. The names and contact details of those who lease land from the CDC has been provided to CES by the applicant and included in a stakeholder database and provided with a background information document via e-mail (as all identified I&APs at this stage of the project have access to e-mail). One of the seawater intakes is proposed inside of the Port of Ngqura, which is owned by the Transnet National Ports Authority (TNPA). As the Application is for a linear activity, written consent is not required. However, the TNPA has been included in the stakeholder database compiled by CES and have been notified of the proposed development via email notification, inclusive of a letter of notification and Background Information Document (BID). The CDC has also notified the TNPA, via its environmental co-management structure, of the project and associated environmental assessment process. TNPA is also a member of the Environmental Liaison Committee (ELC) where environmental applications underway are presented and discussed.*
Alan Southwood - DEDEAT	Requested to be registered as an IAP for the process, and to receive hard copies of the reports for commenting purposes	Registered on the IAP database for the project and will be kept updated of the process and all further documentation. A hard copy of this DSR has been made available to Mr Southwood. **Alan Southwood has retired from DEDEAT since the last application was lodged. DEDEAT has however been notified of the proposed project.*
Hugo Badenhorst – PPC Cement SA (Pty) Ltd	PPC provided a map indicating the area north-east of the Port where they have mining rights to mine sand dunes and plan to mine in the future. Potential conflicts between mining and planned infrastructure required as part of the proposed abstraction and discharge servitude were noted and objected to.	The EIA process and planning of infrastructure required for the abstraction and discharge servitude(s) will be taken cognisance of. PPC will be engaged throughout the process to avoid conflicts with their mining areas. **The planning for Zone 10 has taken existing mining rights into consideration. The CDC has a long-standing co-operative relationship with PPC (Pty) Ltd in the process of developing the Coega SEZ. The CDC has obtained written consent from PPC to submit an application in terms of section 53 of the MPRDA to utilize the land over which PPC have mining rights, for aquaculture purposes and for the establishment of the marine pipeline servitudes.*

I&AP	COMMENT	RESPONSE
Lesa la Grange - SAHRA	Noted that all official comments are now processed electronically via SAHRA's online platform (http://www.sahra.org.za/sahris/). To ensure a timely response to all correspondence relating to the case, SAHRA requested that any documents pertaining to the proposal be uploaded to an application on SAHRIS as they become available Recommended that an archaeological specialist survey the area to assess heritage impacts in full.	Thank you, and noted. All future documents will be uploaded to the website for comment. An underwater archaeological specialist has been appointed to survey the selected servitude(s) areas. **The Draft Scoping Report as well as the Final Marine Heritage Assessment, was submitted to SAHRA via their online platform. Comments received by SAHRA have been included below under the sections related to this application (proof included in Appendix 1: Public Participation Process). The marine heritage assessment submitted to SAHRA is available as Appendix 7 to this report.*
Dr Ane Oosthuizen - SANParks	SANParks note that the Islands and proposed MPA as part of Addo ENP has been identified as sensitive areas. Please keep SANParks on the stakeholder list	Thank you and noted. The islands and proposed MPA have been identified as sensitive areas in the baseline marine ecology report. The marine dispersion model will assess the movement of the discharge plume and water quality at the edge of the required mixing zone from servitude areas in relation to these sensitive habitats. **CES is aware of the marine protected area on the Eastern side of the Eastern Breakwater. This marine protected area has been taken into account in the Dispersion Modelling and the Marine Ecological Report undertaken for the proposed project. The Marine Protected Area has also been included in the Scoping Report, inclusive of the sensitivity map included in Chapter 2 (Figure 2.21). The National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) Regulations for the management of the Addo Elephant National Park Marine Protected Area (23 May 2019) was also consulted in drafting the Scoping Report. SANParks, specifically Ane Oosthuizen remains an I&AP on the revised application and has provided revised comments which are included in the section below related to this application. Proof of this is included in Appendix 1 of this report.*
Dr Paul Martin – ECO for the IDZ and Port of Ngqura	Confirmed that he is still a registered IAP. Noted that he can make recent data on Damara Terns available. There has been a significant increase in their breeding in the area in January 2016	Confirmed that he is still a registered IAP for the process. A copy of the BID was made available. Requested further details on the Damara Tern and any other relevant data that would be useful in the assessment of impacts related to the project. **The latest (2020) monitoring information for the Damara Tern (Coega Mining: Abalone Farm Site) was obtained from the CDC. Surveys were conducted on the 16th of October, the 12th of November and the 11th of December. Monitoring data showed that there were 2 adults flying around the Zone 10 dunefields on the 12th of November (i.e. on territory) and 2 birds feeding at sea opposite the old abalone Farm on the 11th of December. On 11th January 2021, a flock of 6 Damara terns were observed feeding in the shore break opposite the old abalone farm.*

I&AP	COMMENT	RESPONSE
		However, no nests have been observed this season to date. This will be the first season since 2014 that the Damara terns have not nested. However, on the 13th of November there were 4 nests and 2 pairs on territory at Schelmhoek. As this is considered to be early for this site (nesting usually only observed during December), it could be possible that the Damara Terns have relocated from the Abalone Farm site to the Schelmhoek Site. No change was observed in the Alexandria Dunefields site. In addition to this monitoring data, the following reports were obtained from the CDC: *Monitoring of Breeding Damara Terns, Algoa Bay, October 2019-March 2020* *Proposed Coega Mining Right Application, Zone 10, Coega Special Economic Zone, Nelson Mandela Bay Municipality, Avifauna Impact Assessment and Damara Tern Specialist Report. November 2019.* *Both of these reports, as well as the most recent monitoring data has been forwarded to the Ecological Specialist for inclusion in the Ecological Impact Assessment which will be submitted as part of the EIA submission.*
Peter Myles	Requested clarity on the date when comments on pre-application notice should be submitted as Pg 11 of the BID stated 7 September	Confirmed that the closing date for comments is 7 October 2016 as indicated in the body of the email notice and the front page of the BID **This issue related to the EIA process and timelines related to the application submitted in 2016 and is thus not relevant here.*
Kwanele Gxoyiya - Commercial Legal Advisor for MTU South Africa (Pty) Ltd	Rolls-Royce Power Systems (the holding company of MTU South Africa) is part of a consortium which seeks to respond to the Gas to Power project in the Coega IDZ. Requested to be registered as an IAP to provide input w.r.t. their technology (reciprocating gas engines) and the possible impact it may have on the environment.	Explained that CEN IEM Unit is handling the EIA process for the marine servitude, which includes possible abstraction and discharge by a CCGT power plant. Registered as IAP and sent a copy of the BID. Advised the IAP to register for the EIA process for the CCGT power plant being handled by SRK Consulting. Contact details for SRK provided. SRK made contact with IAP. **No further comment related to this issue*
Brian Bouwer	Requested to be registered as an IAP	Registered on the IAP database for the project and will be kept updated of the process and all further documentation. Copy of BID made available. **Brian Bouwer has been included in the revised list of I&APs.*
COMMENTS RECEIVED FROM I&APs ON THE DRAFT SCOPING REPORT SUBMITTED TO AUTHORITIES IN 2016 BY CEN INTEGRATED ENVIRONMENTAL UNIT		

I&AP	COMMENT	RESPONSE
DEDEAT – Alan Southwood / D Govender	The Scoping Report adequately addresses issues that require assessment during the EIA process. The Plan of Study is accepted.	Noted, thank you **This issue related to the EIA process related to the application submitted in 2016 and is thus not relevant here.*
SANParks – Anè Oosthuizen	Please note: Notice of intention to declare the Addo Elephant MPA was Gazetted on 3 February 2016 (GN 39646)	Noted, thank you. The marine specialist study and nearfield dispersion model have taken cognisance of the proposed MPA, and have viewed it as being gazetted. The proposed extent of the MPA is regarded as a critical sensitive environment, and discharge positions and scenarios considered in the nearfield dispersion model did not place any discharges into the MPA. **CES is aware of the marine protected area on the Eastern side of the Eastern Breakwater. This marine protected area has been taken into account in the Dispersion Modelling and the Marine Ecological Report undertaken for the proposed project. The Marine Protected Area has also been included in the Scoping Report, inclusive of the sensitivity map included in Chapter 2 (Figure 2.21). The National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) Regulations for the management of the Addo Elephant National Park Marine Protected Area (23 May 2019) was also consulted in drafting the Scoping Report. SANParks, specifically Ane Oosthuizen remains an I&AP on the revised application and has provided revised comments which are included in the section below related to this application. Proof of this is included in Appendix 1 of this report.*
SANParks – Anè Oosthuizen	Why are there now 2 servitudes being investigated? (Recommend the positions of 2 marine-based servitudes in which future industries can establish infrastructure for abstracting seawater i.e. one to service the requirements of the aquaculture development zone and desalination, and another to service the requirements of the proposed CCGT power stations.)	Owing to the diverse nature of the different industries that may abstract seawater from the servitude over time, various quality and volume parameters have to be considered when determining the number and position of the abstraction servitudes, and the type of infrastructure needed in the servitude. At this stage, it is anticipated that industrial seawater requirements will comprise two broad abstraction scenarios – i.e. a high volume, lower quality seawater need for industries such as the planned CCGT power plant for example, and a lower volume better quality seawater need for facilities such as the planned ADZ for example. Depending on the volume of seawater required, different types of abstraction infrastructure will be used which has implications from an engineering design and cost perspective (which is indirectly related to the position of the servitude). Water quality requirements will determine the position and depth/distance from the high water mark into the marine environment of the abstraction servitude. Further, the position of the discharge servitude will also have bearing on the position of the abstraction servitudes, and possible draw-back of effluent into the abstraction servitude needs to be considered. Because of these factors, it may be necessary to have two abstraction servitudes. Current thinking is to have an abstraction servitude for cooling water in the Port, and

I&AP	COMMENT	RESPONSE
		a second abstraction servitude for the ADZ and other industries that need better water quality in the marine environment on the eastern side of the Port closer to Zone 10. This will be finalised once results of the midfield model are available. **CEN Response above still valid. It has been confirmed (as a result of the dispersion modelling undertaken in both 2016 and 2017) that two intake servitudes will be required for the proposed project. The 2016 PRDW Concept Design Report assessed three (3) broad "locations" for the abstraction of seawater for aquaculture (i.e. it did not consider the power station cooling water requirements, as this project had not been conceptualised at that time). These included:* • *East of the Port of Ngqura;* • *In the vicinity of the Port of Ngqura, and;* • *West of the Port of Ngqura.* *The conclusion was that locating an intake servitude east of the Port of Ngqura is the most feasible alternative mostly due to economic benefits associated with abstracting seawater closer to the aquaculture zone.* *The 2017 PRDW Dispersion Modelling Report assessed six (6) locations for the proposed seawater abstraction or intake points, with a view to identifying common seawater intake servitudes. Compared with the 2016 PRDW Concept Design Report, this analysis also included cooling water. The six locations included (refer to Figure 2.15 in Chapter 2 of this report):* • *W1 - Western intake at -10 m Chart Datum (CD)* • *W2 - Western intake at -16 m CD* • *CW - Cooling water intake inside the Port of Ngqura* • *CB1 - Cerebos intake within the Port of Ngqura* • *CB 2 - Cerebos intake at Sundays River Mouth* • *E1 - Eastern intake at -10 m CD* *The following conclusions were arrived at with respect to the preferred marine intake servitude locations:* • *W1, W2 and CB2 were identified as **'not viable'** for seawater intake due to the large volumes of water required for cooling water and aquaculture development and the long distance of these sites from the power station sites and aquaculture zone, resulting in significantly higher economic costs due to the much longer reticulation distance.*

I&AP	COMMENT	RESPONSE
		• *CW and CB1 were considered **'potentially viable'** if separate aquaculture and cooling water intakes are constructed, as the quality of the seawater within the Port of Ngqura is not suitable for aquaculture.* • *E1 was considered to be **'potentially viable'** since the required effluent dilutions can be achieved, but still subject to the outcome of the marine ecological impact assessment in the EIA phase.* *Thus, the preferred alternative for the location of the marine intake servitude would be two (2) separate seawater intake servitudes locations:* • *Intake servitude 1: Seawater for Once-Through Cooling and Wet Mechanical Cooling located inside the Port of Ngqura; and* • *Intake servitude 2: Seawater for aquaculture and desalination located to the east of the Port of Ngqura.*
SANParks – Anè Oosthuizen	Chap 1, Point 1.3.2 , first paragraph, the last two sentences about the collection chamber does not make sense? Will there be sampling to test for quality/standards? Will the effluent be held? How large will this chamber be? What will be the retention time?	Apologies, the last sentence is meant to read: 'If it is found that the collective effluent contained in the collection chamber exceeds permit standards prescribed for the ADZ, then further treatment on land will need to be investigated and implemented. This will be managed via the Coastal Water's Discharge Permit and the CDC's monitoring and reporting process to the DEA.' It is envisaged that the collection chamber will be a good area to monitor the 'cocktail' of effluent from various facilities in the ADZ prior to it being discharged via the servitude. This EIA (via the marine dispersion model and marine specialist study) will determine effluent quality standards that various industry types will need to meet before discharging from land – this would include effluent from various facilities in the ADZ that would gravitate to a common collection chamber from where it would be sent to the discharge servitude. Details on the position, size, retention time etc. of the collection chamber will be provided at EIA stage once engineering concept design reports are available. **There is no collection chamber envisioned as part of the revised project description.*
SANParks – Anè Oosthuizen	It is difficult to make recommendations without the completed modelling results, and with the Nearfield model (App 5) and Conceptual Engineering design (App 3) not talking to each other in terms of discharge and intakes. However SANParks would still prefer the discharge outlet to be as far away as possible from the Islands and proposed MPA, to	Appendix 3 is a conceptual engineering design report for the ADZ only and was done prior to the nearfield and midfield dispersion models. It was included in the DSR to demonstrate the type of infrastructure that the ADZ would require between Zone 10 and the abstraction / discharge servitudes, as well as possible abstraction and discharge infrastructure designs; rather than the preferred position of servitudes. The nearfield model considered 12 discharge scenarios from 4 discharge positions, and identified a number of scenarios where water quality standards in the receiving

I&AP	COMMENT	RESPONSE
	give greater chance of dispersal. From the nearfield model it seems that a combined discharge would be best, because of the diluting effect of the cooling water? But yet from Appendix 3: it would seem options 1 or 3 : discharge pipe tunnelled underneath the shore and surf zone would be best?. Option 2, with a standalone breakwater would be unacceptable. It would be unnecessary to put more infrastructure onto the shore.	environment at the edge of the Required Mixing Zone are met. It is important to note that the model did not assess any discharges into the proposed MPA boundary, and that of the outfall options that meet water quality requirements at the edge of the RMZ, none of the predicted effluent footprints interact with any of the sensitive areas identified (including the MPA or islands and their buffers). The next step is to do a midfield model which will ultimately determine the preferred position of the abstraction and discharge servitudes. The midfield model is required in addition to the nearfield model for the following reasons: a. To investigate plume interaction between multiple discharges. Water quality guidelines must be met before the point of effluent plume interaction. b. To predict the effect of water abstraction on effluent plume movement. c. To validate the results of nearfield modelling. d. To more accurately estimate dilution values beyond the nearfield ** The 2016 PRDW Concept Design Report assessed three (3) broad "locations" for the discharge of aquaculture effluent (i.e. it did not consider the power station cooling water requirements, as this project had not been conceptualised at this time). These included:* • *East of the Port of Ngqura;* • *In the vicinity of the Port; and* • *West of the Port.* *The conclusion was that locating the effluent discharge servitudes east of the Port of Ngqura was the most feasible alternative mostly due to economic benefits associated with discharging the effluent closer to its source in the aquaculture zone located in Zone 10 of the Coega SEZ, east of the Port.* *In 2017, PRDW conducted a marine dispersion modelling exercise where 12 marine effluent discharge scenarios were developed and then modelled for the defined range of potential effluents. In addition to these 12 scenarios, 3 more scenarios were inferred from results of the modelled scenarios from six (6) sites (Figure 2.16 included in Chapter 2 of this report):* • *Option 1 – Approximately 2 km south-west of the western breakwater, at 10 m depth;* • *Option 2 – Approximately 2 km south-west of the western breakwater, at 16 m depth;*

I&AP	COMMENT	RESPONSE
		• *Option 3 – Along the seaward side of the eastern breakwater, with the discharge point at the elbow of the breakwater;* • *Option 4 – Along the seaward side of the eastern breakwater, with the discharge point at the end of the breakwater;* • *Option 5 – Approximately 900 m to the north-east parallel to the eastern breakwater, at 10 m depth; and* • *Option 6 – Approximately 900 m to the north-east parallel to the eastern breakwater, at 20 m depth.* *The dispersion modelling analysed the mixing zones of 100 m and 300 m from the discharge point. Water quality guidelines were also applied at locations of sensitive receptors, including the boundary of the Addo Elephant Marine Protected Area (MPA), 300 m from the boundary of the MPA, Jahleel Island, 100 m from Jahleel Island and the Port of Ngqura entrance.* *The results of the dispersion modelling which informs the preferred location for discharging effluents, are summarised below.* *The location of the discharge servitude west of the Port was identified as **'not viable'** for the construction of the proposed servitude for the following reasons:* • *Effluent will need to be pumped around the perimeter of the Port which would result in significantly higher capital and operational costs compared with an eastern discharge.* • *Although the required dilutions can be achieved, discharges west of the Port at -10 m will enter the Port, which increases the risk of accumulation of particulates with associated nutrients and heavy metals. If the pipeline is extended to -16 m, the achieved dilutions reduce the risk of effluent entering the Port. However, there is still a risk of accumulation of particulates with associated nutrients and heavy metals.* *Discharging of effluent within the Port was identified as **'not viable'** for the following reason:* • *Discharges will potentially become trapped in the Port resulting in accumulation of particulates with associated nutrients and heavy metals.* • *Disposal of effluent inside the Port may impact on Transnet's ability to meet the permits requirements as per their Dredge Disposal Permit.* *Discharge east of the Port was deemed as being **'potentially viable'** for the following reason:*

I&AP	COMMENT	RESPONSE
		• *The required dilutions can be achieved with no risk of effluent entering the Port or unacceptable environmental damage to the Marine Protected Area (MPA). In addition, the National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) and the Regulations for the management of the Addo Elephant National Park Marine Protected Area (23 May 2019) Section 10(2) make allowance for discharges into the Addo MPA.* *In 2017 PRDW undertook marine effluent dispersion modelling for 12 potential discharge scenarios, to inform the movement of the discharge plumes and possible interactions with planned seawater abstraction points (PRDW, 2017). In 2020, PRDW extended their investigation to model additional scenarios based on the updated effluent characterisation and to refine optimal intake and outlet locations.* ***<u>It is important to note</u>*** *that at this point, abstraction and effluent dispersion modelling was limited to east of the breakwater, due to discharging to the west of the Port and inside the Port having been excluded as viable options.* *It should also be noted that 11 of the 12 discharge scenarios tested by PRDW in 2017 comprised only one discharge location and one effluent, with only one scenario having combined effluents, since the focus of this initial dispersion modelling exercise was to compare different broad discharge locations. The 2020 study comprised* ***worst-case effluent scenarios*** *and multiple discharge locations with all the effluents being discharged simultaneously in order to test the combined impact. The characteristics of each individual effluent were provided by the CDC based on the respective industry specialist input. In addition, the modelling of the worst-case discharge scenario required assigning an intake and discharge location for each of the six effluent streams. The intake and discharge locations were chosen to align with the relevant infrastructure within the SEZ as provided by the CDC.* *The worst-case discharge scenario was run for the summer and winter months. The model outputs show the achieved dilutions in each horizontal and vertical element of the computational mesh at 1-hour intervals throughout the simulation period. Figure 2.18 below provides an example of the dilution contours for worse-case finfish aquaculture effluent.* *The following conclusions were drawn from the 2020 marine dispersion modelling study:*

I&AP	COMMENT	RESPONSE

		• *All the discharges considered can meet the applicable water quality guidelines (WQGs) (The marine WQGs currently in force are those defined in DWAFF (1995). These have been reviewed and updated in DEA (2019) but these are still in draft form and are not yet gazetted. Therefore, here the DWAFF (1995) version of the guidelines are followed primarily but are augmented by WQGs from other jurisdictions where required, e.g. ANZECC (2000), IFC (2009), along with peer-reviewed toxicity test data) within the 300 m mixing zone, except for wastewater and the combined brine and finfish discharge.*
		• *With respect to wastewater, the maximum allowable effluent concentrations (end of pipe) for E.coli, TKN + NH_4 and TSS must be limited in order to meet the Guidelines.*
		• *To ensure compliance, the brine and finfish effluent should be discharged separately.*
		• *Both the cooling water discharges tested meet the guidelines.*
		• *Should additional constituents be added to the effluent streams or identified in future, then the end-of-pipe concentrations of these constituents will need to be limited based on the achieved dilutions from the dispersion model as provided in the modelling report (PRDW, 2020) and the applicable guidelines, using the precautionary principle in cases where marine water quality guidelines for these constituents are not clear.*
		
		*The **preferred specific alternative locations** for the discharge of the various effluent streams are three separate servitudes comprising:*
		• *Discharge servitude 1:*
		  ○ *Cooling water effluent discharge servitude 200 m wide to a distance of 650 m offshore and a depth of -11 m CD.*
		• *Discharge servitude 2: Combined effluent discharge servitude 200 m wide with the following:*
		  ○ *Brine discharge 1,000 m offshore, at a depth of -13.5 m CD.*
		  ○ *Finfish aquaculture recirculation system effluent discharge 1,500 m offshore, at a depth of -16 m CD.*
		  ○ *Wastewater discharge from Phase 2 of the WWTW at 3,000 m offshore, at a depth of -20 m CD.*
		• *Discharge servitude 3:*
		  ○ *Abalone aquaculture flow-through system effluent discharge servitude 100 m wide into the surf zone.*

I&AP	COMMENT	RESPONSE
		Both the revised Dispersion Modelling Report (PRDW, 2020) and the Ecological Risk Assessment conducted by Lwandle Technologies (Pty) Ltd, was made available to SANParks for review and comment.
SANParks – Anè Oosthuizen	Nothing mentioned about monitoring the quality of the effluent after discharge or environmental impacts? This should certainly be the responsibility of the CDC as developer? Design and implementation should be scientifically rigorous.	Noted and agreed. Monitoring and compliance will be handled via the Coastal Waters Discharge Permit (CWDP) process. The Coega Development Corporation will be accountable for monitoring of effluent at the 'end-of-pipe' at in the marine environment. The EIA and CWDP application will include a monitoring plan. **A Draft Coastal Waters Discharge Permit (CWDP) application (as required by Section 69 of the NEM: Integrated Coastal Management Act No. 24 of 2008 for discharge of effluent into the marine environment) will be submitted to the DEA: Oceans and Coasts. Certain conditions, inclusive of monitoring will be included in the permit issued by Oceans and Coasts. In addition, monitoring information will be included in the EMP drafted as part of the EIA Application.*
SANParks – Anè Oosthuizen	Water quality in Algoa Bay should not be allowed to decline and impact on the environment, tourism, recreational activities or the fishing industry.	Noted and agreed. The EIA process and marine specialist studies are being designed using the precautionary principle. The sensitivity of the marine environment and location of sensitive habitats and beneficial users are recognised, and have been mapped in the marine dispersion model and impact assessment. The dispersion models look at the movement and extent of the effluent discharge plume in relation to sensitive environments, and consider effluent quality at the edge of the RMZ of the plume in relation to the water quality standards of the receiving environment. **The revised modelling results (Dispersion Modelling undertaken by PRDW in 2020) indicates the following:* • *Abalone surf zone discharge: Effluent gets trapped within the surf zone, however effluent from abalone meets the required South African Water Quality Guidelines (DWAF, 1995) and no further dilution is required.* • *Wastewater river discharge: Effluent from Phase 1 of the proposed WWTW, discharged into the Coega River and then into the Port of Ngqura results in low dilutions due to the stagnant river conditions and plume buoyancy. Plume is entrapped within the Port. None of the water quality guidelines are met for this option. As such it is recommended that land-based water treatment occurs prior to river discharge.* • *Wastewater with diffuser at 20 m depth: Effluent from Phase 2 of the proposed WWTW, discharged via a pipeline at -20m, with a diffuser, achieved high dilutions. All water quality parameters with the exception of metals and COD*

I&AP	COMMENT	RESPONSE
		were met. Effluent constituents at discharge must be treated so that they are not acutely toxic after discharge. As such it is recommended that land-based water treatment occurs prior to discharge into the marine environment to ensure that all water quality parameters are in line with the South African Water Quality Guidelines. • *Finfish with diffuser at 16 m depth: Effluent from finfish farms, discharged via a pipeline at -16m, with a diffuser, achieved high dilutions. The required Water Quality Guidelines are met within 300 m of end-of-pipe.* • *Brine with diffuser and high jet velocity: Modelling conducted found that the discharge achieved moderate dilutions and that the required Water Quality Guidelines are met within 300 m of end-of-pipe.* • *Cooling and heating water with diffuser at 10 m depth: Modelling conducted found that the discharge achieved moderate dilutions despite the high flow rate of water and that the required Water Quality Guidelines are met within 300 m of end-of pipe.* *Based on the above it is clear that with adequate mitigation measures, such as land-based treatment in place, it is not likely that the water quality within Algoa Bay will deteriorate as a result of the implementation of this project.*
SANParks – Anè Oosthuizen	SANParks will be able to give more detailed comment once all the modelling studies have been completed	Thank you. We will arrange a workshop with SANParks to discuss outcomes of the midfield model. ** In 2016 PRDW undertook marine effluent dispersion modelling for 12 potential discharge scenarios, to inform the movement of the discharge plumes and possible interactions with planned abstraction points (PRDW, 2016). PRDW has modelled additional scenarios in 2020 based on the updated effluent characterisation and refined intake and outlet locations obtained from the results of the previous modelling exercise. In addition, as part of wider assessments on the proposed marine pipeline servitude, PRDW contracted Lwandle Technologies (Pty) Ltd (Lwandle) to conduct an ecological risk assessment of the effects on the receiving environment. This report provides the environmental context in which the proposed discharges will operate based on existing survey information and scientific publications, specify receiving water quality guidelines that should apply in the water body, define mixing zone dimensions where effluent constituent chronic toxicity levels may exceed water quality guideline thresholds, and conduct toxicity effects evaluations on predicted effluent constituent distributions in the receiving environment of the discharges. The report produced by Lwandle should be read in conjunction with the PRDW (2020)*

I&AP	COMMENT	RESPONSE
		report: Marine Pipeline Project for the Coega Special Economic Zone, Marine Effluent Dispersion Modelling, PRDW Report No. S2001150-CE-001-R1, which provides the simulation modelling on which the interpretations and findings of the current report are based. These reports have now been finalised and are appended to this Final Scoping Report as Appendix 5 & 6. Both the 2020 PRDW Dispersion Modelling Report and the Ecological Risk Assessment undertaken by Lwandle was submitted to SANParks via e-mail on the 8th of December 2020. The comments received from SANParks on the 15th of December 2020 includes their comments on these specialist reports. The comments are included and responded to in the sections below relating to the current application.
Aurecon – Margaret Lowies	No major concerns apart from potential impacts on NMBM infrastructure requirements.	**The project is unlikely to place additional stress on the NMBMs infrastructure requirements. In fact, the project may result in the alleviation of these impacts as a result of the following:* • *Allowances are made for the discharge of effluent from an additional wastewater treatment works.* • *Allowances are made for the discharge of brine from a desalination plant that will in essence supply freshwater to industry within the Coega SEZ thereby reducing the overall demand for freshwater from the NMBM.* • *Allowances are made for the discharge of cooling / heating water from the power stations and LNG Hub. This will result in increased power to the national grid that in turn could alleviate the current power situation within the NMBM.*
Aurecon – Margaret Lowies	**S 1.3.3 p. 12**, first bullet point, last sentence: "*The EIA will also assess impacts associated with construction of infrastructure required for discharge by various industries in the servitude*." Please consult with Aurecon on the aforementioned to ensure that the EIA gives an accurate representation of possible pipeline infrastructure envisaged for the WWTW marine discharge in order to eliminate the need for an additional EIA at a later stage.	Possible alternatives for land-based infrastructure have been sent to Aurecon and others for comment. Workshops will be held with consultants handling the EIA process for the planned Coega WWTW, CCGT plant and ADZ plant once results of the midfield model and land-based specialist studies are available to finalise a way forward for positioning of servitudes and to share information on infrastructure requirements and plans. To note – this EIA will determine the preferred position of land-based servitudes to transfer seawater from the marine abstraction servitude to the Zone boundary of respective industries, and transfer treated effluent from the Zone boundary of respective industries to the marine discharge servitude. Further, it will assess impacts associated with construction of infrastructure within the servitudes. However, the EIA will not include detailed engineering designs of the infrastructure needed by various industries – this will need to be done by each investor as part of their planning processes. With this in mind, this EIA will not be able to assess certain specific impacts where detailed designs are required; but will rather make broad recommendations for future consideration. Further, the CDC will

I&AP	COMMENT	RESPONSE
		not be responsible for constructing infrastructure from the Zone boundaries of various industries to the marine servitudes. **Please note that this EIA includes the discharge infrastructure for the WWTW only. A separate EIA process will need to be undertaken for the construction of a WWTW should the NMBM still go ahead with this project.*
Aurecon – Margaret Lowies	**S 1.3.3 p. 12**, third bullet point: "*Recommend the position of a landward servitude for the establishment of infrastructure required to transfer abstracted seawater from the marine servitude to respective industries and to transfer effluent from respective industries to the marine discharge servitude. The servitude and required infrastructure will extend from the Zone boundary in which the respective industries are situated to the marine discharge and abstraction servitudes*." Kindly advise Aurecon at the earliest once the landward servitudes for infrastructure has been identified. The position of the connection point at the zone boundary might have significant cost implications to the NMBM and require the authorisation of additional listed activities under NEMA and NEM: ICMA.	Possible alternatives for land-based infrastructure have been sent to Aurecon and others for comment. Workshops will be held with consultants handling the EIA process for the planned Coega WWTW, CCGT plant and ADZ plant once results of the midfield model and land-based specialist studies are available to finalise a way forward for positioning of servitudes and to share information on infrastructure requirements and plans. To note – this EIA will determine the preferred position of land-based servitudes to transfer seawater from the marine abstraction servitude to the Zone boundary of respective industries, and transfer treated effluent from the Zone boundary of respective industries to the marine discharge servitude. Further, it will assess impacts associated with construction of infrastructure within the servitudes. However, the EIA will not include detailed engineering designs of the infrastructure needed by various industries – this will need to be done by each investor as part of their planning processes. With this in mind, this EIA will not be able to assess certain specific impacts where detailed designs are required; but will rather make broad recommendations for future consideration. Further, the CDC will not be responsible for constructing infrastructure from the Zone boundaries of various industries to the marine servitudes. **Please note that this EIA includes the discharge infrastructure for the WWTW only. A separate EIA process will need to be undertaken for the construction of a WWTW should the NMBM still go ahead with this project.*
Aurecon – Margaret Lowies	**S 1.5.2 p. 18**: Aurecon confirms that the current scope of work for the WWTW includes potential supply of treated effluent to tie into the NMBM return effluent supply scheme.	Noted **There is currently no EIA being undertaken for the proposed WWTW located within the Coega SEZ. Should the NMBM decide to proceed with this project, a separate EIA process will need to be undertaken for this.*
Aurecon – Margaret Lowies	**Appendix 5**:	The nearfield model considered 12 discharge scenarios from 4 discharge positions. A number of scenarios were identified where water quality requirements are met at the edge of the RMZ. The next step is to do a midfield model where the same scenarios will be tested (i.e. there are no preferred options at this stage, only a number of potentially acceptable options). A preferred discharge scenario and position will be identified taking into account impacts on the natural marine

I&AP	COMMENT	RESPONSE
	The nearfield model refers to a "worst case" scenario with Table 4.2 indicating the discharge infrastructure and depth requirements to meet WQG values at the edge of RMZ. It is currently understood from the nearfield modelling results that an eastern or western breakwater discharge at a 16m depth with 10 diffusers (Options 1a and 4a) is recommended by Anchor. The recommendations have a significant impact on the CAPEX and OPEX implications should the NMBM decide to construct a marine outfall at some stage. It is therefore crucial that the recommendations are backed by solid data or that the limitations of the model and methodology used are clearly indicated. The main concern is that the NMBM will be bound to meeting specific design criteria based on a "worst case" scenario approach which discounts the fact that the WWTW will be discharging effluent at a much better quality for the majority of its operational lifespan.	environment and beneficial users, costs to construct, engineering designs etc. The concern w.r.t. prohibitive costs of certain discharge scenarios, along with other factors such as maintenance in operational phase is noted. Further we understand that the intention is to construct and operate a WWTW that will meet certain design standards that should ideally not impact on the receiving environment. However, this EIA and the marine dispersion models have to look at worst case scenario to determine where the servitudes must be placed, and what the discharge parameters must be in the event of worst case happening. **It should be noted that the location of the discharge servitude west of the Port was identified as **'not viable'** for the construction of the proposed servitude for the following reasons:* • *Effluent will need to be pumped around the perimeter of the Port (a distance of about 12 km) which would result in significantly higher capital and operational costs compared with an eastern discharge.* • *Although the required dilutions can be achieved, discharges west of the Port at -10 m will enter the Port, which increases the risk of accumulation of particulates with associated nutrients and heavy metals. If the pipeline is extended to -16 m, the achieved dilutions reduce the risk of effluent entering the Port. However, there is still a risk of accumulation of particulates with associated nutrients and heavy metals.* *Based on personal communication with the Economic Specialist, the cost of constructing a discharge servitude from the ADZ to the western side of the Port will probably make the project financially unfeasible. This will result in each investor having to construct their own independently dedicated discharge servitude which could have a greater environmental negative impact on Algoa Bay. An economic assessment is currently in process to confirm this finding and will be submitted as part of the EIA documentation.*

I&AP	COMMENT	RESPONSE
Aurecon – Margaret Lowies	With reference to the abovementioned, could you kindly confirm the period of discharge at "worst case" concentrations for Ammonia, TSS and *E. coli* was modelled for? I.e. is the model assuming an indefinite malfunctioning of whichever industry's effluent pre-treatment or treatment processes or is the model limited to a certain timeframe of discharge of "raw" or "untreated" effluent? Linked to the aforementioned, if you could kindly confirm whether a dispersion model was done/will be done for long term discharge of different industry effluents under normal operating conditions i.e. meeting the requirements of CMC and CCC under typical conditions on not "worst case" scenarios only. **Section 6, p. 41, first paragraph**: "A prerequisite for industrial effluent is that it may not contain harmful chemicals, trace metals or other substances that exceed GDA standards (personal communication with CEN). This is due to the vast number of pollutants that are likely to occur in this type of combined effluent as well as the uncertainty of industries that will discharge into the servitude. Meeting this requirement will also protect against damage to WWTW bacterial treatment processes should industrial effluent be received and treated by the Coega WWTW." The Coega WwTW will allow for metal and oil removal as part of the Industrial train. It is currently envisaged that industries will have to comply with the current NMBM effluent bylaw standards in order to be allowed to discharge to the WwTW. Effluent quality cannot be dictated by the General and Special limits as per the General Authorisation of 2013 (GN 665 of 2013) as the GA is only applicable to a discharge volume of 2 Mℓ p/d and excludes marine outfalls and complex industrial wastewater. It is therefore critical to quantify the allowed	The nearfield model is based on worst-case scenario effluent, and does not differentiate between different states over time. (e.g. 'expected' effluent parameters were not modelled as the norm in the long-term in operational phase) – a precautious approach was taken so that the model could inform the position, design etc. of the discharge servitude in the event of the worst-case scenario happening as this is largely an unpredictable event that can only be detected once it has already happened. The midfield model that is currently underway will include a scenario where 'expected' effluent parameters are modelled. The EIA will then compare the outcomes of this scenario with the worst-case option and determine the most feasible and risk-averse alternative going forward. Industries discharging to WWTW would need to meet NMBM by-law standards prior to raw effluent entering the works. The midfield model will determine what standards the WWTW (and other industries) effluent should meet prior to discharge via the marine servitude. The receiving water quality objectives approach was followed in the nearfield model where standards for the Natural Environment as per DWA Guidelines (1995) were used – this dictates quality that the edge of the RMZ must comply with and was selected because they are the most stringent standards **As per response from CEN above.*

I&AP	COMMENT	RESPONSE
	contaminant concentrations (specifically metals) by means of a different set of guidelines (e.g. DWAF 1995 guidelines) or actual data collected from the study area. Due to the complex nature of effluent to be treated at the WwTW it is crucial that the design team is aware of the exact allowable concentrations of inorganic pollutants as it has a significant implication in terms of the process design for the WwTW. Please inform Aurecon when the mid-field modelling has been completed and provide a copy of the results when available (if permissible)	
Aurecon – Johan van der Mescht	The width of the outfall/intake servitude on land; The location of the marine outfall/intake corridor	Noted, thank you. These queries will be addressed and reported on at EIA stage. **The land-based seawater intake and effluent discharge pipeline reticulation will comprise HDPE pipes with diameters ranging between 600 mm to 3000 mm. Various pump stations and booster stations will be constructed along the route of the pipeline reticulation. Alignments and preferred positions will be finalised at EIA stage with input from design engineers to advise on aspects such as topography, pumping requirements, costs, flow rates etc.* *The width of the land-based infrastructure servitude is anticipated to be 30 m.* *The location of all infrastructure is shown on Figure 2.12 in Chapter 2 of this document.*
MTU South Africa (Pty) Limited – Charl de Jager	Provided a document with a 'needs list' for the planned Gas to Power project.	Details regarding seawater abstraction and discharge requirements were provided to PRDW for consideration in the midfield marine dispersion model. **The Gas to Power project is subject to four separate EIA processes currently being undertaken by SRK. For any further information related to this project kindly please contact the relevant project manager, Ms Nicola Rump (NRump@srk.co.za).*
Discovery Health - Ellian Peterson	If the proposed project is approved, what impact will it have on the rest of the IDZ?	The project entails the establishment of a marine-based servitude in which current and future investors in the IDZ can establish infrastructure for the abstraction of seawater as required by their processes (e.g. for cooling, desalination, aquaculture) and/or discharge of treated effluent to the marine environment. Land-based infrastructure will also be needed to transfer treated effluent from the respective industries to the marine discharge servitude and to bring water from the sea to the industries.

I&AP	COMMENT	RESPONSE
		** The primary need for the provision of integrated marine servitudes is to facilitate the co-ordinated development of infrastructure for a number of possible investors in the Coega SEZ that would require seawater in their process and/or that need to discharge treated effluent. The types of industries that would use seawater include those that would use seawater for cooling processes (such as power plants), aquaculture facilities and desalination plants. The Coega SEZ is currently the largest SEZ in the Southern Hemisphere and is adjoined by a deep water harbour (Port of Ngqura). According to the NMBM SDF (2015) the Coega SEZ, under the stewardship of the CDC, has managed to attract billions in investments into the economy of the Eastern Cape and thus enabling thousands of jobs to be created. In addition, a number of large projects valued at over R75 billion, are currently on the horizon. According to the Eastern Cape Provincial Spatial Development Plan (2017 Final Draft), the Coega SEZ is one (1) of only two (2) in the Province and as such is seen as having significant growth potential which requires provincial attention. Having the appropriate infrastructure available to investors will enhance the attractiveness of the Coega SEZ as an investment destination and therefore future investment trends. This will result in the provision of revenue, foreign exchange, taxes and royalties. An increase in investment into the area will also result in employment, local economic development, skills development, and local procurement.*
Discovery Health - Ellian Peterson	Will the electrical infrastructure be impacted? Municipality supply affected during and after the project?	The EIA process includes the assessment of impacts of construction of the required land-based infrastructure from the marine servitudes to the boundary of Zones that require these services. To this end, the EIA process will identify an area in the IDZ in which land-based infrastructure can be established. The Scoping Report includes a desk-top sensitivity study of areas that should be avoided. A mid-field dispersion model will be done that will ultimately inform the position of the marine servitudes. Once this has been done, the land-based specialist studies can commence to finalise the position of the land-based servitude. In the process, cognisance will be taken of impacts on existing infrastructure and facilities in the IDZ. Conflicts with existing land uses, roads and infrastructure will be avoided as far as possible. It should be noted that infrastructure for various industries will come on line based on demand – i.e. as and when they develop. Municipal supply should not be affected by the project since use will be made of seawater, and discharge will be to the marine environment. ** The largest volumes of seawater are required for the cooling of two proposed 1,000 MW water-cooled power plants in Zone 10 of the SEZ, which will enable the CDC to provide tenants with a secure access to energy and contributes to the overall energy*

I&AP	COMMENT	RESPONSE
		security of South Africa. The NMBM (through Eskom) supplies electricity to over 297 000 customers in the NMBM area, and has an annual turnover of approximately R1.8 billion. Eskom supplies an incoming voltage of 132 kV which is then distributed to industrial, commercial and residential consumers. Due to the growing population the need for basic services such as electricity continues to increase, and thus the backlog is also increasing. As such there is a need to improve, upgrade and provide additional electricity to the region. In order to achieve universal access to electricity, grid and non-grid technologies have to be implemented in line with the National Energy vision that "more than 90 percent of the population should enjoy access to grid-connected or off-grid electricity within 20 years", as well as to implement any other possible technologies based on cost-effective options in order to address current and future backlogs.
Mamjoli Marine Enterprise (Pty) Ltd - Mxoleli Nkuhlu	Interested in the project with relevance to the Aquaculture Development Zone (ADZ). Requested to be added to this EIA and the ADZ EIA public participation database.	Noted. Details added to the PPP database for this EIA as well. **Mamjoli Marine Enterprise has been included in the revised list of I&APs.*
SAHRA - Lesa la Grange	Requested that the SAHRIS case ID for the application be sent so that a case officer can be assigned to the project.	Case number sent to SAHRA - the Case ID number is 10174 **The Draft Scoping Report as well as the Final Marine Heritage Assessment, was submitted to SAHRA via their online platform. Comments received by SAHRA has been included below under the sections related to this application (proof included in Appendix 1: Public Participation Process). The marine heritage assessment submitted to SAHRA is available as Appendix 7 to this report.*
Matthew Hills – NMBM (query raised at public meeting)	Who owns marine land? Will measures be considered in the design of the abstraction infrastructure w.r.t. entrainment of organisms for example, related to maintenance and clogging	Coastal waters/land and the marine environment is owned by citizens. Coastal public property includes several components such as coastal waters and land below coastal waters, islands, the seashore, and other state land (e.g. the Admiralty Reserve). Ownership of coastal public property vests in the citizens of South Africa, however the State is the trustee on behalf of all citizens. The intention of this zone is to prevent exclusive use of the coast by facilitating access to, and sustainable use of productive coastal resources for the benefit of all South Africans (Celliers *et al.*, 2009) Yes, this will be included under the mitigation of impacts in the EIA report. **As per CEN response included above.*

I&AP	COMMENT	RESPONSE
Christina Hagen – BirdLife South Africa	I would like to register as an I&AP for this project please. Please can you also let me know where in the process the project is and if there are any commenting opportunities	Registered and details added to the IAP database. Sent copy of Executive Summary of DSR and link to download full report. Noted that the commenting period ended on 1 March, but that comments could still be submitted by 7 March. **Christina Hagen has been included in the revised list of I&APs.*
COMMENTS RECEIVED FOLLOWING THE NOTIFICATION OF THE SUBMISSION OF AN APPLICATION FOR EA TO ALL I&APS ON THE 27TH OF JULY 2020		
David Louw Cerebos davel@cerebos.co.za	Hi Nicole Please could you include me as an I&AP for the project involving Coega seawater extraction / effluent return, as a representative of Cerebos. My contact details are in my signature below.	Dear Mr Louw, Thank you for contacting us. Please note that you are now registered as an Interested and Affected Party (I&AP) on the proposed project. As a registered I&AP, you will receive notifications of when the project reports are available for public review and comments as well as how to access these reports. **Cerebos remains a registered interested and affected party on this project.*
Schalk Potgieter Director: Strategic Planning and Policy Formulation SPotgiet@mandelametro.gov.za	Morning Please register as I&AP	Dear Mr Potgieter, Thank you for contacting us. Please note that you are now registered as an Interested and Affected Party (I&AP) on the proposed project. As a registered I&AP, you will receive notifications of when the project reports are available for public review and comments as well as how to access these reports. **Schalk Potgieter remains a registered interested and affected party on this project.*
COMMENTS RECEIVED FOLLOWING THE NOTIFICATION OF THE AVAILABILITY OF THE DRAFT SCOPING REPORT FOR PUBLIC REVIEW (PREVIOUS APPLICATION RELEASED IN JULY 2020)		
Simon Wijnberg CEO – Impact Free Water simon@impact-freewater.com	Dear Nicole, Thanks for this – please can you add neil@impact-freewater.com to the mailing list. Thank you.	Good morning Simon, Thank you for contacting us. Please note Neil has been added to our I&AP database and is now registered as an Interested and Affected Party (I&AP) on the proposed project. The email notification was subsequently forwarded to Neil **Simon Wijnberg remains a registered interested and affected party on this project*
Christelle du Plessis Habitat Link (Coega ECO)	Hi Nicole Kindly register me as an I&AP as CDC's independent ECO for the SEZ.	Good afternoon Christelle, Thank you for contacting us. Please note that you have been included in the database for this project as the CDC's independent ECO.

I&AP	COMMENT	RESPONSE
christelle@habitatlink.co.za		**Christelle du Plessis remains a registered interested and affected party on this project*
Christelle du Plessis Habitat Link (Coega ECO) christelle@habitatlink.co.za	Morning Nicole Yes, I did manage to download the document. Thanks very much.	Good afternoon Christelle, I trust you are well. I would just like to confirm whether you have been successful in accessing the Draft Scoping Report for the Coega Marine Intake and Outfall Infrastructure Project?
Ane Oosthuizen National Marine Co-ordinator Park Planning & Development South African National Parks Ane.Oosthuizen@sanparks.org	HI Nicole Thank you for the reminder. Please register me as I&AP for the EIA. Kind regards	Good afternoon Ane, Thank you for your email. Please note that you have been included as an Interested and Affected Party (I&AP) on the database for this project. **SANParks remains a registered interested and affected party on this project*
Patrick Nodwele NMBM pnodwele@mandelametro.gov.za	Hi Nicole, We received your email, for future correspondence kindly copy Ms Buyiswa Deliwe (bhumani@mandelametro.gov.za) and Kobus Slabbert kslabbert@mandelametro.gov.za as well. Regards, Patrick	Good afternoon Patrick, Thank you, noted. ** Patrick Nodwele remains an I&AP on the proposed project*.

I&AP	COMMENT	RESPONSE
DEFF	The Department noted the use of the word “may” when describing the project activity that triggers the listed activities applied for. The use of the word “may” shows that the EAP/applicant is not confident and/or uncertain as to why the listed activities applied for are being triggered by the proposed activity. You are therefore requested to rephrase all project activity descriptions to refrain from the use of the word “may”. The onus is on the applicant and the appointed environmental assessment practitioner to ensure that only the applicable listed activities are included in the application. An amended application form must be submitted.	The listed activities have been amended in both this Final Scoping Report and the application form. An amended application form has been uploaded to the DEFF online system. **The listed activities have been further amended. The listed activities within the revised Scoping Report correspond to those submitted to the DEFF in the application form.*
DEFF	Please ensure that all relevant listed activities are applied for, are specific and that it can be linked to the development activity or infrastructure as described in the project description. The details such as the capacity of the off-stream storage of water, including dams and/or reservoirs must be included in the project description.	The listed activities have been amended in both this Final Scoping Report and the application form. An amended application form has been uploaded to the DEFF online system. The Listing Notice GNR983 Activity 13 have been removed from the application as the storage of seawater (maximum capacity 7,605,000 ML) has been approved as part of the Aquaculture project (EA 14/12/16/3/3/3/214). **The listed activities have been further amended. The listed activities within the revised Scoping Report correspond to those submitted to the DEFF in the application form.*
DEFF	The EAP is urged to revisit the applicability of the listed activities as the applicability of some of the listed activities is questioned. The following questions must be addressed as the basis for providing guidance on whether or not the proposed activity is triggered. “Does the proposed development trigger all the below mentioned infrastructure? Does the proposed development increase the proposed footprint of the harbour? Special attention must be given to the exclusion clauses. An example of such an activity is Activity 17 Listing Notice 1 of GNR 983.	The listed activities have been amended in both this Final Scoping Report and the application form. An amended application form has been uploaded to the DEFF online system. **The listed activities have been further amended. The listed activities within the revised Scoping Report correspond to those submitted to the DEFF in the application form.*

I&AP	COMMENT	RESPONSE
DEFF	If the activities applied for in the application form differ from those mentioned in the Final SR, an amended application form must be submitted. Please note that the Department's application form template has been amended and can be downloaded from the following link https://www.environment.gov.za/ documents/forms.	The listed activities have been amended in both this Final Scoping Report and the application form. An amended application form has been uploaded to the DEFF online system. **The listed activities have been further amended. The listed activities within the revised Scoping Report correspond to those submitted to the DEFF in the application form.*
DEFF	Please ensure that the final SR includes a legible site layout map; and environmental sensitivity map indicating all environmental sensitive areas and features, a map combining a layout map superimposed (overlain) on the environmental sensitivity map, and a regional map of the area.	The site layout map superimposed on both terrestrial and marine based sensitive sites is included as Figure 2.10. A locality map, including the regional context have been included as Figure 2.1. **The site layout map superimposed on both terrestrial and marine based sensitive sites is included as Figure 2.21.* *A locality map, including the regional context has been included as Figure 2.2.*
DEFF	Google maps will not be accepted.	No google maps have been included in the FSR. **As above*
DEFF	The plan of study, page 102 of the DSR indicates that the fundamental alternatives of the development other than the proposed infrastructure are technically not feasible in this instance and that no design/layout, technology and/or operational alternatives will be assessed for the proposed development as all options mentioned in the project description will require authorisation. This is noted, however, this information must be presented in such a way that the reasoning is clear and can be followed in order to enable the decision maker to adequately apply his/her own mind to the considerations and to follow the argument. Gaps, uncertainties and assumptions must be clearly reported and the decision in terms of the preferred alternatives must be appropriate considering the gaps, uncertainties and assumptions and the need for a risk averse and cautious approach.	A revised table comparing all site and layout alternatives has been included in the report as Table 2.2. **The alternatives section (Section 7.1) included in the Plan of Study has been substantially revised in order to make it more clear and concise. This section includes a table (Section 7.1.1) indicating gaps, uncertainties and assumptions.*

I&AP	COMMENT	RESPONSE
DEFF	Please ensure that all issues raised and comments received during the circulation of the DSR from registered I&APs and organs of state which have jurisdiction (including this Department's Biodiversity Section, Oceans and Coasts) in respect of the proposed activity are adequately addressed in the Final SR. Proof of correspondence with the various stakeholders must be included in the Final SR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments. The public participation process must be conducted in terms of Regulation 39, 40, 41, 42, 43 & 44 of the EIA Regulations 2014, as amended.	Comments on the content of the Draft Scoping Report were only received from DEFF and SANParks. These comments have been addressed in the IRT and amendments to the DSR have been made and included in the FSR accordingly. Additional comments received during the mandatory 30-day Public Review Period were limited to requests to register as I&APs. All I&APs were notified of the availability of the DSR via email and SMS notification. I&APs were also contacted via telephone on the 10th of August to confirm the receipt of the DSR for review. Please refer to Appendix A for proof of all correspondence with I&APs. **All comments received to date (including historical comments) have been included in this IRT and are responded to by the EAP. All evidence of correspondence is included in Appendix 1 of this report.*
DEFF	A comments and response trail report (C&R) must be submitted with the final SR. The C&R report must incorporate all historical comments for this development. All comments from I&APs must be adequately responded to. Please note that a response such as noted is not regarded as an adequate response to I&AP comments.	A comments and Response report has been included in the FSR (this table). Additionally, historical comments received during the previous Scoping phase of this development are included in Appendix A. Proof of email notification and I&AP comments received are included in Appendix A. **A comments and response report has been included in the FSR (this table). This includes historical comments received during the previous two Scoping phases of this development. Proof of email notification and I&AP comments received are included in Appendix 1.*
DEFF	The final SR must provide evidence that all identified and relevant competent authorities have been given the opportunity to comment on the proposed development; the Eastern Cape Environmental Department, the District and Local Municipalities.	All I&APs were notified of the availability of the DSR via email and SMS notification. Additionally, I&APs were also contacted via telephone on the 7th and 11th of August to confirm the receipt of the DSR for review. Please refer to Appendix A for proof of all correspondence with I&APs. **All I&APs were notified of the availability of the DSR via email and SMS notification. Please refer to Appendix 1 for proof of all correspondence with I&APs.*
DEFF	Given the background to this application, that the previous application lapsed due to the fact that additional specialist studies were to be undertaken because of the unexpected variance in the results of the draft midfield model in comparison to the nearfield model presented in the DSR, as well as	Midfield Marine Dispersion Model: Marine Dispersion modelling was undertaken for the proposed project in July 2017. In addition to this study the CDC has commissioned further marine dispersion modelling in order to address comments raised by stakeholders on the results of this modelling as well as to further refine the location of proposed infrastructure. Preliminary results of this modelling were presented at the ELC meeting held in

I&AP	COMMENT	RESPONSE
	queries raised by the project team and the authorities on the draft midfield modelling results. This necessitated the expansion to the scope of works of the EIA and associated specialist studies which outcome could not have been anticipated prior to undertaking the midfield model. The following additional specialist assessment were to be done after the Scoping Phase. These additional studies were the main reason for the delays in the submission of the Draft Environmental Impact Assessment (DEIAR) to the Department, which led to the lapsing of the application. A midfield marine dispersion model to refine the outcome of the near and far field models presented in the FSR and ultimately determine the preferred position of the marine and abstraction servitude(s) A marine Archaeological Study A Terrestrial and Aquatic Specialist Study of the terrestrial environment A paleontological specialist study of the terrestrial environment	August 2020 and the final report will be submitted to the department in conjunction with the Draft EIR. The terms of reference of this study is included in the Plan of Study (Section 7.3.6) **The completed studies are appended as Appendix 5&6.* A Marine Archaeological Study is currently underway. The terms of reference for this study has been included in Section 7.3.1 of the Plan of Study. **The completed study is appended as Appendix 7.* A terrestrial ecological assessment is currently underway. The terms of reference for this study has been included in Section 7.3.5 of the Plan of Study. The Coega Development Corporation (CDC) appointed Scherman Colloty & Associates (SC&A) to assess and delineate all wetlands located within the Coega SEZ in September 2016. This study identified three wetlands within Zone 10 of the SEZ, none of which are situated within 500 m of the proposed development, except the Coega River/Estuary (port). As per the NFEPA (2011) spatial data set (please see Figure 4.3 under Section 4.2.2: Surface Hydrology), the artificial wetland located along the coast, in the centre of the proposed development, is the now defunct Marine Growers abalone facility. Additionally, it should be noted that no wetlands were observed during the site survey conducted by the ecological specialist. A section on this (inclusive of mapping) has been included in Section 7.3.7. An Archaeological and Cultural Heritage Assessment was conducted for the SEZ in 2010. The CDC also has a Heritage Management Plan, and guidelines from SAHRA in place to ensure that all aspects of heritage are managed. These recommendations are included in the impact assessment included below and will be included in the EIA and Construction EMPr. It should be noted that we are aware that generally specialist studies should not be older than 5 years, however, heritage, archaeological and palaeontological artifacts are sessile and thus the position of these do not change over time, as such it is considered acceptable to utilise the existing study as the status quo would not have changed. A section on this (inclusive of mapping) has been included in Section 7.3.8. **As above* *The full procedure currently being implemented by the CDC in the management of its heritage resources is as follows:*

I&AP	COMMENT	RESPONSE
		1. *National Heritage Resources Act, 25 of 1999. Section 35(4) states that no person may, without a permit issued by the responsible heritage resources authority –* *(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;* *(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;* 2. *It is in fulfilment of this Act that the CDC conducted its Phase 1 Heritage Impact Assessment (HIA).* 3. *The recommendations from the HIA have been incorporated into the CDC's Operational Environmental Management Plan (OSHEMP), as approved by the DEFF. Section 4.13 of CDC's approved OSHEMP sets out the requirement for the protection of heritage resources in the SEZ.* 4. *The recommendations from the CDC's OSHEMP have been incorporated into the CDC's Project Environmental Specification (PES) for Construction, for each project. Section 5.19 of the PES for Construction sets out the specification for the appointment of heritage specialists to ensure the OSHEMP and PES is implemented, as described below:* ***Protection of archaeological and palaeontological sites within the SEZ*** *The CDC conducted a Phase 1 Heritage Impact Assessment (HIA) for the Coega SEZ. The HIA was in fulfilment of Section 38 of the National Heritage Resources Act, 1999. The HIA comprised of 3 separate specialist impact assessments:* a) *Scoping & Phase 1 archaeological impact assessment for the Coega SEZ, with recommendations;* b) *Scoping & Phase 1 palaeontological heritage impact assessment for the Coega SEZ with recommendations;* c) *Assessment of the Built Environment in the Coega SEZ, with recommendations for the preservation of identified grave sites and buildings of conservation value; i.e. older than 60 years.* *In collaboration with the South African Heritage Resources Agency (SAHRA), management guidelines were generated for each of the 14 Zones within the Coega SEZ, outlining the sensitivity of each Zone and proposing guidelines which must be followed prior to and during any development within each Zone. These management guidelines, together with the findings of the three impact assessments, constitute the CDC's Heritage Management Plan (HMP) for the Coega SEZ, which must be complied with by all contractors in the SEZ.*

I&AP	COMMENT	RESPONSE
		The contractor must ensure that an archaeologist and palaeontologist are appointed to implement the CDC's Heritage Management Plan for the Coega SEZ. The following are the minimum requirements for the implementation of the HMP: *1. An archaeologist must inspect the Site once bush clearing has taken place, and monitor the Site during topsoil removal and trenching activities to allow for the documentation and/or rescue of any new archaeological discoveries;* *2. A palaeontologist must inspect the Site once bush clearing has taken place and during deep (> 3m depth), high-volume trenching activities while fresh bedrock is still exposed;* *3. In the event that a significant cultural site, archaeological deposit or palaeontological site is found, the archaeologist and/or palaeontologist, in collaboration with the CDC, must engage SAHRA and ECPHRA, to determine the requirement for cultural, archaeological and/or palaeontological mitigation;* 4. *All reporting to be done in terms of the NHRA and its Regulations.*
	The Department is concerned that the Plan of Study does not include all of the "additional" specialist studies mentioned above. The Department still considers these to be relevant to the proposed development.	Please refer to comments included on specialist assessments above. **As above*
DEFF	The DSR on page 2 indicates that the "*The position of the discharge servitude, depth of discharge, and design of discharge infrastructure will be determined via a dispersion modelling process and engineering studies".* The Department is of the opinion that these specialist studies were conducted already since these were conducted as part of a previous application. It is quite concerning that these specialist studies were not included in the DSR phase to give I&APs as well as the EAP enough time to address the challenges previously encountered.	Additional dispersion modelling has been conducted based on comments received from previous applications for this project. The preliminary results of this additional modelling were presented at the ELC meeting held in August 2020, however the reports are not yet available (i.e. have not be completed) for inclusion into the DSR and distribution to the I&APs. Based on the preliminary results, marine effluent discharge will be conducted as follows: • Cooling and Heating water discharge via a tunnel (to accommodate large flows from once through cooling) to – 11 m CD, 650 m offshore • Brine discharge via a pipeline to -13.5 m CD, 1000 m offshore • Finfish discharge via a pipeline to -16 m CD, 1500 m offshore • Wastewater from phase 1 of the WWTW via the Coega River into the Port • Wastewater from phase 2 of the WWTW via a pipeline to – 20 m CD, 3000 m offshore • Abalone discharge via pipeline into the surf zone.

I&AP	COMMENT	RESPONSE
		The final marine dispersion modelling reports will be submitted to all I&APs for review with the Draft EIR and the final results will be incorporated into the EIR for review. The relevant edits as outlined above has been made to the text in the project description included in the FSR. **As above. The marine dispersion modelling, environmental risk assessment and marine heritage assessment has now been completed and the reports have been received from the relevant specialists, as such these have been appended to the FSR as Appendices 5, 6 and 7. The marine dispersion modelling and environmental risk assessment report were circulated to SANParks (upon request), as such comments received from SANParks are addressed in the relevant sections below includes comments on these reports.*
DEFF	Please note tha the specialist studies conducted as part of the previous application may still be submitted as part of this application, provided that the findings are still relevant and less than 5 years old.	The marine dispersion modelling was undertaken in 2017 and the wetland delineation in 2016 as such both of these studies are not older than 5 years. An Archaeological, Palaeontological and Cultural Heritage Assessment was conducted for the SEZ in 2010. The CDC also has a Heritage Management Plan, and guidelines from SAHRA in place to ensure that all aspects of heritage are managed. These recommendations are included in the impact assessment included below and will be included in the EIA and EMPr. It should be noted that we are aware that generally specialist studies should not be older than 5 years, however, heritage, archaeological and paleontological artifacts are sessile and thus the position of these do not change over time, as such it is considered acceptable to utilise the existing study as the status quo would not have changed. **As above.*
DEFF	Please note that the specialist studies to be conducted must provide a detailed description of their methodology, as well as indicate the locations and descriptions of infrastructure positions, and all other associated infrastructures that they have assessed and are recommending for authorisations.	All specialists have been informed of this requirement. **As above.*

I&AP	COMMENT	RESPONSE
DEFF	The specialist studies must also provide a detailed description of all limitations to their studies. All specialist studies must be conducted in the right season and providing that as a limitation, will not be accepted.	All specialists have been informed of this requirement. **As above*
DEFF	Should the appointed specialists specify contradicting recommendations, the EAP must clearly indicate the most reasonable recommendation and substantiate this with defendable reasons, and where necessary, include further expertise and advice.	Noted and agreed. **As above.*
DEFF	The positive and negative cumulative social impacts must be adequately addressed in the report bearing in mind the size, scale, scope and nature of the project in relation to its location and other planned developments in the area.	Two impacts have been included in the impact assessment section: • Social Benefits from the project mainly related to short term employment and the purchasing of goods locally rated as LOW + • A cumulative impact related to the functionality of the proposed marine abstraction and discharge servitude which will also enable the development of a number of other industries (e.g. G2P, WWTW and the ADZ), which will in term result in a number of indirect employment opportunities. It should be noted that relevant state departments involved with water resource and coastal management (e.g. DWS and DEA: Oceans and Coasts), have advised the CDC that it would be beneficial for the SEZ to have dedicated servitudes for the placement of infrastructure needed for the abstraction of seawater and discharge of treated effluent to the marine environment rather than each industry establishing their own set of infrastructure. This would make management of the volumes and quality of effluent easier, would streamline the maintenance of infrastructure, and would also result in less physical impacts to the coastal environment by reducing the number of points where hard structures are placed in the dynamic coastal zone. As such no other intake and outfall infrastructure is planned in the vicinity of the project and therefore cumulative impacts are unlikely to occur. **As above*

I&AP	COMMENT	RESPONSE
DEFF	Should there be any other similar projects within a 30 km radius of the proposed site, the cumulative impact assessment for all identified and assessed impacts must be refined to indicate the following: • Identified cumulative impacts must be clearly defined and where possible the size of the identified Impact must be quantified and indicated, i.e. hectares of cumulatively transformed lands. • Detailed process flow and proof must be provided, to indicate how the specialist's recommendations, mitigation measures and conclusions from various similar developments in the area were taken into consideration in the assessment of cumulative impacts and when the conclusion and mitigation measures were drafted for this project. • The cumulative impacts significance rating must also inform the need and desirability of the proposed development. A cumulative impact environmental statement on whether the proposed development must proceed.	**There are two Cerebos intakes within 30 km of the proposed project site. One is located within the Port and one near the Sundays River Mouth. Please note that these intakes were considered during the dispersion modelling. The findings show that due to the high number of dilutions required for the worst-case waste water effluent, the expected waste water effluent conditions were also tested. Under expected waste water effluent conditions, the dilutions (and therefore the environmental guidelines) are achieved for all the proposed seawater intake locations except for the Cerebos seawater intake inside the port. For other effluents, good dilutions are achieved at the proposed intake locations. As such, any waste water discharge via the Coega River will have to be treated on land to meet the required water quality guidelines prior to being discharged.*

I&AP	COMMENT	RESPONSE
DEFF	You are further reminded to comply with Regulation 21(1) of the NEMA EIA Regulations 2014, as amended, which states: "*If S&EIR must be applied to an application, the applicant must, within 44 days of receipt of the application by the competent authority, submit to the competent authority a scoping report which has been subjected to a public participation process of a least 30 days and which reflects the incorporation of comments received, including any comments of the competent aauthority". In light of the above, it is concerning to note that the Final Scoping Report is due to be submitted to the Department on 31 August 2020, which is the same due date for I&APs to submit their comments on the DSR. The Department has and is still willing to assist where possible, however it remains the responsibility of the EAP and the applicant to properly manage the application and the potential impacts associated with it. The Department's mandate is to ensure that the requirements of the EIA regulations, in this case submission timeframes as well as the minimum requirements of the public participation process are complied with.*	The EAP will ensure that all I&APs have had the mandatory 30 days for the review of reports and that all comments are incorporated and responded to in the FSR. **The public review period on the Draft Scoping Report was undertaken from the 13th of November to the 14th of December 2020 (i.e. 30 days). All comments received during this period have been incorporated into this IRT and the letters/responses received from I&APs are included in Appendix 1 of this report.*
DEFF	You are further reminded that the final SR to be submitted to this Department must comply with all the requirements in terms of scope of assessment and content of Scoping reports in accordance with Appendix 2 and Regulation 2(1) of the EIA Regulation 2014, as amended.	Please refer to Table 1.2: Requirements for the Scoping Report and content (in accordance with Appendix 2 of the EIA Regulations). This table cross references the legal requirements of the Scoping Report and where these have been addressed in the FSR. **As above.*
DEFF	Further note that in terms of Regulation 45 of the EIA Regulation 2014, as amended, this application will lapse if the applicant fails to meet any of the timeframes prescribed in terms of these Regulations, unless an extension has been granted in terms of Regulation 3(7).	Noted **As above.*

I&AP	COMMENT	RESPONSE
DEFF	You are hereby reminded of Section 24F of the National Environmental Management Act, Act No. 107 of 1998, as amended, that no activity may commence prior to an Environmental Authorisation being granted by the Department.	Noted **As above.*
Dr. Ane Oosthuizen SANParks	Bearing in mind the development borders on the Addo Elephant National Park Marine Protected Area, SANParks will require 24hr access to the coast through the development zone for various reasons including law enforcement, oil spill operations/clean ups and for monitoring purposes. Please make SANParks access a condition of the EIA.	This has been included in the mitigation measures included in the impact assessment for the project. **As above.*
Dr. Ane Oosthuizen SANParks	A Buffer zone of sufficient distance needs to be between the coastline/coastal zone and developments. Inductions of construction staff and monitoring needs to take place to prevent them poaching/snaring whilst living on site.	As construction will occur within the coastal zone it would not be possible to erect a buffer zone, however only development footprints (i.e. trenches for pipelines) will be disturbed and all other areas will be demarcated as no-go areas. No construction staff will be housed on site. Inductions will be conducted prior to construction. The CDC's Environmental Specifications for Construction contain requirements for Environmental Awareness training and require that the contractor draft method statements for Awareness training. All method statements are verified and approved by the CDC prior to construction commencing. The appointed ECO for the construction phase of the project will monitor compliance of the contractor to the method statements and any other documentation, including the EMPr. **As above.*
Dr. Ane Oosthuizen SANParks	It is extremely important that correct processes including EIA's are followed through DEA national office and no short cuts taken.	Noted and agreed **The CDC agrees. Effective environmental management is key to the success of the CDC and the successful implementation of this project.*

I&AP	COMMENT	RESPONSE
Dr. Ane Oosthuizen SANParks	Cultural Heritage aspects and applicable legislation needs to be taken into account as the area contains cultural historical sites including shell middens.	An Archaeological, Palaeontological and Cultural Heritage Assessment was conducted for the SEZ in 2010. The CDC also has a Heritage Management Plan, and guidelines from SAHRA in place to ensure that all aspects of heritage are managed. These recommendations are included in the impact assessment included below and will be included in the EIA. It should be noted that we are aware that generally specialist studies should not be older than 5 years, however, heritage, archaeological and paleontological artifacts are sessile and thus the position of these do not change over time, as such it is considered acceptable to utilise the existing study as the status quo would not have changed. **As above* *Please refer to responses provided to DEFF in the sections above* on *how the CDC has incorporated the heritage guidelines into the Project Environmental Specifications for each project conducted in the SEZ.*
Dr. Ane Oosthuizen SANParks	The development area is found in a very sensitive coastal zone area containing a number of vulnerable and endangered species which need to be protected.	The marine ecological assessment that was undertaken for the previous application for this project will be updated and incorporated into the EIR. In addition, a terrestrial ecological assessment is also being undertaken. **As above*
Wayne Hector (DEFF)	What size mixing zones are being recommended? Is it different for each effluent type being discharged?	Allowed dimensions of initial dilution zones vary across jurisdictions: • USEPA and IFC indicate 100 m in all directions from discharge points, or that calculated by a plume model. • Local (DEA 2015) advice is 100 m radius for enclosed water bodies and those classed as being sensitive environments and 300 m radius in open coast settings where water depths exceed 10 m and distance offshore is >500 m. The proposed discharges will be located in an open coast setting characterised by sometimes vigorous winds and turbulent sea conditions. The inner continental shelf ecosystem hosting the discharges is rated as 'vulnerable' in terms of conservation threat by SANBI; however, this is in common with large extents of the inner continental shelf between Cape St Francis in the south and East London in the north. Consequently, although within a declared MPA this commonality and the open coast setting indicates that a 300 m radius for the initial dilution zone is appropriate. **As above*

I&AP	COMMENT	RESPONSE
Lyndon Mardon (DEDEAT)	Hormones and trace chemicals have not been assessed / discussed in the Lwandle presentation – will the impact of the discharge of these be considered?	This will be considered in the EIR, once the specialist assessments have become available. **Only the constituents provided by CDC have been included in the assessment. Should additional constituents be added to the effluent streams or identified in future, then the end-of-pipe concentrations of these constituents will need to be limited based on the achieved dilutions from the dispersion model and the applicable guidelines, using the precautionary principle in cases where marine water quality guidelines for these constituents are not clear.*
Lyndon Mardon (DEDEAT)	Advised that the precautionary approach must be considered.	Noted and agreed. **As above.*
Lyndon Mardon (DEDEAT)	Indicated that when it comes to E-coli, there appears to have been no consideration for the Cerebos seawater intake. The hazardous impact of this on the foodstuffs at Cerebos must been minimized. Additionally, there are various organisms within the effluent that may have a negative impact. Advised that the water also be looked at from a public health perspective as well, not just from a recreational perspective.	This will be considered in the EIR, once the specialist assessments have become available. **As above.* *As salt concentrations increase through evaporation in salt ponds osmotic pressure increases. Research on the mammalian gut bacterium Campylobacter jejuni, important in causing human gastroentiritus worldwide, shows that survival decreases with increasing osmotic stress (Bui et al 2012, Effect of environmental stress factors on the uptake and survival of Campylobacter jejuni in Acanthamoeba castellani. BMC Microbiology 12: 232). Similar effects can occur in E. coli. E. coli itself can tolerate sodium chloride concentrations to 58.44 g/L (https://en.wikipedia.org/wiki/Salt_evaporation_pondreference). In evaporative salt ponds salt content increases to 260 g/L (Akridge DG 2008, Methods for calculating brine evaporation rates during salt production. Journal of Archaeological Science, 35(6): 1453-1462). This is 4.4 x higher than the apparent toleration threshold. Finally, Cerebos sterilizes their product to remove halophilic bacteria (Http://cerebos.co.za/industrialproducts).* *Consequently toxicity risks are considered to be low as the apparent effects should apply to most of the organisms in the sewage treatment plant discharges.*
Dylan Govender (DEDEAT)	Advised that that they must consider the impact of nano-plastics within the marine environment.	It is unlikely that micro-plastics will get into the effluent discharges that have been assessed. This is usually only the case with storm water discharges. The Draft EIR will include measures to ensure that the design of the storm water infrastructure will prohibit any land-derived litter from entering the marine environment via any stormwater channels. **As above*

I&AP	COMMENT	RESPONSE
Millicent Solomons (DEFF)	DEFF is busy drafting comments on the Draft Scoping Report. Were comments from previous EIA (Scoping Report) considered in the drafting of this DSR? Specifically in relation to the specialist studies that were mentioned. Concerned about the plan of study that was included in the report; suggests that the consultants go back and look at the previous EIA recommendations because not all the recommended studies have been included and no motivation has been given as to why that is.	Based on the IRT for the previous application for this project, DEFF requested the following specialist studies to be completed: • Midfield marine dispersion model to refine the outcome of the near and far field models presented in the FSR and ultimately determine the preferred position of the marine and abstraction servitude(s); • Marine archaeological study; • Terrestrial and aquatic specialist study of the terrestrial environment; • Paleontological specialist study of the terrestrial environment; and • Economic assessment. All of the above studies, with the exception of an aquatic assessment and a palaeontological assessment, are currently underway. Motivations as to why an additional aquatic assessment (Section 7.3.7) and palaeontological assessment (Section 7.3.8) is not required have been included in the Plan of Study of the FSR. **As above*
Wayne Hector (DEFF)	Which is the preferred option wrt alternatives? It must be clearly outlined in the Final Scoping Report.	The alternatives section (Section 2.4) has been revised for clarity purposes. The preferred layout is indicated on Figure 2.10 included in this report. **The alternatives section has been revised in its entirety to ensure clarity and understanding. This section is included in Chapter 2 of this report.*
Millicent Solomons (DEFF)	What informed the location of your pipeline?	Location of the pipeline was informed by the dispersion modelling done in 2017 and again in 2020 where two additional scenarios that were modelled. Placement of terrestrial infrastructure was informed by where the marine infrastructure was going while making sure that all sensitive areas are avoided. **As above*
Millicent Solomons (DEFF)	It is critical that this comes out clearly because we need to look at what mitigation hierarchy you followed to get to your preferred options.	The alternatives section (Section 2.4) has been revised for clarity purposes. The preferred layout is indicated on Figure 2.10 included in this report. **The alternatives section has been revised in its entirety to ensure clarity and understanding. This section is included in Chapter 2 of this report.*

I&AP	COMMENT	RESPONSE
Wayne Hector (DEFF)	Was a palaeontological study or a terrestrial ecological specialist study considered?	Responded that the CDC has conducted a Heritage Impact Assessment, the recommendations of which are included within CDC's Environmental Specifications for Construction. The recommendations from that study fully cover the palaeontological aspect and this will be elaborated on more in the FSR and ensuing EIR. **Based on the IRT for the previous application for this project, DEFF requested the following specialist studies to be completed:* • *Midfield marine dispersion model to refine the outcome of the near and far field models presented in the FSR and ultimately determine the preferred position of the marine and abstraction servitude(s);* • *Marine archaeological study;* • *Terrestrial and aquatic specialist study of the terrestrial environment;* • *Paleontological specialist study of the terrestrial environment; and* • *Economic assessment.* *All of the above studies with the exception of an aquatic assessment and a palaeontological assessment are currently underway.* *Motivations as to why an additional aquatic assessment (Section 7.3.7) and palaeontological assessment (Section 7.3.8) is not required have been included in the Plan of Study of the FSR.*
Lyndon Mardon (DEDEAT)	Have the cumulative impacts been modelled and will they be assessed and reported on in the EIA?	The cumulative impacts from the different effluent streams (i.e. brine, finfish, power generation hub, etc.) will be incorporated into both the marine ecological assessment and the EIR. **As above*
Lyndon Mardon (DEDEAT)	Climate Change must be assessed in the EIA.	The Plan of Study for the EIR makes provision for a climate change chapter to be included in the EIR. In addition, impacts related to climate change have been included in the FSR. **As above*
Lyndon Mardon (DEDEAT)	Noted that air quality impacts are considered as minor; however, air quality impacts can be significant, especially movement of sand dunes.	Noted, however, please note that construction within the coastal zone will be limited to trenching for the construction of pipelines and as such the removal of vegetation, excavations and grading will be limited. This impact will, however, be further refined once specialist reports have been made available.

I&AP	COMMENT	RESPONSE
		*As above
Lyndon Mardon (DEDEAT)	The impact assessment slide indicates that sociological impacts are positive, but very few jobs are likely to be created.	The social impact assessment looked beyond just employment opportunities i.e. buying locally produced construction material, and development of other industries within the SEZ through this project. CDC further indicated that this is largely a construction project so the environmental economic study will also look at the knock-on effect. So, if there is no seawater there cannot be aquaculture nor a power station. The comment was made based on the economic benefits of having access to seawater. The economic impact assessment will assess the impact in detail, and this will in turn be incorporated into the EIR. *As above
Lyndon Mardon (DEDEAT)	Noise impacts on marine fauna must be assessed. Added that if knock-on impacts of this study are going to be looked at together, then all the environmental impacts associated with all the supporting projects. If that is the principle, then the risk assessment matrix needs to be reconsidered.	The noise impact included in the DSR has been re-assessed to include any potential impact on marine mammals. The specialist study undertaken by TNPA in 2014, will be provided to the marine ecological specialist for incorporation into the marine specialist report. The findings of the marine specialist in response to noise will be included in the Draft EIR. *As above
Rene de Klerk	Impacts on marine mammals during blasting must be assessed. TNPA conducted a detailed study iro this issue, with onerous conditions that were recommended. This study will be provided to the EAP.	Please refer to response included above. Clarified that the issues discussed in the DSR are preliminary because no specialist reports have been received yet. They will be refined as the specialist reports are received. *As above
COMMENTS RECEIVED FOLLOWING THE NOTIFICATION OF THE AVAILABILITY OF THE DRAFT SCOPING REPORT FOR PUBLIC REVIEW (THIS APPLICATION RELEASED IN NOVEMBER 2020)		
Paul Martin Tel: 041 4665698 Cell: 0732524111 email: pmartin@axxess.co.za	Nicole, My comment on the Revised DSR: Unfortunately I cannot find in the main body of the Revised DSR any reference to the submission of the previous (July 2020) DSR and Aug 2020 Final Scoping Report (FSR).	Good morning Paul, Apologies for the delayed response to your email. I have been off recovering from COVID. Unfortunately, because we had to resubmit a completely new Application and Draft Scoping Report (DSR), we could not make the changes to the report in track changes. However, the main amendments to the report include the project description and alternatives sections.

I&AP	COMMENT	RESPONSE
	Nor can I find any indication on what amendments have been made to this DSR compared to the July DSR / August 2020 FSR (if it is in the document it is not obvious). So I&APs are forced to go through the entire document again if they want to comment further. I see my comments sent 31 Aug 2020 are included in the I&AP section (p206) but the opportunity was not taken in the revised DSR to answer my queries (it says these will be addressed in the FSR). My 31 Aug 2020 comments are attached again for ease of reference. An additional comment is that Section 4.6.4 (p103) on Birds is out of date. It refers to Barnes (2000) instead of the 2015 SA Red Data Book (Taylor et al.). Consequently many of the threat statuses are incorrect and there may be some species of conservation concern omitted. Please provide a copy of the Final Scoping Report in due course.	Thank you for re-attaching your comments. These will be addressed and included in the Final Scoping Report (FSR). As a registered I&AP on this project, you will be notified of the availability of the FSR for public review. Thank you for your comments on Section 4.6.4 (p103) regarding the information on the birds. We will ensure that this Section is updated accordingly in the Final Scoping Report. Kind regards, Nicole
	Leaks: Designs / operational mitigation to detect and prevent seawater leaks on land is required (seawater is a potent herbicide). There is a similar requirement to prevent / detect leaks along the effluent infrastructure.	**Mitigation measures currently include the following:* • *The pump stations will have a built in safety mechanism in the event of loss of pressure.* • *Regular maintenance inspections.* • *Additional emergency / mitigation measures will be explored in the EIA Phase if required.*
	Water Quality: Noted that this EIA will assess water quality impacts (from e.g. the proposed WWTW, Aquaculture & power stations) on the marine environment. As the full extent and nature of the industries are not yet known a very precautionary / worst case scenario approach is required, especially as very few WWTW in RSA comply with their permit conditions. Aquaculture will presumably result in elevated nutrient levels in discharge water. It is noted that the proposed discharge pipe locations are "upstream" (west to	**The following six effluent types are considered in the PDRW 2020 dispersion modelling:* *1. Abalone effluent from land-based aquaculture (AB).* *2. Wastewater from the proposed Coega Wastewater Treatment Works:* *a. WW1: Phase 1 with the effluent discharged into the Coega River which in turn discharges into the Port of Ngqura. The constituent concentrations provided by CDC represent an upset condition.* *b. WW2: Phase 2 with effluent discharged offshore via a submarine pipeline. The constituent concentrations provided by CDC include industrial effluent and represent an upset condition.*

I&AP	COMMENT	RESPONSE
	east longshore drift) of the proposed intake pipes – leading to a contamination risk (noted that modelling will be done to assess this).	*3. Finfish effluent from land-based aquaculture (FF).* *4. Desalination brine from a 60 MLD Reverse Osmosis desalination plant (BR).* *5. Cooling water from the two Liquefied Natural Gas (LNG) power plants in Zone 10S and Zone 10N (note that the inland Zone 13 power plant will use air rather than seawater cooling and is thus not considered in this study). The following three options are being considered for the cooling:* *a. CW1: Once through cooling (Zone 10S) plus wet mechanical cooling (Zone 10N).* *b. CW2: Once through cooling (Zone 10S) plus air cooling (Zone 10N).* *c. CW3: Wet mechanical cooling (Zone 10S) plus wet mechanical cooling (Zone 10N).* *To limit the number of scenarios modelled, only two of the three cooling water options were modelled. CW1 and CW2 have similar flow rates, but CW2 has a slightly higher temperature and required dilution (refer Table 6-1 in the Dispersion Modelling Report available as Appendix 5) and CW2 was thus selected for modelling as the more conservative option between CW1 and CW2, although there will be minimal difference in the results. CW3 was selected as it has the lowest flow rate and highest salinity.* *6. Heating water from LNG vaporiser:* *a. HW1: The vaporisers use the warm cooling water from the power plant (only possible for once through cooling).* *b. HW2: The vaporisers use sea water from an intake in the Port of Ngqura.* *The characteristics of each individual effluent were provided by CDC and are given in Table 6-1 of the PRDW 2020 report. In this table a constant ambient seawater temperature, salinity and density of 10.0°C, 35.0 PSU and 1025.30 kg/m^3 are assumed, although in the model simulations these will vary in time and space.* *Also shown in Table 6-1 are the required dilution for each constituent to meet the applicable water quality guideline target concentration, which is calculated using the equation below. Please refer to Lwandle (2020), available as Appendix 6 to this report for details of the guidelines and background concentrations applied.* $Required\ dilution = (Effluent\ concentration - Background\ concentration)$ $(Target\ concentration - Background\ concentration)$ ***Eqn 1***

I&AP	COMMENT	RESPONSE
		Only the constituents provided by CDC have been included in Table 6-1 and are thus included in the model. Should additional constituents be added to the effluent streams or identified in future, then the end-of-pipe concentrations of these constituents will need to be limited based on the achieved dilutions from the dispersion model and the applicable guidelines, using the precautionary principle in cases where marine water quality guidelines for these constituents are not clear. *The power plant and desalination plant designers must ensure that any co-discharges meet the applicable water quality guidelines at end-of-pipe, thus ensuring that temperature and/or salinity are the limiting constituents in these effluents, e.g. the World Bank specifies an average free chlorine of 0.2 mg/l at end of pipe (IFC, 2007).* *Temperature and salinity were modelled explicitly as these affect the density of the discharge. For temperature, the non-conservative heat exchange between the sea and the atmosphere has also been included in the model. The remainder of the constituents provided above were modelled as conservative tracers and the results presented as the achieved dilutions.*
	Alien Marine Organisms: The Aquaculture Zone EIA did not assess the impact of escaped marine organisms (from aquaculture projects) on the marine environment. Will this EIA do so / how will mitigation ensure that nothing gets into the discharge systems.	**The impact of alien marine organisms was assessed in the ADZ EIA; i.e. ecological impacts due to escapees, and impacts due to the transfer of diseases, pathogens and parasites to wild stocks. The impact was rated as very high without mitigation and medium with mitigation. Some mitigation measures include the following:* o *Develop and implement a biosecurity management plan and disease and animal health management plan for the ADZ which covers all aquaculture operations within the ADZ.* o *Develop a comprehensive monitoring programme for the ADZ to include water quality in incoming water sources and effluent discharges, sediment physical and chemical characteristics, biological monitoring at the intake and discharge points (benthic invertebrates, phytoplankton etc.), assessment of exotic and invasive species in adjacent water, health monitoring and monitoring the compliance of individual farms with disease and fish health standards in accordance with the ADZ biosecurity management plan and disease and animal health management plan. The monitoring programme must incorporate both baseline assessments prior to impact, reference points outside of the local area of impact, action thresholds and performance assessment criteria.*

I&AP	COMMENT	RESPONSE
		○ *Individual aquaculture farms must comply with the Alien and Invasive Species (AIS) Regulations (GNR 598, GG 37885), which may include an operation specific risk assessment and approval by the relevant authorities prior to commencement of any operations. No species on the Prohibited Species List should be considered for culture in the ADZ.* ○ *Individual investors to develop and implement a biosecurity management plan and disease and animal health management plan for their operations in the ADZ.* ○ *All organisms obtained from other hatcheries or imported to be sourced only from certified disease, pathogen and parasite free sources.* ○ *In order to minimise negative genetic impacts, broodstock and grow-out organisms should originate from the same genetic stock as the wild populations adjacent to the facility. The respective national Genetic Best Management Practice Guidelines for collection and husbandry of the culture species and the DAFF permit conditions for broodstock collection and facility operation should be followed at all times (e.g. Genetic Best Management Practice Guidelines for Marine Finfish Hatcheries in South Africa, 2016). This includes adherence to movement restrictions of specimens between disease and genetic management zones.* ○ *Culture facilities must be designed to have multiple redundancy exclusion barriers or screens fine enough to contain the live stages of the organisms being cultured (eggs, larvae, juveniles etc.).* ○ *Incoming water must be treated and sterilised to prevent the amplification of naturally occurring diseases and pathogens.* ○ *Exclusion barriers to be maintained through a farm specific standard operating procedure and in accordance with the ADZ biosecurity management plan.* ○ *Consider sterilisation of fish through hybridisation or single sex production to provide genetic security from invasive species.*

I&AP	COMMENT	RESPONSE
		○ *Effluent water from hatcheries and grow-out facilities should be treated to prevent escapees and the transfer of pathogens and diseases into the nearshore marine environment. The type of treatment is dependent on the culture organisms, culture methods, discharge volumes and biosecurity risk and need to be developed on an individual basis per aquaculture operation. Possible methods include sand filtration, ozonation or UV filtration but will be farm specific based on the culture species, design (flow through/re-circulating), water volumes and flow rates and must be determined in each farm level biosecurity management plan. Where there is a risk, and depending on the species, effluent water to be filtered and sterilised prior to discharge to prevent the escape of eggs, larvae and juveniles.* ○ *Effluent water from individual operations to comply with effluent discharge and water quality standards as per CDC coastal wasters discharge permit before release to the marine pipeline.* ○ *Individual operations to develop farm specific monitoring programmes, including water quality, disease and fish health monitoring, pathogens in the facility, escapee trap performance, and incorporate action thresholds and performance assessment criteria.* ○ *Brood stock of indigenous species must be obtained from the same disease and genetic management zone in which the study area is situated.* ○ *Ongoing monitoring of escapee management control measures on individual farms and at the ADZ level to monitor compliance and performance of the management measures is required.* ○ *Open, non-enclosed farms must have effective physical barriers to exclude birds and other wildlife in order to prevent potential disease transfer vectors from accessing holding tanks and waste water sources. Non-lethal bird netting and screens may be used to ensure isolation of individual operations from each and prevent transmission vectors from accessing water sources.* ○ *Quarantine and disease treatment tanks must be effectively isolated for other production sections of the facility and stringent sterilisation of the effluent water must be undertaken. Staff accessing these areas must comply with the biosecurity standards.* ○ *All organisms introduced to the facility should be isolated in a quarantine system for a period of six weeks and subject to regular health inspections to monitor for disease.* ○ *The effluent discharge point has yet to be determined as part of a separate EIA but should be sited as far as possible from the intake location to reduce the risk of re-introduction of pathogens.*

I&AP	COMMENT	RESPONSE
		In addition, a specialist study was conducted to support this aspect; i.e. a biosecurity and biodiversity risk assessment, prepared by TG Paulet. Further, the updated and approved EMPR for the ADZ included a detailed Biosecurity Management Plan.
	Heritage: Noted that the Heritage Impact Assessment (2010) and the Recommendations of SAHRA dated 16 March 2011 will be adhered to. There will almost certainly be shell middens along the pipeline routes through the coastal zone.	**An Archaeological, Palaeontological and Cultural Heritage Assessment was conducted for the SEZ in 2010. The CDC also has a Heritage Management Plan, and guidelines from SAHRA in place to ensure that all aspects of heritage are managed. The CDC's Environmental Specifications for Construction include detailed requirements for the management of heritage in the SEZ, amongst others, the appointment of an archaeologist and palaeontologist during the construction phase of a project. These recommendations are included in the impact assessment included below and will be included in the EIA. It should be noted that we are aware that generally specialist studies should not be older than 5 years, however, heritage, archaeological and paleontological artefacts are sessile and thus the position of these do not change over time, as such it is considered acceptable to utilise the existing study as the status quo would not have changed.*
	Decommissioning / Repairs: At all stages construction / repair waste (old pipes, etc) need to be removed – including all scrap, etc underwater. The marine engineering work looks complicated – meaning a lot can go wrong.	**Agreed, the EMPr to be submitted as part of the EIA documentation will allow for this.*
	Ownership of the infrastructure: Presumably CDC is going to be the holder of the Environmental Authorization (EA) and will be responsible for ensuring the operational maintenance of the infrastructure and ensuring that all tenants comply with requirements? A rigorous monitoring and enforcement system is required to prevent tenants shirking their obligations (this must be a condition of the EA).	**Yes, the CDC will be the owner of the infrastructure and responsible for all mitigation and monitoring measures included in the EIA, EMPRs and EA (if issued by DEFF). The CDC will also need to adhere to the conditions tied to the Coastal Waters Discharge Permit to be issued by DEFF: Oceans and Coasts.*
	Existing EAs / RoDs / EMPrs: Existing Environmental Authorisations & their EMPRs for areas impacted by the development need to be checked to avoid any conflicting recommendations / actions (e.g. The Port & CDC RoDs, Mining & Aquaculture EAs, Manganese EA, etc).	**CES are aware of these authorisations and will ensure that no conflicting mitigation measures are included into the EMPRs.*
	Mammals:	**Thank you, these conditions will be incorporated in the EMPr. These conditions have also been included in the impact assessment (Chapter 6) of this report.*

I&AP	COMMENT	RESPONSE
	a. 2002 Port RoD Condition 2.18: "The NPA must ensure that the Duthies golden mole and Pygmy hairy-footed gerbil occurring in the dune habitats in the Coega area are included in the relocation and management plan to the satisfaction of the relevant provincial environmental department". See attached that includes a discussion that *Gerbilliscus paeba exilis* that has known colonies at the bases of the Ngqura breakwaters may be a distinct threatened species. b. Blasting must e.g. avoid whale periods (especially Southern Right Whale calving periods and Humpback Whale Cow/Calf return migration periods).	
	Avifauna: a. E.g. Table 4.4: SCC bird species should include Regional (SA Red Data Book) & Global (IUCN Red List) species as well as gazetted Threatened or Protected Species (TOPS) – both Terrestrial and Marine (e.g. GN 476 dd 30 May 2017). b. Bird lists for the area are included in previous EIAs / available on BIrdMap (e.g. Bush Blackcap / Black-tailed Godwit are at best vagrants, Black Oystercatcher is no longer a SCC). c. Damara Tern colony: See Mining Right EIA avifauna report for potential impacts. Apart from direct disturbance impacts on the colony, indirect impacts include water quality / turbidity (may impact the feeding grounds of this near-shore feeder), sand starvation of the dunefield – if this project further prevents sand entering the dunefield this will be an additional impact, attraction of mammalian and aerial predators (e.g. due to effluent discharges, marine material / waste at the pump stations). Timing construction to avoid the Damara Tern breeding period should be considered as one of the mitigating actions & there should be continued colony monitoring.	**The avifaunal section (including the list of species of special concern) in this report has been updated in its entirety.* *The impacts suggested by Dr Martin have been forwarded to the ecological specialist and will be incorporated and rated by the ecological specialist and included in the Ecological Assessment to be submitted as part of the EIA documentation.*

I&AP	COMMENT	RESPONSE
	d.If the seawater intake results in Cerebos closing its Coega Saltpans (as it will have access to alternative brine sources), this will have a Very High Permanent Impact on avifauna (see Manganese Project EIA). It is not clear which project EIA will assess this possibility – if the saltpans cease to operate is a decommissioning EIA required before the pans start to dry out?	
Rob Milne Senior Section Ranger (Marine) Addo Elephant National Park South African National Parks Tel: (042) 233 8600 Cell: 082 483 2477 E mail: rob.milne@sanparks.org	Hi Nicole Kindly register me as an interested and affected party for the proposed Coega Marine Intake and Outfall Servitude(s) Project. Kind Regards	Good morning Mr Milne, Thank you for your email. Please note that if you have received the below email notification, you are a registered Interested and Affected Party (I&AP) on our I&AP database for the Coega Marine Intake and Outfall Infrastructure Servitude project. As such, you will receive updates on the process as well as the availability of reports for public review. Should you have any queries, please do not hesitate to contact me.
Dr Ané Oosthuizen National Marine Co-ordinator Park Planning & Development South African National Parks 071 4000371 Ane.Oosthuizen@sanparks.org	HI Nicole Just attempted to contact you at the below stated tel no, the office informed me you are on sick leave . I'd like to request a meeting with you, for a presentation on the project. Next week and on Tuesday 1 at 8am specifically would be preferred. Alternatively on the 3 Dec. Could you please confirm availability of you or a fellow colleague to engage us. Many thanks	Good morning Ane, Thank you for your email. I am currently recovering from COVID. We are able to do a virtual meeting / presentation on the 3rd of December. Please kindly confirm if this is suitable? Thank you and kind regards, Nicole
	Dear Nicole I hope you recover fully.	*Meeting Invite Sent*

I&AP	COMMENT	RESPONSE
	Thank you for accommodating us on the 3rd. Please copy all above to the meeting invitation.	
	Dear Nicole and Chantel As I was typing this your meeting request came through. Hope you are recovering well Nicole. Could we please delay our proposed meeting on the 3rd to the 8th if possible. I am on family leave due to a death in the family, and will not be able to attend on the 3rd. Apologies, and thanks	My sincere apologies and condolences for the loss of your loved one. I have amended the meeting invite as requested.
Matthew Hills NMBM:Civil Engineer: Planning & Research Division Water & Sanitation Sub-Directorate Infrastructure & Engineering Directorate Cel: 079 490 0911 Email: mhills@mandelametro.gov.za	Good afternoon all, 23.09 m3/sec is equivalent to 1994.976 ML/day. Either that is exceptionally impressive or the units should be litres per second instead. Kind regards,	**The amount is correct as 23.09 m^3/s*
Riccardo Maresca Legal Advisor riccardo.maresca@msc.com	Good morning Nicole Would you please be so kind to send the PDF version of the draft EIA? Thanks and best regards	Good morning Riccardo, Thank you for your email. The Draft Scoping Report can be accessed and downloaded via our website at the following link: http://www.cesnet.co.za/assets/Draft%20Scoping%20Report%20 %20revised%2013.11.20_compressed.pdf

I&AP	COMMENT	RESPONSE
		Please let me know if you have any difficulty accessing the document.
Wayne Hector DEFF WHector@environment.gov.za	Dear Nicole The Department's comments on the DSR is up for management review and will be emailed to you shortly. Kind regards Wayne	Dear Wayne, Thank you for the feedback. Much appreciated.
Questions and Answers from the ELC Meeting held in November 2020		
Andries Struwig (DEDEAT)	This EIA application was refused by DEFF recently. Can you elaborate on the reasons and how these have been addressed in the revised EIA application?	CES: Primary reasons for rejection revolved around the alternatives not being adequately described and the project description not being sufficiently detailed and descriptive. CES thus needed to explore, in a more rigorous way, the elimination of alternatives and the selection of the preferred alternatives. CES was surprised about the rejection of the scoping report because we used a general scoping report that we normally use and which is normally approved. During the scoping stage it is difficult to provide definitive reasons for the selection of preferred alternatives before the EIR stage has started and before the specialist studies have started. Another reason provided for the refusal was that there was an omission of original IAP comments from the relevant PPP appendix to the Final Scoping Report.
Andries Struwig (DEDEAT)	Discharge of effluent from a future WWTW is being considered. Why are we still looking at options for discharge of effluent instead of treating it and re-using it?	The CDC cited the EIA that would need to be conducted for the future WWTW would need to investigate options of effluent re-use. The Marine Dispersion Modelling done for the Marine Pipeline EIA looked at the worst-case scenario of discharge of effluent and therefore the WWTW effluent was included. This inclusive approach also guided the identification of the servitude (intake and discharge) locations and whether different effluents could be mixed and how this would impact on the dispersion of those individual and mixed effluents. A range of scenarios was modelled. The modelling has been the key input into determining the location of the intake and discharge servitudes.

I&AP	COMMENT	RESPONSE
Andries Struwig (DEDEAT)	Noted that the western servitude alternative is not preferred due to terrestrial ecological reasons. How is this different from the eastern alternative?	**CES:** The marine dispersion modelling determined that the plume from a western discharge option would be entrained into PoN, therefore the eastern option is preferred. Similarly, from an economic perspective, the western discharge is not preferred due to plume entrainment into the PoN. With respect to the western alternative intakes, the costs associated with construction and OPEX of pumping are not feasible. An economic assessment is underway addressing economic feasibility, GHG emissions and costs to the biodiversity.
Wayne Hector (DEFF)	Require confirmation on the status of the CWDP – has the application been submitted already?	**CES:** A Coastal lease and CWDP applications, ito ICMA, have not yet been submitted, but we have been engaging with DEA O&C.
Wayne Hector (DEFF)	The DEFF is closed as from 15 Dec – 5 Jan. The application will only be acknowledged on 5 Jan '21.	**CES:** The application will be submitted prior to the Dec shut-down period.
Wayne Hector (DEFF)	For the intake of seawater, are you applying for approval of two (2) intake servitudes? For the discharge of effluent, are you applying for the approval of three (3) discharge servitudes?	**CES:** Confirmed that two (2) intake servitudes are required, one inside the PoN for the cooling water intake requirements of the proposed power stations, and the other intake servitude is east of the PoN to accommodate the intake requirements for desalination and aquaculture. Within each intake servitude, a number of different seawater abstraction technologies will be utilised, depending on industry requirements. Approval is being sought for all the different abstraction technologies. Three (3) discharge servitudes and associated discharge infrastructure are required, all east of the PoN, to accommodate the discharge of brine (from desalination), cooling water (from power stations), storm water, effluent from aquaculture (finfish and abalone) and effluent from the WWTW.
Andries Struwig (DEDEAT)	With reference to the risk matrices in the description of the alternatives, does the term "not preferred" mean the alternative is a fatal flaw?	**CES:** Have used a traffic light system for the risk matrices. Red does not necessarily indicate a fatal flaw. This will be clarified in the methodology.
Muhammad Essop (DEFF)	Is there a permit required ito Section 48 of NEMPAA? EAP must consider.	**CES:** Not as far as aware, but will verify and confirm.
Andries Struwig (DEDEAT)	The comment that the economic cost is too large is always used to motivate why a project should or should not go ahead. Such a comment should be substantiated by looking at the overall project cost including the environmental cost.	**CES:** With the economic cost, CES agrees that we have to consider the environmental cost and one of the specialist studies does include an analysis of the economic costs and the benefits of this. The current economic assessment will be looking at biodiversity costs; it will also be looking at things like additional GHG emissions associated with large pumping requirements, as well as large electricity usages. So the economic assessment will be looking at both the ecological and environmental costs and as well as the biological costs and this information will be included into the EIR.
Comments received from DEFF on the 14 December 2020 regarding the Draft Scoping Report		

I&AP	COMMENT	RESPONSE
DEFF	(i) If the activities applied for in the EIA application from differ from those in the FSR, an amended application form must be submitted. Please note that the Departments application form template has been amended and can be downloaded from the following link https://www.environment.gov.za/documents/froms .	*The listed activities within the revised Scoping Report corresponds to those submitted to the DEFF in the application form.*
DEFF	(ii) Please ensure that all issues raised and comments received during the circulation of the draft SR from registered I&APs and organs of state which have jurisdiction in respect of the proposed activity, including SANPARKS, this Department's Biodiversity Section, are adequately addressed in the final SR. Proof of correspondence with the various stakeholders must be included in the Final SR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments. The Public Participation Process must be conducted in terms of Regulation 39,40, 41, 42, 43, & 44 of the EIA Regulations 2014.	**The public review period on the Draft Scoping Report was undertaken from the 13th of November to the 14th of December 2020 (i.e. 30 days). All comments received during this period has been incorporated into this IRT and the letters/responses received from I&APs are included in Appendix 1 of this report.*
DEFF	(iii) A comments and response trail report (C&R) must be submitted with the final SR. All comments from I&APs must be adequately responded to. Please note that a response such as "noted" is not regarded as adequate response	*This table constitutes the comments and response trail report (C&R) and includes all comments submitted by I&APs to date, including historical comments on previous applications. Proof of all PPP is included in Appendix 1.1 (historical) and Appendix 1.2 (recent).*

I&AP	COMMENT	RESPONSE
DEFF	(iv) The C&R report must include all historical comments for this development. However, the comments must be presented or grouped according to the stage of commenting, for e.g., all comments on the pre-app meeting held in August 2019 are grouped together under a clear heading for easy reference so as to avoid mixing of issues. Please indicate the dates and how the comments were presented. i.e., a column must be which specify the date (e.g. 11/11/2020 via email or 12/12/2020 via letter). For historical comments you are not required to provide proof of correspondence , a summary of issues and the responses thereto will suffice. However, proof of correspondence is required for all the comments obtained on this application 14/12/16/3/3/2/2036. The final SR must provide evidence that all identified and relevant competent authorities have been given an opportunity to comment on the proposed development.	*This table constitutes the comments and response trail report (C&R) and includes all comments submitted by I&APs to date, including historical comments on previous applications. Proof of all PPP is included in Appendix 1.1 (historical) and Appendix 1.2 (recent). Comments are grouped in order of the process being undertaken as requested.*
DEFF	(v) Please ensure that a description of any identified alternatives for the proposed activity that are feasible and reasonable, including the advantages and disadvantages that the proposed activity or alternatives will have on the environmental and the community that may be affected by the activity as per Appendix 2 (1) © (d) and 2 (h) of GN R. 982 of 2014 is provided. Alternatively, you should submit written proof of investigation and motivation if no reasonable or feasible alternatives exist in terms of Appendix (2)(x)(xi).	**The alternatives section including the alternatives section in the Plan of Study has been revised in order to make it more clear and concise. This section includes a table indicating gaps, uncertainties and assumptions. Tables showing the advantages and disadvantages of the various alternatives are included in the alternatives section of this report (Section 2.6)*
DEFF	(vi) In accordance with Appendix 2 (2) (a) of the EIA Regulations 2014, the details of – (i) the EAP who prepared the report; and (ii) the expertise of the EAP to carry out Scoping and Environmental Impact Assessment procedures; must be submitted.	*Bios of the entire project team has been included in Chapter 1 of this report. In addition, the Curriculum Vitae of the EAP, Dr Alan Carter, is included as Appendix 2 of this report*

I&AP	COMMENT	RESPONSE
DEFF	(vii) Please ensure that the final SR includes a legible site layout map; an environmental sensitivity map indicating all environmental sensitive areas and features; a map combining layout map superimposed (overlain) on the environmental sensitivity map; and a regional map of the area.	*Site Layout Plan – Figure 2.1 & Figure 2.12* *Environmental Sensitivity Map with Infrastructure Layout – Figure 2.21* *Regional Map – Figure 2.2* *No google maps have been included in the FSR.*
DEFF	(viii) Please note that the specialist studies conducted as part of the previous application may still be submitted as part of this application, provided that the findings are still relevant and less than 5 years old.	*The marine dispersion modelling was undertaken in 2017 and the wetland delineation in 2016 as such both of these studies are not older than 5 years.* *An Archaeological, Palaeontological and Cultural Heritage Assessment was conducted for the SEZ in 2010. The CDC also has a Heritage Management Plan, and guidelines from SAHRA in place to ensure that all aspects of heritage are managed. These recommendations are included in the impact assessment included below and will be included in the EIA and EMPr. It should be noted that we are aware that generally specialist studies should not be older than 5 years, however, heritage, archaeological and paleontological artifacts are sessile and thus the position of these do not change over time, as such it is considered acceptable to utilise the existing study as the status quo would not have changed.*
DEFF	(ix) Please note that the specialist studies to be conducted must provide their comments and recommendations on the preferred alternatives.	*All specialists have been informed of this requirement.*
DEFF	(x) Should the appointed specialist specify contradicting recommendations, the EAP must clearly indicate the most reasonable recommendation and substantiate this with defendable reasons; and where necessary, include further expertise advice.	*Noted and agreed*.
DEFF	(xi) The specialist studies must also provide detailed description of all limitations to their studies. All specialist studies must be conducted in the right season and providing that as a limitation, will not be accepted.	*All specialists have been informed of this requirement.*

I&AP	COMMENT	RESPONSE
DEFF	(xii) You are further reminded that the final SR to be submitted to this department must comply with all the requirements in terms of the scope of assessment and content of scoping reports in accordance with Appendix 2 and Regulation 21(1) of the EIA Regulations , 2014.	*Please refer to Table 1.2: Requirements for the Scoping Report and content (in accordance with Appendix 2 of the EIA Regulations). This table cross references the legal requirements of the Scoping Report and where these have been addressed in the FSR.*
DEFF	(xiii) Please ensure that the Appendices uploaded via the online system are fully labelled for easy reference, for e.g. "Appendix 10: Declaration of the Applicant".	*All appendices will be uploaded separately and will be adequately labelled.*
DEFF	(xiv) Further note that in terms of regulation 45 of the EIA Regulations 2014, this application will lapse if the applicant fails to meet any of the timeframes prescribed in terms of these Regulations, unless an extension has been granted in terms of Regulation 3(7).	*This FSR will be submitted by 15 January 2021 in order meet the requirements of Regulation 45 of the EIA Regulations.*
General		
DEFF	You are further reminded to comply with Regulation 21(1) of the NEMA EIA Regulations 2014, as amended, which states: "*If S&EIR must be applied to an application, the applicant must, within 44 days of receipt of the application by the competent authority, submit to the competent authority a scoping report which has been subjected to a public participation process of a least 30 days and which reflects the incorporation of comments received, including any comments of the competent authority".*	*The public review period on the Draft Scoping Report was undertaken from the 13th of November to the 14th of December 2020 (i.e. 30 days). All comments received during this period has been incorporated into this IRT and the letters/responses received from I&APs are included in Appendix 1 of this report.*
DEFF	You are further reminded that the final SR to be submitted to this Department must comply with all the requirements in terms of the scope of assessment and content of Scoping reports in accordance with Appendix 2 and regulation	*Please refer to Table 1.2: Requirements for the Scoping Report and content (in accordance with Appendix 2 of the EIA Regulations). This table cross references the legal requirements of the Scoping Report and where these have been addressed in the FSR.*

I&AP	COMMENT	RESPONSE
DEFF	Further note that in terms of Regulation 45 of the EIA Regulations 2014, as amended, this application will lapse if the application fails to meet any of the timeframes prescribed in terms of these Regulations, unless and extension has been granted in terms of Regulation 3(7).	This FSR will be submitted by 15 January 2021 in order meet the requirements of Regulation 45 of the EIA Regulations.
DEFF	You are hereby reminded of Section 24F of the National Environmental Management Act, Act No. 107 of 1998, as amended, that no activity may commence prior to an Environmental Authorisation being granted by the Department.	The Applicant, Coega Development Corporation (CDC), is aware that no activity may commence prior to an Environmental Authorisation being granted by the Department.
Comments received from SANParks on the 11th of December 2020 regarding the Draft Scoping Report		
SANParks	Algoa Bay is a highly biodiverse area and important for recreational and commercial fisheries as well as marine tourism. South African National Parks (SANParks) is the national conservation authority responsible for management of the Addo Elephant National Park and Marine Protected Area. The Management plan of Addo Elephant National Park can be found at: https://www.sanparks.org/conservation/park_man/approved_plans.php and the MPA notice and regulations at http://www.gpwonline.co.za/Gazettes/Pages/Published-Gazettes.aspx	*CES is aware of the SANPark's authority in this regard as well as the sensitivity of particularly Jahleel island and the African Penguin. This is noted in Section 4.8.3 of the Scoping Report.* ***Additional Response:*** ***Our previous response remains valid. This is also included in Section 2.2.6 of the Marine Ecological Assessment.***

I&AP	COMMENT	RESPONSE
	SANParks manages the largest remaining colonies of African penguins, with ±7,616 breeding pairs (57%) on St Croix and Bird Islands within the Addo Elephant National Park MPA. The African penguin population has declined dramatically on a national scale. They were classified as Endangered by the IUCN in 2010, following a 61% decrease in their population over 28 years (BirdLife International 2010). The South African population was estimated at 13,312 breeding pairs in 2019, which represents a 42% decline since 2010. If current population trajectories continue, the African penguin will become functionally extinct in the wild (Sherley et al. 2018). St Croix island, with the largest remaining breeding colony of the African Penguins are situated within 5km and Jahleel within 500m of the Port.	
SANParks	SANParks are concerned over the several possible risks and longterm impacts from this project on water quality, marine biodiversity, the pelagic food chain, pelagic fish species serving as prey for the penguins, the island ecosystems, and disease risks amongst others.	*A marine ecological assessment is currently underway and will address these issues in particular.* ***Additional Response based on Marine Ecological Specialist Report*** ***A total of seventeen potential marine environmental impacts were assessed in the Marine Ecological Report, ranging from habitat loss to operational effects (impacts that have been assessed in other marine specialist studies undertaken for the particular industries within the Coega SEZ, such as the bio-active compound and disease risks associated with aquaculture, are not reassessed here). The impacts of the proposed development on fisheries in Algoa Bay were assessed separately. Scenario 1 and Scenario 2 were assessed together for construction impact, with three impacts rated as 'medium' before mitigation (reduced to 'low' or 'very low' after mitigation), and four impacts were rated as 'low' (reduced to 'very low' after mitigation).*** ***Scenario 1 and Scenario 2 were assessed separately under operational impacts. Under Scenario 1, one impact was rated 'very low' and one was reduced to 'insignificant' rating after mitigation. Three impacts were rated 'low' under Scenario 1 (reduced to 'very low', or remaining of 'low' significance after mitigation), while two impacts were rated medium (reduced to 'low' and 'very low' after mitigation), and three impacts were rated as of 'high' significance. These 'high' significance impacts were however reduced to 'low' after the implementation of mitigation measures.***

I&AP	COMMENT	RESPONSE
		There were two impacts rated 'very low' under Scenario 2 and two as 'low' (reduced to 'low', 'very low' or 'insignificant' after mitigation). Two impacts were assessed to be of 'medium' significance, and three were rated as 'high'. Again, mitigation reduced these 'medium' and 'high' impacts to either 'very low' or 'low' after mitigation. All impacts on fisheries are considered 'low' or 'very low' with mitigation. ***Cumulative marine environmental impacts emanating from the proposed project are primarily related to the overlap in use with various other water users in the vicinity of the proposed servitudes. As sea-based finfish farms tend to be significant sources of nitrogenous waste (i.e. nutrients), there is particular concern about the cumulative impacts of increased nutrient concentrations arising from both the sea based finfish aquaculture in Algoa 7, and the nutrients discharges by the wastewater and finfish pipelines. However, dispersion modelling by PRDW (2020) shows that required dilutions of TKN + NH_4 from Wastewater 1 achieve dilutions of ~1870 at Algoa 7 (required dilution to meet WQG is 120), and that the finfish + brine effluent combination under Scenario 2 archives dilutions of ~580 at Algoa 7 (required dilution to meet WQG is 39.1). As such, it is considered unlikely that there will be significant interaction between these nutrient sources, especially if the recommended scenario is implemented (PRDW 2020), and end of pipeline requirements are met. However, there is some level of uncertainty (i.e. low confidence) in the assessment of the cumulative impact of the simultaneous operation of multiple discharge pipelines. While the effluents are relatively different to each other (i.e. dense brine vs buoyant finfish aquaculture effluent), there are potential interactions between effluent constituents that can only be identified by a far field dispersion model. This simultaneous discharge scenario should therefore be modelled, and the results used to assess the impacts thereof with high degree of certainty.*** ***It is critical that end of pipe limits stipulated by the dispersion modelling report be adhered to so as to safeguard the marine environment of Algoa Bay and mitigate impacts on other water users. Based on the impacts assessed in this report, it is recommended that the proposed development proceed with the implementation of strict environmentally responsible practices as outlined in the mitigation measures below. This assessment is based on the results presented by PRDW (2020), under a 300 m RMZ for all outfalls. This is considered acceptable, given the status of the receiving environment (and in particular, that of the Coega estuary). However, this assessment is only valid***

I&AP	COMMENT	RESPONSE
		on condition that Wastewater 1 effluent does not contain excessively high levels of trace metals (ostensibly from industrial effluent) as per PRDW (2020).
SANParks	The report lacks a more strategic view in tying together all of the proposed activities which are to make use of the infrastructure. SANParks requests a map with the proposed facilities (aquaculture, WWTW, desalination and power plants, storm water system) along with the infrastructure for which authorisation is sought is provided in the report (similar to figure 2.3 in report). Ideally this map should show the proposed location of infrastructure between the intake / discharge points and the facilities (including the drainage areas for the storm water discharge points).	*All infrastructure related to the proposed project is included on the project layout map (Figure 2.3), with the exception of the proposed future WWTW, which is currently earmarked in Zone 5 of the SEZ.* ****Additional Response:*** ***Our previous response remains valid.***
SANParks	Background detail regarding the structures that the pipelines will service should be included in the report. This should include the status of each of the facilities (power plants, aquaculture, desalination plant, WWTW and the storm water system on site) – have they been constructed, have designs been finalised, have authorisations been obtained, if not how far along in the process are the applications (these should be cross referenced e.g. EIA application numbers provided or EA provided as an appendix), etc.	**<u>Power Plants</u>:* *There are currently 4 EIAs being conducted for the proposed power plants, 2 in Zone 10 and 1 in Zone 13 as well as an LNG Gas Hub. The Scoping Reports for these projects have recently been accepted by the relevant authorities (DEFF). For any further details regarding these projects please contact Ms Nicola Rump (SRK) at NRump@srk.co.za.* *<u>Aquaculture</u>:* *The EA for the ADZ was issued on the 7th of February 2018 (EA14/12/16/3/3/3/214). Construction of the bulk services to service the ADZ commenced in 2020.* *<u>Desalination Plant</u>:* *The desalination plant was approved as part of the EA for the ADZ. The intake and discharge pipelines to/from the desalination plant are the subject of the marine pipeline EIA. The desalination plant is earmarked to commence construction in the latter part of 2021.* *<u>WWTW</u>:* *EIA yet to be conducted.* *<u>Stormwater Infrastructure in Zone 10</u>:* *Construction earmarked to commence in the latter part of 2021.* *All available documentation can be obtained from the CDC upon request / or is available for download on the CDC Website:* *http://www.coega.co.za/DocumentList.aspx?cmd=browse&objID=80&catID=51* ****Additional Response:*** ***Our previous response remains valid.***

I&AP	COMMENT	RESPONSE
SANParks	The reuse options of grey water to be explored as part of the WWTW application (given that it is a water stressed area) would be critical before a decision can be made on what type of outfall infrastructure is approved. In this case, the WWTW application needs to first be finalised before approval for the discharge infrastructure is sought. The location of the proposed WWTW structure, land-based water filtration / purification systems and distance to the discharge point need to be indicated on a map. Given that this will be discharged into an MPA, worst case scenarios need to be avoided and therefore approval of structures to accommodate such flows before treatment scenarios are investigated and approved is inappropriate.	*The NMBM appointed an EAP in 2014 to commence with the EIA for their future WWTW, to be located in Zone 5 of the SEZ. The application was never submitted; however, some planning was done, including a number of presentations to the ELC. The recommendation by the authorities at the time was that the effluent from Phase 1 of the proposed WWTW may be considered for discharge (once treated to specifications in the WWTW) into the Coega River. Treatment was also to consider reed beds. The motivation for the discharge of the Phase 1 effluent into the Coega River was based on economic reasons, as it would be far cheaper than to construct a pipeline and pump that volume of effluent from the WWTW to a marine outfall. However, this would have had to be assessed in the EIA that is required for the WWTW. As the application was never lodged, this proposal has not been authorised. The recommendation by the authorities for the Phase 2 effluent from the WWTW was that this additional volume would be too much for discharge to the Coega River, and hence the decision was made to consider pumping the Phase 2 effluent to a marine outfall. The Phase 2 effluent could also include heavy metals from industrial effluent, which Transnet was concerned about, as it may risk their compliance to their dredge disposal permit from the DEFF. Already the sediment monitoring in the Port of Ngqura shows above average metal content in the case of some of the metals. Because the CDC was conducting the marine pipeline EIA at the same time as the NMBM was conducting their WWTW EIA (in 2014), it was recommended that the marine dispersion modelling being done by the CDC (PRDW) must include the Phase 2 effluent from the WWTW. The Marine Pipeline EIA wasn't actually seeking approval for the phase 2 effluent pipelines; but rather the modelling included the Phase 2 effluent to see whether it was indeed viable to discharge this effluent to the marine environment. The Phase 2 effluent also needed to be modelled to see whether it affected the location of the proposed seawater intakes and discharges. The outcome of PRDW's various modelling shows that a worst-case scenario for Phase 2 effluent discharge is not advised, and that any effluent from the WWTW would need to be treated on land prior to any discharge into the marine environment. These recommendations would need to be taken into consideration during the EIA process that is yet to be conducted for the proposed WWTW project.* ***Additional Response:*** ***Our previous response remains valid.***

<table>
<tr><th>I&AP</th><th>COMMENT</th><th>RESPONSE</th></tr>
<tr>
<td>SANParks</td>
<td>SANParks are concerned that the alternative outfall site west of the Port were discarded due to economic reasons. The outfall to the west of the Port still remains SANParks preferred option as it will allow for substantial dilution, dissipation and mixing of effluent before reaching the Addo ENP MPA. It will lessen the impact on the highly sensitive and biodiverse area significantly, as the distance from the MPA and islands are increased. The statement below indicates that the concern for water quality within an industrial port, and economic cost is of greater concern to the developers than that of a national protected area.</td>
<td>

The western discharge is not a reasonable and feasible alternative.

*Preliminary cost projections for the return of **only** the Once-Through cooling water a distance of about 12 km from Zone 10S and 10N east of the Port via the N2 to the west of the Port, via two 2.5 metre diameter Glass-fibre Reinforced Plastic (GRP) pipelines and associated pumps, are as follows:*

<table>
<tr><td>Capital cost (12 km pf pipelines and pumps)</td><td>R 1 250 000 000</td></tr>
<tr><td>Annual operating cost (monitoring and maintenance)</td><td>R 130 000 000</td></tr>
<tr><td>Annual energy cost (pumping)</td><td>R 98 550 000</td></tr>
<tr><td>Operating cost 20 year life (monitoring and maintenance)</td><td>R 2 600 000 000</td></tr>
<tr><td>Energy cost 20 year life (pumping)</td><td>R 1 971 000 000</td></tr>
<tr><td>TOTAL CAPITAL AND OPERATING COST OVER 20 YEAR LIFE</td><td>R 5 821 000 000</td></tr>
<tr><td>Annual carbon footprint (tCO_2e = tons of CO_2 equivalents)</td><td>94 608 tCO_2e</td></tr>
<tr><td>Carbon footprint 20 year life</td><td>1 892 160 tCO_2e</td></tr>
<tr><td>Annual cost of carbon @ R100 per ton</td><td>R 9 460 800</td></tr>
<tr><td>Cost of carbon @ R100 per ton over 20 year life</td><td>R 189 216 000</td></tr>
</table>

Additional Response:
According to the Environmental Economic Assessment conducted for the proposed development the significance of the capital and operating costs associated with transporting the effluent streams from the east to the west of the Port of Ngqura, varies between industries. The industries that use greater quantities of seawater are more greatly affected by the additional western discharge costs. Once Through Cooling and abalone aquaculture are the most affected due their respective high seawater requirements. They contribute about R6 billion (63%) and R2 billion (21%), respectively, to the total R9.5 billion additional direct cost to transport effluent to the west of the Port.

</td>
</tr>
</table>

I&AP	COMMENT	RESPONSE
		With respect to the impact on the individual industries, the additional direct cost to transport effluent to the west of the Port represents a significant increase in: • ***Discharge costs: ranging from 37% for Wet Mechanical Cooling up to 58% for other streams; and*** • ***Discharge cost as a percentage of total project cost: ranging from 4% for Wet Mechanical Cooling up to over three times (316%) for desalination.*** ***Based on the above, it can be concluded that the additional cost to transport effluent streams will without doubt have a significant impact on the financial viability of the respective industries and other land-based activities, such as the Coega SEZ wastewater treatment facility and desalination plant.***
SANParks	The EIA process should emphasise the Environmental Impacts of various options, which does not appear to have been adequately addressed in the documentation provided. One concern raised about a more westerly discharge is potential elevation of metals in the harbour, yet no such concern is being raised about heavy metal accumulation in the MPA.	**It should be noted that the location of the discharge servitude west of the Port was identified as **'not viable'** for the construction of the proposed servitude for the following reasons:* • *Effluent will need to be pumped around the perimeter of the Port which would result in significantly higher capital and operational costs compared with an eastern discharge.* • *Although the required dilutions can be achieved, discharges west of the Port at -10 m will enter the Port, which increases the risk of accumulation of particulates with associated nutrients and heavy metals. If the pipeline is extended to -16 m, the achieved dilutions reduce the risk of effluent entering the Port. However, there is still a risk of accumulation of particulates with associated nutrients and heavy metals.* *Based on personal communication with the Economic Specialist, the cost of constructing a discharge servitude from the ADZ to the western side of the Port will make the project economically unfeasible. This will result in each investor having to establish their own independent dedicated discharge servitude which will likely have a greater negative environmental impact on Algoa Bay. An economic assessment is currently in process to confirm this finding and will be submitted as part of the EIA documentation. See provisional estimates above.*

I&AP	COMMENT	RESPONSE
		The concern about heavy metal accumulation in the MPA was not raised as this is highly unlikely to occur. Effluent gets trapped in the Port which allows for the accumulation of particulates over time as discharge continues. This is not the case for the MPA, i.e. effluent does not get trapped, it gets diluted and dispersed. ***Additional Response:*** ***Our previous response remains valid. According to the Environmental Economic Assessment conducted for the proposed development the significance of the capital and operating costs associated with transporting the effluent streams from the east to the west of the Port of Ngqura, varies between industries. The industries that use greater quantities of seawater are more greatly affected by the additional western discharge costs. Once Through Cooling and abalone aquaculture are the most affected due their respective high seawater requirements. They contribute about R6 billion (63%) and R2 billion (21%), respectively, to the total R9.5 billion additional direct cost to transport effluent to the west of the Port.*** ***With respect to the impact on the individual industries, the additional direct cost to transport effluent to the west of the Port represents a significant increase in:*** • ***Discharge costs: ranging from 37% for Wet Mechanical Cooling up to 58% for other streams; and*** • ***Discharge cost as a percentage of total project cost: ranging from 4% for Wet Mechanical Cooling up to over three times (316%) for desalination.*** ***Based on the above, it can be concluded that the additional cost to transport effluent streams will without doubt have a significant impact on the financial viability of the respective industries and other land-based activities, such as the Coega SEZ wastewater treatment facility and desalination plant.***

I&AP	COMMENT	RESPONSE
SANParks	Further, the report states that the effluent should not impact on the water quality needed for the abalone farm, the intake infrastructure situated east and down current from the effluent outfall. Using the site west of the port will reduce this risk substantially.	*Modelling showed that there is no impact on the abalone intake from the discharge infrastructure. This issue was taken into consideration prior to modelling being undertaken.* ***Additional Response:*** ***Our previous response remains valid.***
SANParks	During the meeting on the 8 December, the Consultant indicated that assessment of Biodiversity vs Economic value will be conducted. SANParks requests that the balance between economic development and the environment will be considered, and the long term impact of degraded water quality on marine tourism income, impacted ecosystems and the possible loss of species, and species feeding areas, impacts on local fisheries taken into account.	*The economic study is in progress and will be included in the EIAr.* *See provisional capital and operational estimates above.* *Please note that based on the marine modelling report, as well as the Environmental Risk Assessment conducted by Lwandle, as well as the number of available mitigation measures, such as land based treatment of effluent from the WWTW prior to discharge, there is no evidence that the proposed project will result in any long term degradation of water quality.* ***Additional Response based on Environmental Economic Specialist Report*** ***The overall objectives of the EEIA were to:*** • ***Describe the costs and engineering requirements of required infrastructure to transport effluent to the western and eastern side of Port; and*** • ***Quantify and compare the engineering costs with environmental costs of discharging to the east, and the impact of western discharge on viability of various industries*** ***<u>Direct capital and operating costs</u>*** ***The study determined that it will cost an additional R9.5 billion to transport and discharge all six effluent streams to the west of the Port. This represents an increase of 25% in combined total project costs over a 20 year period, and an increased cost as a percentage of total project costs ranging from 21% to 37%.***

		<u>Impact of western discharge on viability of various industries</u> ***The study determined that the significance of the capital and operating costs associated with transporting the effluent streams from the east to the west of the Port of Ngqura, varies between industries. The industries that use greater quantities of seawater are more greatly affected by the additional western discharge costs. Once Through Cooling and abalone aquaculture are the most affected due their respective high seawater requirements. They contribute about R6 billion (63%) and R2 billion (21%), respectively, to the total R9.5 billion additional direct cost to transport effluent to the west of the Port.*** ***With respect to the impact on the individual industries, the additional direct cost to transport effluent to the west of the Port represents a significant increase in:*** • ***Discharge costs: ranging from 37% for Wet Mechanical Cooling up to 58% for other streams; and*** • ***Discharge cost as a percentage of total project cost: ranging from 4% for Wet Mechanical Cooling up to over three times (316%) for desalination.*** ***Based on the above, it can be concluded that the additional cost to transport effluent streams will without doubt have a significant impact on the financial viability of the respective industries and other land-based activities such as the Coega SEZ wastewater treatment facility.*** ***<u>Direct, indirect and external environmental and social costs</u>*** ***The EEIA has attempted to systematically identify and assess the overall economic significance of the impact of the proposed effluent discharges on the ecosystem goods and services provided by the affected terrestrial and marine ecosystems. This was achieved by identifying all the relevant ecosystem goods and services associated with the affected terrestrial and marine environments, attaching where possible an economic value, and assessing the likely economic impact based on the impact ratings provided in the Final Scoping Report and specialist Marine Impact Assessment (Anchor, 2021).*** ***A very important assumption was that the significance of the environmental and social economic impacts (impacts to ecosystem goods and services) is directly proportional to the significance of environmental impacts as determined by the:***

I&AP	COMMENT	RESPONSE
		• ***Final Scoping Report; and*** • ***Specialist Marine Impact Assessment (Anchor, 2021).*** ***In addition, there are inherent uncertainties and gaps in knowledge with respect to the valuation of ecosystem goods and services. Attaching values to less tangible goods and services that have no material benefit to which one can attach a monetary value, can be difficult and subjective.*** ***Based on the assessment, it is concluded that the environmental and social economic impacts associated with the discharge of the proposed effluent streams into the marine environment and the Addo MPA, will not be significant and probably not material. In addition, the impacts (limited as they are) are likely to be the same or not materially different whether discharging in the east (within the Addo MPA) compared with discharging to the west of the Port.*** ***It must be emphasised, however, that the low projected environmental and social economic impacts are contingent on the mitigation measures proposed by the Marine Impact Assessment which reduces the impacts to LOW, VERY LOW and INSIGNIFICANT. The most critical mitigation measure is treating all effluent streams to the end of pipe concentrations specified by PRDW (2020).***
SANParks	In the previous application it was indicated that CDC will be responsible for monitoring the adherence to water quality standards at the outfalls, however it is now indicated that each individual developer will be responsible for monitoring tis own water quality. With several industries contributing to the effluent it leaves room for different interpretations in the case of contravention. The applicant in this project will not be held accountable for the effluent emanating from the applicants infrastructure.	*The CDC will be the owner of the infrastructure and responsible for all mitigation and monitoring measures included in the EIA, EMPRs and EA (if issued by DEFF). The CDC will also need to adhere to the conditions tied to the Coastal Waters Discharge Permit to be issued by DEFF: Oceans and Coasts. Each individual investor will need to keep records with regards to what is discharged into the discharge pipelines and this needs to be available to the CDC at all times. All conditions in the Coastal Waters Discharge Permit to be issued to the CDC will also apply to individual investors that will make use of the discharge infrastructure.* ****Additional Response:*** ***Our previous response remains valid.***

I&AP	COMMENT	RESPONSE
SANParks	SANParks requests DEFF to establish a single monitoring body, and that SANParks are consulted in the issuing of any coastal waters discharge permit for effluent into the Addo ENP MPA. SANParks also requests that any future coastal discharge permits for effluent discharge through the applicant's infrastructure be linked to the applicant's Environmental authorisation. The future coastal discharge permits and this application cannot be seen as separate and are intrinsically linked.	*This is the mandate of DEFF Oceans and Coasts and as such the EAP cannot provide a response in this regard.* ***Additional Response:*** ***Our previous response remains valid.***
SANParks	In both the report and the Consultant presentation emphasis was placed on sensitivities in the terrestrial environment, yet comparatively little mention is made of the marine environment, and the potential impact of the proposed developments on marine biota and processes. It almost appears as if because the regulations permit discharge of effluents into the marine environment no significant consideration is given of the impact of the effluent discharge on the marine environment, and options presented highlighting how these effects could be minimised or mitigated through system design, placement etc.	*This is not the case. The sensitivity of the marine environment is highlighted in section 5.6 of this report. In addition, the marine dispersion modelling took into account marine sensitive areas and as such an environmental risk assessment to support the dispersion modelling was undertaken as part of this process. Furthermore, a marine ecological assessment is currently being conducted and will be available for review by SANParks during the EIA Phase of this development.* ***Additional Response:*** ***Our previous response remains valid. In addition, a full impact assessment of the impacts related to the marine environment (for all phases of the development) are included in Chapter 5 of the Marine Ecological Assessment as well as Chapter 9 of both the Draft and Final EIRs.***
SANParks	There needs to be a clear indication of all potential pollutants from the various industries including all chemicals used in reverse osmosis plants, as well pharmaceutical products (hormones, antibiotics etc) used in aquaculture, and explanations given on if and how these were incorporated into the dispersion models. What standards were used to define acceptable concentrations in the marine environment, and what approach was used in determining possible impact for compounds for which no national standards exist.	*Only the constituents provided by CDC have been included in the assessment. Should additional constituents be added to the effluent streams or identified in future, then the end-of-pipe concentrations of these constituents will need to be limited based on the achieved dilutions from the dispersion model and the applicable guidelines, using the precautionary principle in cases where marine water quality guidelines for these constituents are not clear.* *The power plant and desalination plant designers must ensure that any co-discharges meet the applicable water quality guidelines at end-of-pipe, thus ensuring that temperature and/or salinity are the limiting constituents in these effluents, e.g. the World Bank specifies an average free chlorine of 0.2 mg/l at end of pipe (IFC, 2007).* ***Additional Response:*** ***Our previous response remains valid.***

I&AP	COMMENT	RESPONSE
SANParks	There is obvious concern about discharges in close proximity to St Croix Island, and how this may impact seabirds, notably penguins, dependant on this area of the ocean, and their prey species. Options for more removed positions of discharge outlets away from the island need to be considered.	*A marine ecological assessment is currently being conducted and will be available for review by SANParks during the EIA Phase of this development. The distance of each proposed marine discharge servitude from St Croix Island is as follows:* *Cooling water from the proposed power stations: 5.3 km* *Brine, Finfish, Phase 2 effluent: 3.5 km* *Abalone effluent: 4.1 km* ****Additional Response:*** ***A full impact assessment of the impacts related to the marine environment (for all phases of the development) are included in Chapter 5 of the Marine Ecological Assessment as well as Chapter 9 of both the Draft and Final EIRs.***
SANParks	Scoping report deals mostly with effluent discharges with no significant consideration given to the likely impact of the actual construction or placement of infrastructure, in terms of both actual disruptions to the sea floor as well as well as disturbance, pollution etc during construction. Mitigation of these impacts also needs to be considered in the discussion of more than one option and locality.	*Construction phase impacts are included in Chapter 6 of this report. These impacts will be expanded upon in the EIR Phase of the proposed development.* ****Additional Response:*** ***Our previous response remains valid. A full impact assessment of the impacts related to the marine environment (for all phases of the development) are included in Chapter 5 of the Marine Ecological Assessment as well as Chapter 9 of both the Draft and Final EIRs.***
SANParks	SANParks requests that the applicant provide models for infrastructure failure scenarios supported by contingency plans for the different structures in the case of their failure. By nature of the position of this infrastructure, any failure could impact the marine environment of Algoa Bay and the Addo ENP MPA severely.	*This issue is acknowledged and valid and has been forwarded to the Coega Project Team. The team is currently in the process of compiling different scenarios for inclusion in the EIR.* **** Additional Response based on liaison between the CDC and SANParks are included below.*** ***A high level project specific emergency response plan has been developed by the CDC, in consultation with SANParks. This plan outlines the proposed infrastructure, possible failure scenarios and the contingency plans in the event of failure and has been included as Table 7.1 in the operational EMPr.***
SANParks	SANParks requests that the applicant provide a monitoring and maintenance plan, and schedule for the proposed infrastructure.	The Scoping Report has identified risks/environmental impacts for further assessment at EIA stage. Emergency/mitigation measures will be listed at EIA stage. **Mitigation measures currently include the following:* *The pump stations will have a built-in safety mechanism in the event of loss of pressure.* *Regular maintenance inspections*

I&AP	COMMENT	RESPONSE
		Additional emergency / mitigation measures will be explored in the EIA Phase if required. **** Additional Response based on liaison between the CDC and SANParks are included below.*** ***A high level project specific emergency response plan has been developed by the CDC, in consultation with SANParks. This plan outlines the proposed infrastructure, possible failure scenarios and the contingency plans in the event of failure and has been included as Table 7.1 in the operational EMPr.***
SANParks	Modelling should include both effluent outfall sites west and east of port	**Modelling did incorporate options both west and east of the Port as well as in the Port itself. This was included in the 2016 PRDW Concept Design Report. This report can be circulated to SANParks upon request. In addition, in 2017, PRDW conducted a marine dispersion modelling exercise where 12 marine effluent discharge scenarios were developed and then modelled for the defined range of potential effluents. In addition to these 12 scenarios, 3 more scenarios were inferred from results of the modelled scenarios from six (6) sites:* • *Option 1 – Approximately 2 km south-west of the western breakwater, at 10 m depth;* • *Option 2 – Approximately 2 km south-west of the western breakwater, at 16 m depth;* • *Option 3 – Along the seaward side of the eastern breakwater, with the discharge point at the elbow of the breakwater;* • *Option 4 – Along the seaward side of the eastern breakwater, with the discharge point at the end of the breakwater;* • *Option 5 – Approximately 900 m to the north-east parallel to the eastern breakwater, at 10 m depth; and* • *Option 6 – Approximately 900 m to the north-east parallel to the eastern breakwater, at 20 m depth.* *The dispersion modelling analysed the mixing zones of 100 m and 300 m from the discharge point. Water quality guidelines were also applied at locations of sensitive receptors, including the boundary of the Addo Elephant Marine Protected Area (MPA), 300 m from the boundary of the MPA, Jahleel Island, 100 m from Jahleel Island and the Port of Ngqura entrance.* *The location of the discharge servitude west of the Port was identified as* ***'not viable'*** *for the construction of the proposed servitude for the following reasons:*

I&AP	COMMENT	RESPONSE
		• *Effluent will need to be pumped around the perimeter of the Port which would result in significantly higher capital and operational costs compared with an eastern discharge.* • *Although the required dilutions can be achieved, discharges west of the Port at -10 m will enter the Port, which increases the risk of accumulation of particulates with associated nutrients and heavy metals. If the pipeline is extended to -16 m, the achieved dilutions reduce the risk of effluent entering the Port. However, there is still a risk of accumulation of particulates with associated nutrients and heavy metals.* *This report can also be made available to SANParks on request.* ****Additional Response:*** ***Our previous response remains valid.***
SANParks	Address the impact of increased water temperature and nutrients and the likelihood of regular Harmful algal blooms (HABs) occurring in the Bay and MPA.	A marine ecological assessment is currently being conducted and will be available for review by SANParks during the EIA Phase of this development. This study will address all possible impact on the marine environment as a result of effluent discharge, including the impact of increased water temperature and nutrients. ****Additional Response based on Marine Ecological Specialist Report*** ***The impacted related to increased water temperature is assessed in detail in Section 5.2.2 of the Marine Ecological Assessment and has been included in Table 9.5 of the EIR.*** ***Changes in water temperature can have a substantial impact on marine species and ecosystems, with the effects either influencing the physiology of the biota (e.g. growth and metabolism, reproduction timing and success, mobility and migration patterns and production); and/or influencing ecosystem functioning (e.g. through altered oxygen solubility). This includes impacts on plankton and the pelagic food web. South African WQGs recommend that the maximum acceptable variation in ambient temperature should not exceed 1°C at the edge of the RMZ. This is a conservative value considering the negligible effects of thermal plumes on benthic assemblages reported for a change in temperature of 5°C or less (van Ballegooyen et al. 2007).***

I&AP	COMMENT	RESPONSE
		Far field modelling results indicate that effluent temperature under both Scenario 1 and 2 achieve the required dilutions at the edge of the stipulated RMZ (Section 4). However, PRDW (2020) recommends Scenario 2 because there is better performance in terms of temperature dilutions, and a larger "margin of safety" (4 dilutions required vs 25 dilutions achieved) which allows the option of reducing number of ports and/or the port exit velocities. As such, Scenario 1 is rated as 'low', and Scenario 2 rated as having 'very low' impact. Mitigation measures are the implementation of the preferred Scenario recommended by PRDW (2020). ***The impacted related to elevated nutrients is assessed in detail in Section 5.2.4 of the Marine Ecological Assessment and has been included in Table 9.5 of the EIR.*** ***Increased nutrient levels in receiving waters can encourage plant growth, which may lead to algal blooms and local eutrophication. Prolific seaweed growth on intertidal rocky shores and foul-smelling subtidal sediments are often indications of enrichment. There are three forms of nitrogen that are commonly measured in water bodies: ammonia, nitrates and nitrites. Total Kjeldahl nitrogen (TKN) is the sum of organically bound nutrients, while total nitrogen is the sum of inorganic and organic nutrients. Organic nutrients include nitrogen, ammonia (NH_3) and ammonium (NH_4+), while inorganic nutrients include nitrates (NO_3) and nitrite (NO_2). Organic nutrients need to be broken down into inorganic nutrients before being absorbed by organisms; therefore, inorganic nutrients can be described as being readily available sources of energy.***

I&AP	COMMENT	RESPONSE
		Nitrogen is an essential nutrient for plants and animals; however, an excess amount of nitrogen may lead to low levels of dissolved oxygen in the water (anoxia) and may negatively affecting organisms within the marine environment. For example, a surplus of ammonia and organic nitrogen in a body of water can result in eutrophication and lead to prolific algal growth. Sources of nitrogen include WWTW, runoff from fertilized lawns and croplands, failing septic tank systems, and input from processing factories, aquaculture facilities and industrial discharges. Thus, ammonia and the associated ions are required parameters for regulatory reporting at many treatment plants to assist in the monitoring of operations and effluent quality. Ammonia is highly toxic to most organisms and even low levels can cause toxicity issues for animals. Increased concentrations of nitrate (>30 mg/L) can have serious impacts on aquatic organisms as it inhibits growth of some organisms and promotes that in others, and can cause a number of stresses on aquatic life. Increased phosphates can also lead to enrichment and potentially eutrophication, which will result in significant changes to species composition and species diversity in the affected area. Increased levels of nitrates and phosphate can result in an increased abundance of certain algal species and may facilitate the generation of harmful algal blooms. ***Under natural conditions, high concentrations of nitrate (>10 µmol/l) are present in offshore waters (outer shelf and shelf edge), and off Cape Padrone and Cape Recife, but much lower concentrations (around 1 µmol/l or less) occur within Algoa Bay itself.*** ***Modelling indicates that nutrient concentrations (specifically, TKN and NH_4) within the Wastewater 1 effluent stream do not achieve the required dilutions at the 300 m RMZ under Scenario 1 or Scenario 2. PRDW (2020) recommends that the end of pipe effluent quality must be improved, given that a diffuser is not feasible at the proposed site. The maximum permitted end of pipe concentrations of TKN and NH_4 for this effluent under Scenario 1 are defined by PRDW (2020) as 5 mg/l. With Wastewater 2, however, the longer pipe length and deeper discharge allows the required TKN and NH4 dilutions to be met under both Scenario 1 and 2 (PRDW 2020).*** ***Other nutrients modelled are ammonia, nitrates and nitrates, from the finfish discharge (Scenario 1), and the combined brine and finish discharge (Scenario 2). Required dilutions were met for land-based finish aquaculture effluent at the 300 m RMZ under Scenario 1 due to the use of a diffuser and adequate depth of discharge. In contrast however, the Scenario 2 combined finfish and brine effluent does not meet the required dilutions for ammonia, nitrates and***

I&AP	COMMENT	RESPONSE
		nitrates. PRDW (2020) therefore recommends that the brine and finfish effluent are discharged separately (under Scenario 1), where the required dilutions for all constituents are met. ***As such, both Scenario 1 and Scenario 2 are rated as having 'high' impacts without mitigation. Mitigation measures include implementing the recommended Scenario presented by PRDW (2020), which requires the Wastewater 1 outfall to limit the maximum allowable effluent concentrations (end of pipe) for TKN + NH_4 to below 5 mg/l (wastewater must be treated on land to meet appropriate standards prior to discharge). Additionally, the recommended Scenario specifies that the brine and fin fish effluents are discharge separately; otherwise, the ammonia, nitrate and nitrate end of pipe concentrations must be reduced to below 13.37 mg/l (PRDW 2020).*** ***The implementation of this mitigation will reduce the impact to 'low' significance.***
SANParks	Impact of effluent on the water turbidity, and turbidity dispersion	*A marine ecological assessment is currently being conducted and will be available for review by SANParks during the EIA Phase of this development. This study will address all possible impact on the marine environment as a result of effluent discharge.* ****Additional Response based on Marine Ecological Specialist Report*** ***The impacted related to reduced water quality is assessed in detail in Section 5.1.5 of the Marine Ecological Assessment and has been included in Table 9.5 of the EIR.*** ***Construction activities such as drilling and blasting are likely to generate sediment plumes that will increase the turbidity of the water and settle on the surrounding seafloor. Increased erosion and sedimentation may occur during the construction phase when heavy duty vehicles will be moving sediment. Loose sediment may be washed down with rainfall, leading to increased turbidity and sedimentation. Dredging activities will cause the resuspension of sediment into the water column, causing increases in turbidity. Sessile organisms, particularly those that filter-feed are most likely to be impacted as material suspended by dredging and other construction activities is likely to be largely inorganic resulting in feeding difficulties. They generally ingest high levels of inorganic material filtered from the water, resulting in lower growth rates, starvation and, in the worst cases, mortality. For autotrophic organisms such as microphytobenthos and phytoplankton, suspended material blocks light, the higher the suspended solids the more light is attenuated. This is likely to cause a temporary decrease in the productivity of autotrophic microphytobenthos and phytoplankton. However, given that the area***

I&AP	COMMENT	RESPONSE
		surrounding the construction site is exposed, it is anticipated that sand particles suspended by construction will be readily dispersed by wave action. In addition, sand movement in the nearshore marine environment occurs naturally both in the coastal zone and intertidally. Consequently, nearshore biota is resilient to sand movement and additional sediment input to the marine environment during construction is unlikely to be detrimental. ***Dredging activities may also result in the suspension of sediment associated pollutants such as trace metals. As pollutants are strongly associated with the cohesive fraction of sediment, pollutant deposition is most likely to occur where effluent plumes come into close contact with a muddy benthic environment. A geological survey of the area northeast of the Port of Ngqura showed that approximately 65% of the seafloor area consists of rocks with unconsolidated sediment cover of less than 0.5 m (CSIR 2010a).*** ***Superficial sediments within the Port of Ngqura were found to be very muddy, indicating that the Port is a depositional area for fine sediments (CSIR 2010b). It can be inferred that the Port area is thus more susceptible to the absorption of contaminants than the area north-east of the eastern breakwater. To limit the possibility of pollutant deposition, effluent outfalls have been positioned far enough away from the Port entrance to prevent entrainment within the Port. Mitigation for dredging and blasting activities includes the setup of water quality monitoring stations in the vicinity of the construction (~300 m from the site). The median TSS concentration (as calculated from baseline monitoring data) should not exceed the threshold limit which is set as the greater of the 80th percentile of the baseline monitoring data, or ten percent (10%) greater than the natural background turbidity. Consequently, this impact is rated as very low with the implementation of these best practice mitigation measures.***
SANParks	Temperature and turbidity impacts on plankton, the pelagic food web and small pelagic fish species	*A marine ecological assessment is currently being conducted and will be available for review by SANParks during the EIA Phase of this development. This study will address all possible impact on the marine environment as a result of effluent discharge.* ****Additional Response based on Marine Ecological Specialist Report*** ***Please refer to the impact related to increased water temperature as assessed in detail in Section 5.2.2 and the impact related to reduced water quality in Section 5.1.5 of the Marine Ecological Assessment as discussed above.***
SANParks	Accumulation of discharge elements in the sediments and benthic habitats and associated impacts	*A marine ecological assessment is currently being conducted and will be available for review by SANParks during the EIA Phase of this development. This study will address all possible impact on the marine environment as a result of effluent discharge.*

I&AP	COMMENT	RESPONSE
		Additional Response based on Marine Ecological Specialist Report ***It is recommended in the Marine Ecological Assessment that benthic macrofaunal samples be collected and analysed both pre- and post-discharge. Benthic macrofauna biological indicators, such as species abundance, biomass, and diversity, provide a direct measure of the state of the ecosystem in space and time and tend to be directly affected by pollution/disturbance. It is recommended that a minimum of six sites be monitored in the vicinity of each outfall with three samples collected per site. Two control sites should be included to assess potential impacts relative to broader changes within Algoa Bay. These samples must be accompanied by an assessment of sediment granulometry and organic content to permit correct interpretation of the macrofauna results, because sediment particle size, Total Organic Carbon (TOC) and Total Organic Nitrogen (TON) within the sediment influence macrofaunal community structure in marine systems. These factors must therefore be controlled for to correctly interpret changes in community structure, should such changes be detected. These benthic samples should be collected and assessed annually. Sediments from control and impacts sites must also be analysed for trace metal content in order to detect potential enrichment due to effluent discharges.***
SANParks	We note that scenarios of noncompliance from Coastal discharge permit holders will be modelled	The modelling addressed the worst case scenario and characterised the extent and duration for which there might be non-compliance with the required dilutions governed by applicable water quality guidelines and / or the water quality requirements of other users in the region ***Additional Response:*** ***Our previous response remains valid.***

I&AP	COMMENT	RESPONSE
SANParks	Additional information on the storm water structures should be provided. How much of the storm water will be from the industrial stands and how much will come from runoff from roads, etc. Storm water should ideally be discharged onto land (e.g. onto an artificial wetland) as opposed to on a beach. Can the proposed open space areas at the site not be used for this purpose? Is it not possible to have small grassy areas where water can flow onto from the storm water outlets (even if it is landward of the roads mentioned – the water from higher up can then flow onto these areas, thus reducing the amount of water potentially discharged onto the beach)? The possibility of pollutants (oil and fuel from vehicles, domestic, etc.) entering the marine environment from storm water runoff is extremely high without proper mitigation, especially after first rains, therefore beach discharge should be considered a last resort. Also, if discharge onto land is not possible, is it possible to discharge the storm water with the one of the other pipelines / tunnels into the ocean if treated to acceptable standards (e.g. the South African Water Quality Guidelines for Coastal Waters – Volumes I and II, whichever is more stringent) before being discharged (there are various options, the CoCT are exploring some of these).	*This information will be provided in the EIA Phase as the final designs for stormwater infrastructure are still in progress.* **** Additional Response based on liaison between the CDC and SANParks are included below.*** ***SANParks objected to the stormwater management design presented in the Scoping Report. The CDC and its engineers engaged proactively with SANParks, and have now redesigned the stormwater outlets for Zone 10. The main objective of the stormwater outlet structure is the dissipation of energy and prevention of erosion during rain events. The secondary objective is to collect waste that might wash down the stormwater pipes/channels.*** ***<u>Structure location and Design</u>*** ***Stormwater derived from Zone 10 will be attenuated on land behind the foredune area, approximately 40-50 m from the HWM. The stormwater outlet channels will run parallel to the HWM but behind the foredune, and will comprise of gabions and reno mattresses to break the flow of water before it enters a gently sloping lined channel (0%-0.5% slope). This will attenuate the stormwater and allow for the infiltration of water into the underlying sandy substrate. The stormwater strictures have been designed to attenuate the 1:5 year storm event. Three stormwater outlet channels will be constructed (Figure 2.12). A berm surrounding the outlet channel will prevent the overflow of stormwater into the surrounding beach environment. A large reno mattress and associated gabions on the far end of the outlet channel will extend to the rocky shoreline to ensure the system can accommodate major rainfall events (>1:5 year) which may result in the overflow of water from the stormwater outlet channel (Figure 2.13).*** ***As such none of the comments related to stormwater discharge are relevant anymore.***
SANParks	The municipality should be made aware that discharges onto beaches could affect applications for blue flag status for beaches and could impact use of beaches (localised erosion, hard structures on sandy coastlines, functioning of dune systems, etc.).	*The local municipality is included in the stakeholder database and as such are aware of the project and have access to the Scoping Report.* **** Additional Response based on liaison between the CDC and SANParks are included below.*** ***Please refer to the Section above related to change in the stormwater design based on direct correspondence with SANParks.***

I&AP	COMMENT	RESPONSE
SANParks	If the gabions are to be built on sandy beaches I would also not support their use as they limit coastal access (if it extends to the HWM) and they could potentially change the nature of the beach (erosion / accretion of sediment) if placed incorrectly.	*This information will be provided in the EIA Phase as the final designs for stormwater infrastructure are still in progress.* **** Additional Response based on liaison between the CDC and SANParks are included below.*** ***Please refer to the Section above related to change in the stormwater design based on direct correspondence with SANParks.***
SANParks	SANParks are concerned about the proposed impacts of these projects, as well as those environmental impacts not taken into consideration. Addo Elephant National Park MPA is the last stronghold of the African Penguin in the world and any further cumulative impacts can add to the pressures on this species.	*Please note that the impacts above (i.e. increased water temperature and nutrient on the persistence of harmful algal blooms, impact of effluent on water turbidity and turbidity dispersion, temperature and turbidity impacts on plankton, the pelagic food web and small pelagic fish species, accumulation of discharge elements in the sediments and benthic habitats and associated impacts) will be included in the marine ecological assessment currently being conducted for the proposed project. This document is an integral part of the EIA process as these impacts need to be assessed by a qualified marine ecologist.* ****Additional Response:*** ***Our previous response remains valid. A full impact assessment of the impacts related to the marine environment (for all phases of the development) are included in Chapter 5 of the Marine Ecological Assessment as well as Chapter 9 of both the Draft and Final EIRs.***
SANParks	SANParks requests the Department of Environment, Forestry and Fisheries to carefully consider the number of power stations as well as the location of these plants, the likely impacts on and the adjacency of the Addo Elephant National Park and MPA.	*This is the mandate of DEFF and as such the EAP cannot provide a response in this regard.* ****Additional Response:*** ***Our previous response remains valid.***
Comments received from SAHRA on the 15th of December 2020 regarding the Draft Scoping Report		
SAHRA	SAHRA has noted a few inaccuracies in the Draft Scoping Report which need to be addressed in any subsequent documents. The table under Section 6.3 Assessment of Issues lists potential issues and possible mitigation measures. In the table on page 138 under the Issue of Impacts on Archaeological, Palaeontological and Cultural Sites, the mitigation measure reads	*Thank you, this has been corrected*

I&AP	COMMENT	RESPONSE
	"Should any archaeological or cultural sites or objects be located during the construction of the proposed project, it should immediately be reported to the National Heritage Council. Failure to report a site or object of archaeological and/or cultural significance is a contravention of the National Heritage Act (Act No. 25 of 1999)" The responsible agency is SAHRA and not the National Heritage Council so this section needs to be revised to reflect that any discoveries must be reported to SAHRA.	

I&AP	COMMENT	RESPONSE
COMMENTS RECEIVED FROM ELC MEMBERS ON THE 18TH OF FEBRUARY 2021		
Andries Struwig (DEDEAT)	Why is it necessary to blast? Where and to what extent will blasting be required	The beaches around the Coega SEZ consist of a combination of sandy and rocky shores. There are also a number of subtidal (< 10 m) and deeper reefs (> 10 m) off the coast of Algoa Bay. A number of different servitude widths have been proposed for the project, and these range from 100-200 m wide. Depending on the geotechnical conditions, pipelines are either anchored firmly to the seabed and shoreline, or embedded within excavated trenches. Typically, pipelines would be buried in trenches in the high impact beach and surf zone, and then anchored to the seabed beyond the high active surf zone. Suitable anchoring / weighting is required to ensure the pipeline is stable on the seabed during storm conditions (see Plate 2.7). Further work is required to determine whether these pipelines need to be buried or anchored, and how they might be anchored to the seabed. In the case of a buried pipeline, and depending on the results of the Geotechnical assessments, a channel will be blasted into the rocky shore from above the spring high water mark to below the spring low water mark, or excavated on a sandy shoreline. Thus depending on where within the proposed servitude the infrastructure will be placed, blasting may / may not be required. Blasting will be avoided as far as

I&AP	COMMENT	RESPONSE
		practically possible and as such the extent of blasting cannot be determined at this stage.
Andries Struwig (DEDEAT)	Where does the reference to St Francis Dune Thicket come from?	Mucina and Rutherford
Andries Struwig (DEDEAT)	It would seem that some of the infrastructure on your layout maps transects the proposed power plant presented for a different application.	The proposed positions of the infrastructure was obtained from the CDC, who has designed the detailed base plan for the Coega SEZ Zone 10 (refer to Figure 6.1 included below). The proposed development will connect to the proposed power stations in Zone 10, but will not transect them.
Lyndon Mardon (DEDEAT)	Where does the 1 km exclusion zone for blasting come from?	There is a large amount of literature on impacts of noise on marine animals, mostly cetaceans. A lot of this has been cited in the Marine Ecological Assessment and is not repeated here. Recommendations on the size of exclusion zones vary widely for different activities and species for reasons such as intensity of the sound/blast wave and sensitivity of the species in question being most important. In the case of this project, we have a good idea of the species involved but not the levels of noise that will be produced, which makes it difficult to accurately define safe exclusionary zones for the species in question. The latter (exclusion zones) are usually defined or derived from the results of noise modelling studies which have not been conducted for this project. Different rules are formulated for different zones (observation, exclusion and suspension) around a construction or operational site which are again derived from the modelling studies referred to above. In the absence of any detailed modelling work this approach is difficult to justify, and can lead to confusion and poor compliance unless it is implemented by skilled professionals. For this reason we adopted a precautionary approach, and recommended a 1 km exclusionary buffer for blasting. **Observation Zone** – This is the radius cetaceans and their movements should be monitored. Within the distance set for piling activities, a partial capacity strike or warning will occur before commencement. **Exclusion Zone** – If a whale moves within this radius; piling, dredging or spoil disposal work will not commence until the animal has moved outside this zone. **Suspension Zone** – Within this zone, piling activities will be suspended until the animal moves outside the exclusion zone. Where practical dredging will be suspended or vessel speeds/direction adjusted. Spoil disposal will not be suspended once commenced.

I&AP	COMMENT	RESPONSE
Lyndon Mardon (DEDEAT)	What is the back-up plan in case effluent to be discharged will not meet the required WQG?	For finfish effluent, the CDC will ensure that an inline screening system is hard-wired into investor operations to ensure that the solids are separated from the effluent prior to discharge, as it's the solids (TSS) that present the main problem. The intention is to reduce the levels of TSS in the effluent. Examples of inline screening systems include settlement ponds or swirl operators. Once the effluent has been through the screening system, e.g. a swirl operator, the solids fall to the bottom and can be collected and disposed of, whereas the supernatant (liquid) will be discharged to the marine pipeline. It is the supernatant effluent that will need to comply with the CDC's CWDP conditions. The investor will need to test the quality of this supernatant effluent to prove that it meets the requirements. If it doesn't, then the CDC would have to stipulate (in their lease agreements), that additional treatment must take place. Each ADZ investor must compile their own site- and activity-specific EMP, which would have to include a detailed section on how they will be ensuring that their effluent meets the Water Quality Guidelines and permit requirements. For abalone effluent, the CDC will ensure that each operation incorporates an inline screening system to trap / capture any solids (organic or inorganic); e.g. seaweed ponds. Experience is that plastic litter will still need to be screened out, despite seaweed ponds in use. Each operator must monitor their effluent quality once it's been through the screening system. In terms of wastewater, the WWTW treatment technology and design of the WWTW must ensure that all effluent (from Phases 1 and 2) from the WWTW must meet the relevant guidelines before it leaves the WWTW.
APPROVAL OF THE FINAL SCOPING REPORT BY DEFF ON THE 24TH OF FEBRUARY 2021		
DEFF	The Listed Activities represented in the EIAR and the application form must be the same and correct.	The listed activities within the Draft EIR corresponds to those submitted in the application form submitted to DEFF.
DEFF	The EIAR must assess the correct sub listed activity for each listed activity applied for.	Only the sub listed activities relevant to the project have been included in both the DEIR and the Application Form.
DEFF	The EIAR must provide an assessment of the impacts and mitigation measures for each of the listed activities applied for.	The section below provides the relevant listed activities and the impacts considered to be relevant to each activity, which has been included in Chapter 8 of the EIAR: <u>Listing Notice 1: Activity 10:</u> • Reduced water quality in the marine environment • Impacts of elevated temperature in the marine environment • Impacts of changes to salinity in the marine environment • Impacts of elevated nutrients in the marine environment

I&AP	COMMENT	RESPONSE
		• Impacts of elevated suspended solids in the marine environment • Impacts of elevated trace metal and inorganic compound concentrations in the marine environment • Impacts of reduced dissolved oxygen <u>Listing Notice 1: Activity 15:</u> • Reduced water quality in the marine environment • Hazardous substance spills • Erosion • Impacts on topography (terrestrial environment) • Impacts on bathymetry (marine environment) • Loss of sandy beach, intertidal and subtidal habitat and biota • Disturbance of pelagic open water habitat • Barotrauma impacts on marine fauna as a result of blasting • Noise disturbance to marine fauna <u>Listing Notice 1: Activity 17:</u> • Reduced water quality in the marine environment • Hazardous substance spills • Erosion • Impacts on topography (terrestrial environment) • Impacts on bathymetry (marine environment) • Loss of sandy beach, intertidal and subtidal habitat and biota • Disturbance of pelagic open water habitat • Barotrauma impacts on marine fauna as a result of blasting • Noise disturbance to marine fauna <u>Listing Notice 1: Activity 18:</u> • Impacts to the Coastal Dune System <u>Listing Notice 1: Activity 19A:</u> • Reduced water quality in the marine environment • Impacts of elevated suspended solids in the marine environment • Impacts on bathymetry (marine environment) • Barotrauma impacts on marine fauna as a result of blasting • Noise disturbance to marine fauna <u>Listing Notice 2: Activity 6:</u> • Reduced water quality in the marine environment • Impacts of elevated temperature in the marine environment • Impacts of changes to salinity in the marine environment

I&AP	COMMENT	RESPONSE
		• Impacts of elevated nutrients in the marine environment • Impacts of elevated suspended solids in the marine environment • Impacts of elevated trace metal and inorganic compound concentrations in the marine environment • Impacts of reduced dissolved oxygen <u>Listing Notice 2: Activity 14:</u> • Reduced water quality in the marine environment • Hazardous substance spills • Erosion • Impacts on bathymetry (marine environment) • Disturbance of pelagic open water habitat • Barotrauma impacts on marine fauna as a result of blasting • Noise disturbance to marine fauna <u>Listing Notice 2: Activity 26:</u> • Reduced water quality in the marine environment • Hazardous substance spills • Erosion • Impacts on bathymetry (marine environment) • Disturbance of pelagic open water habitat • Barotrauma impacts on marine fauna as a result of blasting • Noise disturbance to marine fauna <u>Listing Notice 3: Activity 12:</u> • Loss of Indigenous Vegetation (Cape Seashore Vegetation and St Francis Dune Thicket) • Loss of Biodiversity / Encroachment into Priority Biodiversity Areas • Spread of Alien Plant Species • Habitat Loss/ • Fragmentation • Possible loss of the following plant species: *Brunsvigia litoralis*, *Euryops ericifolius*, *Erica chloroloma*, *Psoralea repens* • Possible loss of the following plant species: *Cotyledon adscendens*, *Rapanea gilliana*, *Gymnosporia elliptica*, *Agathosma stenopetala*, *Erica glumiflora*, *Othonna rufibarbis*, *Salvia obtusata* • Loss of mammal SCC • Disturbance to Damara tern population / Loss of habitat

I&AP	COMMENT	RESPONSE
		• Loss of *Chlorotalpa duthiae* (Duthie's Golden Mole) and/or associated habitat
DEFF	From the information presented in the FSR, it is noted that there are concerns from SANParks with regards to, inter alia, discharges in close proximity to St Croix Island, Addo Elephant National Park and Marine Protected Area (MPA) and how this may impact seabirds, notably penguins, dependant on this area of the ocean, and their prey species. SANParks is concerned about several possible risks and long-term impacts from this project on water quality, marine biodiversity, the pelagic food chain, and pelagic fish species serving as prey for the penguins, the island ecosystems, and disease risks amongst others. You are required to address these concerns adequately. The preferred alternative intake servitudes and preferred alternative discharge servitudes to be presented in the EIA Phase must meet both the Coega Development Corporation (CDC) requirements and it must address concerns raised by I&APs, including SANParks during the environmental impact assessment phase.	All comments received from SANParks related to the marine environment were submitted to the Marine Ecologist and incorporated in the Marine Ecological Impact Assessment. The Draft EIAR in conjunction with all the specialist assessments will be submitted to SANParks as well as all other registered I&APs for comment. Any additional comments received from SANParks on these reports will be incorporated into the Final EIAR and specialist assessment, inclusive of responses from the EAP, the Applicant, the various specialists and engineers. Interaction with SANParks has been ongoing. For example, based on comments received from them on the storm water discharge infrastructure a site meeting was held, and this infrastructure was redesigned to accommodate SANParks concerns.
DEFF	Please ensure that all comments from all relevant stakeholders are submitted to the Department with the EIAR. Further ensure that all issues raised and comments received during the circulation of the Draft EIAR from registered I&APs and Organs of State, including the Branch: Oceans and Coasts with DEFF which have jurisdiction in respect of the proposed activity are adequately addressed and responded to in the Final EIAR. Proof of correspondence with the various stakeholders must be included in the Final EIAR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments.	The mandatory public review period on the Draft EIAR (i.e. 30 days) will take place in April and May 2021. All comments received during this period as well as comments received the during the Scoping Phase as well as historical comments received on previous applications will be incorporated into a separate Comments and Response Report to be submitted as part of the Final EIR submission. The Draft EIR (this document) contains a separate Comments and Response Report (inclusive of all historical comments and comments on the Scoping Phase) as Appendix 3 to this report. Any new comments received (i.e. not included in the FSR) have been included in Table 6.1 of the Draft EIR. Proof of PPP, inclusive of correspondence with various stakeholders are included in Appendix 2 of this document.

I&AP	COMMENT	RESPONSE
DEFF	A Comments and Response Trail Report (C&R) must be submitted with the final EIAR. The C&R report must incorporate all comments for this development. The C&R Report must be a separate document from the main report and the format must be in table format. All comments from I&APs must be responded to adequately. A response such as "noted" is not regarded as an adequate response to I&AP's comments. Comments from each submission must be responded to individually. The dates on which comments were received must be recorded in the C&R.	As above.
DEFF	The Public Participation Process must be conducted in terms of Regulation 39, 40, 41, 42, 43 and 44 of the EIA Regulations, 2014, as amended.	The PPP process has been conducted in line with these regulations (refer to Chapter 6 of the Draft EIAR) and the approved PPP Plan.
DEFF	The EAP is requested to contact the Department to make the necessary arrangements to conduct a site inspection prior to the submission of the Final EIAR.	Correspondence related to a request for a site visit was submitted to the case officer, Ms Constance Musemburi, on the 29th of March 2021, via e-mail correspondence.
DEFF	Please ensure that a description of each of the preferred alternative type and a detailed motivation on why it is preferred is provided.	All alternatives as requested have been incorporated into Chapter 4 of the Draft EIAR.
DEFF	The EIAR must provide the four corner co-ordinate points for the proposed development site (note that if the site has numerous bend points, at each bend point co-ordinates must be provided) as well as start, middle and end points of all linear infrastructure.	This information has been included as Appendix 16 to the DEIR.
DEFF	The EIAR must provide a clear indication of the envisioned area for the proposed development and all associated infrastructure which should be mapped at an appropriate scale. A clear description of all associated infrastructure must also be provided.	A full project description, including maps have been included in Chapter 2 of the DEIR. In addition, a sensitivity map (project infrastructure overlaying sensitive sites) has been included as Figure 10.2.
DEFF	An environmental sensitivity map indicating environmental sensitive areas and features identified during the assessment process.	A sensitivity map (project infrastructure overlaying sensitive sites) has been included as Figure 10.2.

I&AP	COMMENT	RESPONSE
DEFF	A map combining the final layout map superimposed (overlain) on the environmental sensitivity map.	A sensitivity map (project infrastructure overlaying sensitive sites) has been included as Figure 10.2.
DEFF	The EAP must ensure that the terms of reference for all identified specialist studies must include the following: • A detailed description of the study's methodology, indication of the locations and descriptions of the development footprint, and all other associated infrastructure that they have assessed and are recommending for authorisation. • Provide a detailed description of all limitations to the studies. All specialist studies must be conducted in the right season and indicating that as a limitation will not be allowed. • Please note that the Department considers a "no-go" area, as an area where no development of any infrastructure is allowed; therefore, no development of associated infrastructure including access roads is allowed in the "no-go" areas. • Should the specialist definition of "no-go" area differ from the Department's definition, this must be clearly indicated. The specialist must also indicate the "no-go" area's buffer if applicable. • All specialist studies must be final, and provide detailed/practical mitigation measures for the preferred alternative and recommendations, and must not recommend further studies to be completed post EA.	All specialists have been made aware of these requirements.

I&AP	COMMENT	RESPONSE
	• Should a specialist recommend specific mitigation measures, these must be clearly indicated. Should the appointed specialists specify contradicting recommendations, the EAP must clearly indicate the most reasonable recommendation and substantiate this with defendable reasons, and where necessary, include further expert advice.	
DEFF	In regard to cumulative impacts: • Please ensure that cumulative impacts are clearly defined and where possible the size of the identified impact must be quantified and indicated, i.e. hectares of cumulatively transformed land. • A detailed process flow to indicate how the specialist's recommendations, mitigation measures and conclusions from the various similar developments in the area were taken into consideration in the assessment of cumulative impacts and when the conclusions and mitigation measures were drafted for this project. • Identified cumulative impacts associated with the proposed development must be rated with the significance rating methodology used in the process. • The significance rating must also inform the need and desirability of the proposed development. • A cumulative impact environmental statement on whether the proposed development must proceed or not.	• It has not been possible to include the size off the identified cumulative impact, due to the nature of the project. The rationale behind establishing servitudes is to consolidate the marine infrastructure within defined footprints and thus avoid an ad hoc approach to constructing marine infrastructure. By clearly defining servitudes cumulative impacts are avoided. • The location for the development is a special economic zone, and one of the principles of establishing these was to consolidate industrial infrastructure to specific geographical areas to encourage similar industries with synergies between them, hence reducing waste streams. This approach also allowed for improved management of cumulative impacts, which at Coega has been achieved through the establishment of the Coega Open Space Management Plan, which ensures that there is adequate representation of various vegetation types in the area, and through the establishment of ecological corridors avoids, as far as possible, the cumulative impact associated with habitat fragmentation. • Refer to Table 9.6 in Chapter 9 of this report • Refer to Table 9.6 in Chapter 9 of this report • There is considerable debate and disagreement amongst academics and practitioners about whether cumulative impact assessment (CIA) should be part of the EIA or be undertaken as a separate stand-alone process. The IFC's good practice manual on CIA nevertheless draws attention to the importance of determining whether a project may contribute to cumulative impacts on valued environmental and social components. We have concluded that this will not be the case because the rationale behind defining marine servitudes is to specifically deal with cumulative impacts (refer to Chapter 10)

I&AP	COMMENT	RESPONSE
DEFF	Should a Water Use Licence, Coastal Waters Discharge Permit (CWDP) or any other licence be required, proof of application for a licence needs to be submitted.	A Draft Coastal Waters Discharge Permit (CWDP) application (as required by Section 69 of the NEM: Integrated Coastal Management Act No. 24 of 2008 for discharge of effluent into the marine environment) was submitted to the DEA: Oceans and Coasts. A reference number (2014/008/EC/Coega IDZ) for this application was issued on the 24th of April 2014. Based on personal communication with DEFF: Oceans and Coasts, the reference number issued for the Coastal Waters Discharge Permit in 2014 remains valid, but the application needs to be updated to reflect the most recent information. This revised application will be submitted to DEFF: Oceans and Coasts prior to the submission of the Final EIR.
DEFF	A construction and operational phase EMPr that includes mitigation and monitoring measures must be submitted with the Final EIAR.	Noted, both the Draft and Final EIARs will be accompanied by both a Construction and an Operational EMPr.
DEFF	The EAP is requested to add the name together with the Appendix number when uploading the files on the Department's system.	Noted, all appendices have been appropriately named.
DEFF	The applicant is hereby reminded to comply with the requirements of Regulation 45 of GN R982 of 4 December 2014, as amended, with regard to the time period allowed for complying with the requirements of the Regulations.	Based on our calculations the Final EIR is due to the Department on the 17th of June 2021. Regulation 23 (1) states that "The applicant must within 106 days of the acceptance of the scoping report submit to the competent authority….." Regulation 3 (5) states that: "Where a prescribed timeframe is affected by one or more public holidays, the timeframe must be extended by the number of public holiday days falling within that timeframe." There are 7 public holidays during that period: 21 March – Human Rights Day 22 March – Public Holiday as Human Rights Day Fall on a Sunday 2 April – Good Friday 5 April – Family Day 27 April – Freedom Day 1 May – Workers Day 16 June – Youth Day

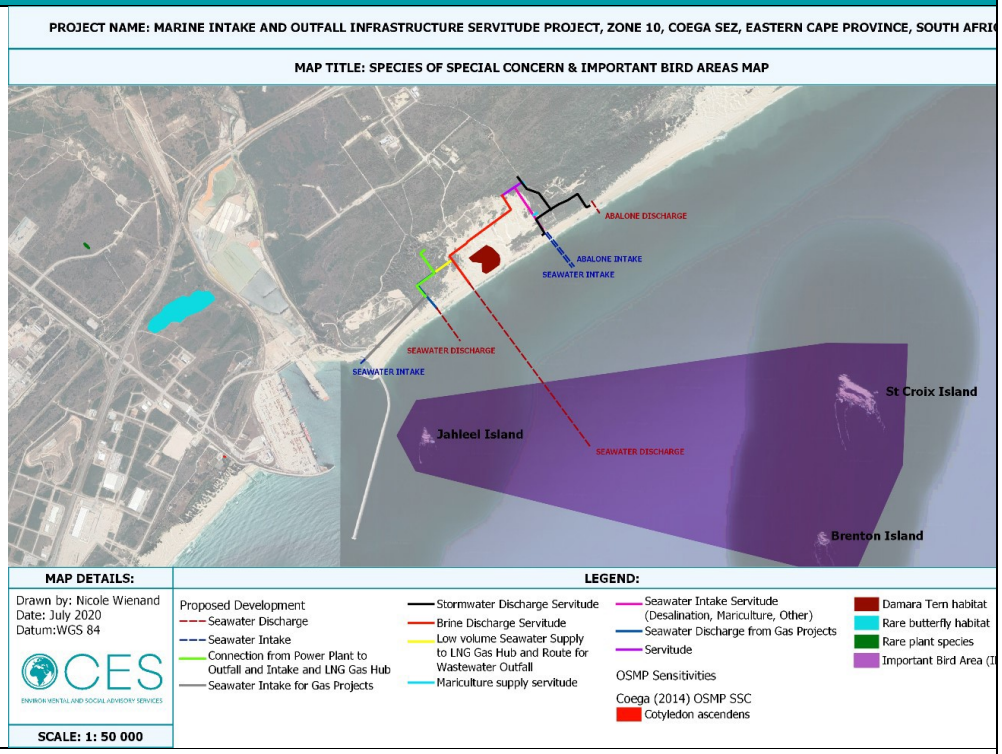
I&AP	COMMENT	RESPONSE
		The 26th of April is a school holiday as Freedom Day falls on the Tuesday, as this is a school holiday this has not been factored this into our calculations. The approval of the Scoping Report was dated 24th of February 2021 (Received by the EAP on the 1st of March). We have started the count from the 25th as Regulation 3 (1) states: Subject to subregulations (2) and (3), when a period of days must in terms of these Regulations be reckoned from or after a particular day, that period must be reckoned as from the start of the day following that particular day to the end of the last day of the period, but if the last day of the period falls on a Saturday, Sunday or public holiday, that period must be extended to the end of the next day which is not a Saturday, Sunday or public holiday.
DEFF	You are hereby reminded of Section 24F of the National Environmental Management Act, Act No. 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.	Noted, no activity will commence prior to any EA received from the Department.
COMMENTS RECEIVED FOLLOWING THE NOTIFICATION OF THE AVAILABILITY OF THE DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT		
DFFE	Dear Chantel 14/12/16/3/3/2/2036 ACKNOWLEDGEMENT OF RECEIPT OF THE DRAFT ENVIRONMENTAL IMAPCT ASSESSMENT REPORT FOR THE PROPOSED MARINE INTAKE AND OUTFALL INFRASTRUCTURE SERVITUDE PROJECT, ZONE 10, COEGA SEZ, EASTERN CAPE PROVINCE.	Thank you

I&AP	COMMENT	RESPONSE
	The Department confirms having received the Draft Environmental Impact Assessment Report for the abovementioned project on 06 April 2021. You have submitted these documents to comply with the National Environmental Management Act, 1998(Act No. 107 of 1998) and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended You are hereby reminded of Section 24F of the National Environmental Management Act 1998 (Act No. 107 of 1998), as amended, that no activity may commence prior to an Environmental Authorisation being granted by the Department. Kindly quote the abovementioned reference number in any future correspondence in respect of the application. Yours in admin EIA Applications Integrated Environmental Authorisations Department of Environment, Forestry and Fisheries	
Aulicia Maifo **DFFE: Biodiversity**	Good day Sir/Madam Hope you are well. DFFE Directorate: Biodiversity Conservation hereby acknowledge receipt of the invitation to review and comment on the Draft Environmental Impact Assessment Report for the proposed Coega Marine Intake and Outfall Infrastructure Project. Kindly note that the project has been allocated to the officers, Ms. Portia Makitla (copied on this email) and myself.	Portia Makitla was added as the DFFE: Biodiversity Case Officer on the Stakeholder/ I&AP Database during the Scoping Phase and has been copied into all notifications regarding the availability of reports for public review and comment.

I&AP	COMMENT	RESPONSE
	Please note that all Public Participation Process documents related to Biodiversity EIA review and any other Biodiversity EIA queries must be submitted to the Directorate: Biodiversity Conservation at Email: BCAdmin@environment.gov.za for attention of Mr Seoka Lekota. Kind regards, Ms. Aulicia Maifo	
Andrea Shirley **CDC**	Afternoon ladies, Please include Nontsasa onto the stakeholder database for the Marine Pipeline EIA. She and Rueben are from Oceans & Coasts.	Nontsasa Tonjeni was added to the Stakeholder/ I&AP Database and the notification of the availability of the Draft EIAR for public review was subsequently forwarded to her.
Nelson Coelho **Marine and Coastal Construction**	Greetings Dr Chantel Bezuidenhout, Your colleague at Cape Town branch of CES advised me to contact you via this address concerning the Marine Intake and Outfall Infrastructure Servitude Project you are currently working on. The company I represent is involved in marine works such as the laying of these pipelines and we are trying to understand what is the status of this project at this moment. We understand the consultancy job was awarded to CES back in 2019 and your colleague mentioned a draft environmental scoping report had been prepared last year; but she also suggested asking you for further clarification on whether/when the EIA was completed and delivered to the client.	The notification email regarding the status of the project and the availability of the Draft EIAR for public review was subsequently forwarded to Nelson Coelho.

I&AP	COMMENT	RESPONSE
	In particular we would like to know the expected dimensions of this infrastructure and whether it is foreseeable that the execution would require the participation of marine contractors. Thank you for your time and consideration. With kind regards, MARINE AND COASTAL CONSTRUCTION Tel. + 44 20 3290 7180 www.marineandcoastal.com	
Ane Oosthuizen **SANParks**	Good afternoon Ane, I hope you are well. Would SANParks like for us to arrange a meeting regarding the Draft Environmental Impact Assessment (EIAR) Report for the Coega Marine Intake and Outfall Infrastructure Project? Will SANParks be submitting comments on the Draft EIAR? I look forward to hearing from you. Kind regards Nicole	Hi Nicole, Thank you for the offer of a meeting, yes SANParks will be submitting comments. We are available for a meeting after 12pm on the 3rd. Apologies for the single date, but this is a particularly busy time for SANParks.
Nicole Wienand to Wayne Hector and Constance Musemburi **(DFFE)**	Good afternoon, I trust you are well. Please could you kindly indicate whether the DFFE will be submitting comments on the Draft Environmental Impact Assessment Report (EIAR) for the Proposed Coega Marine Intake and Outfall Infrastructure Project? Thank you and kind regards,	DFFE submitted comments of the Draft EIAR on the 11th of May 2021.

I&AP	COMMENT	RESPONSE
	Nicole	
Seoka Lekota **DFFE: Biodiversity Conservation**	The Directorate: Biodiversity Conservation has reviewed and evaluated the aforementioned report. According to the information provided in the Draft Environmental Impact Assessment Report (DEIAR) and the specialists report, the proposed development is located within the coastal protection zone (defined as any urban land unit that is completely or partly within 100 m of the High-Water Mark (HWM). Majority of the impacts are rated as moderate and high negative which will be reduced to a moderate to low negative significance. Notwithstanding the above the following recommendation must be considered in order to minimise further loss of biodiversity:	The information provided in the Draft EIAR and associated specialist reports regarding the location of the proposed development within the coastal protection zone (defined as any urban land unit that is completely or partly within 100 m of the High-Water Mark (HWM) is correct. The recommendations outlined within the letter from DFFE: Biodiversity Conservation were incorporated into the relevant sections of the Draft EIAR and the Terrestrial Ecological Impact Assessment and are outlined below.
Seoka Lekota **DFFE: Biodiversity Conservation**	High sensitive areas in close proximity to the development footprint must be demarcated as no-go areas i.e. IBA.	Highly sensitive areas, including the Damara Tern habitat, have been identified and delineated in Section 7.1 of the Terrestrial Ecological Impact Assessment. No-go areas have been specified in Section 9.1.3. Due to the findings of the modelling and the dispersion requirements, one (1) of the proposed discharge servitudes extends into the boundary of the Algoa Bay Islands: Addo Elephant National Park IBA (refer to section 5.7.1 on Page 49 of the Terrestrial Ecological Impact Assessment). Due to the location of the discharge servitude within the IBA (as determined by dispersion modelling), this area has not been proclaimed a no-go area. However, strict monitoring of these discharge servitudes has been recommended as conditions of the EA, if granted.

I&AP	COMMENT	RESPONSE
		
Seoka Lekota **DFFE: Biodiversity Conservation**	Vegetation clearing must be limited to the approved areas.	This mitigation measure has been included under *Impact 2: Loss of Indigenous Vegetation (Cape Seashore Vegetation and St Francis Dune Thicket)* within the Terrestrial Ecological Impact Assessment. The mitigation measure reads as follows: "*Except to the extent necessary for the carrying out of construction works, flora shall not be removed, damaged or disturbed.* ***The clearance of vegetation at any given time should be kept to a minimum and vegetation clearance must be strictly limited to the development footprint***". This recommendation was also included in Table 9.5 of the EIR and Table 3.1 of the Construction Phase EMPr.

I&AP	COMMENT	RESPONSE
Seoka Lekota **DFFE: Biodiversity Conservation**	A final walk-through with the relevant specialist must be undertaken to identify the Species of Conservation Concern (SCC) that needs protection.	This mitigation measure has been included under Impact 2: Loss of Indigenous Vegetation (Cape Seashore Vegetation and St Francis Dune Thicket) within the Terrestrial Ecological Impact Assessment. The mitigation measure reads as follows: "*The search and rescue of rare, endemic or threatened species, prior to site clearance must be carried out in accordance with the Project Vegetation Specification (PVS), by a competent and qualified service provider*". This recommendation was also included in Table 9.5 of the EIR and Table 3.1 of the Construction Phase EMPr.
Seoka Lekota **DFFE: Biodiversity Conservation**	Alien Invasive Plant (AIP) Management and Control Plan must be designed and implemented to prevent further loss of floral habitat and diversity as AIPs displace native species.	The spread/establishment of Alien Invasive Plant (AIP) species was assessed under Impact 8 (construction phase) and Impact 11 (operational phase) in the Terrestrial Ecological Impact Assessment. An Alien Vegetation Management Plan has already been developed for the Coega SEZ. As such, the following mitigation measures relating to the spread of Alien Plant Species has been specified: • The Alien Vegetation Management Plan developed for the Coega SEZ must be implemented and managed to prevent the further spread of alien invasive species within Zone 10 of the Coega SEZ (Construction and Operational Phase); • Any alien vegetation which establishes during the construction phase should be removed from site and disposed of at a registered waste disposal site. Continuous monitoring for seedlings should take place throughout the construction phase (Construction Phase). • Implement a Rehabilitation Plan in accordance with the specifications outlined within the OSMP (2014) and the CDC's Project Vegetation Specifications (Operational Phase). These recommendations were also included in Table 9.5 of the EIR and Table 3.1 of the Construction Phase EMPr and Table 3.1 of the Operational EMPr.
Seoka Lekota **DFFE: Biodiversity Conservation**	Erosion management, maintenance and rehabilitation plans of natural vegetation must be developed to mitigate on habitat degradation and consider all phase on the development.	The impact of erosion was also assessed in the Draft EIAR for which the following mitigation measures were identified: • The seawater abstraction and discharge pipeline infrastructure should be designed to limit risks of erosion. • During construction, disturbance and clearing of natural vegetation should be kept to the minimum required for construction; • Newly cleared and exposed areas must be promptly rehabilitated with indigenous vegetation to avoid soil erosion. • Where necessary, temporary stabilization measures must be used until vegetation re-establishes;

I&AP	COMMENT	RESPONSE
		• Plan and design for the worst case, that is, for heavy rainfall and runoff events, or high winds; • Care must be taken to ensure that runoff is well dispersed so as to limit erosion. These recommendations are included in Table 9.5 of the EIR and Table 3.1 of the Construction Phase EMPr.
Seoka Lekota **DFFE: Biodiversity Conservation**	NB: The Public Participation Process documents related to Biodiversity EIA for review and queries should be submitted to the Directorate: Biodiversity Conservation at Email: BCAdmin@environment.gov.za for attention of Mr. Seoka Lekota.	The email notification regarding the availability of the Draft EIAR was submitted on the 6th and again on the 13th of April 2021 to the Case officer Ms Portia Makitla, Ms. Aulicia Maifo, with BCAdmin@environment.gov.za cc'd into the email. The relevant persons will also be notified of the submission of the Final EIAR.
COMMENTS ON THE DEIR RECEIVED FROM SANPARKS		
Andre Riley **SANParks**	SANParks comment follows several meetings between the consultant CES, and the developer CDC and a team from SANParks. This project proposes both intake and outfall infrastructure to service a range of industries, including land-based aquaculture, a Municipal wastewater treatment plant, two proposed LNG Power stations, a Desalination plant, associated stormwater outfalls and other possible future developments in the Special Economic Zone (SEZ). Most of the proposed sea-based infrastructure falls within the footprint of the Addo Elephant National Park MPA, which will also be the receiving environment for all the proposed outfall effluent, associated impacts and some seawater abstraction (Fig 1).	Statement: No response necessary.

I&AP	COMMENT	RESPONSE
Andre Riley **SANParks**	**General Risks and concerns** SANParks remains concerned over the potential long-term impacts of this project on water quality, pelagic fish species serving as prey for the penguins, the island ecosystems and species they support.	Please note that three meetings have been conducted with SANParks, a virtual meeting was conducted on the 8th of December 2020 to discuss comments, queries and the recommendations made in the Draft Scoping Report. A site visit was also conducted on the 4th of February 2021 with SANParks representatives, the CDC and their engineers, as well as the EAP in order to discuss alternative stormwater options. In addition, a meeting was held on the 3rd of May 2021 to discuss comments, queries and the recommendations made in the Draft EIAR and relevant specialist reports. In addition, all issued raised by SANParks on the Draft Scoping Report was forwarded to the Marine Ecological Specialist, who then incorporated these issues into the Draft Marine Ecological Report in order to ensure that all comments have been adequately addressed and that SANParks have all the relevant information in order to make an informed-decision on the project. However, we acknowledge SANParks concerns related to the residual long-term impacts on the marine ecosystem, as that is their mandate. We confirm that a range of mitigation measures have been recommended to reduce impact significance to acceptable levels. Nevertheless, it is acknowledged that there will be residual impacts and risks to the marine environment, but the specialists and the EAP have concluded that these are acceptable.
Andre Riley **SANParks**	**Mitigating impacts** 1. It is critical that the recommendations of the Final Marine Ecological Assessment report on the discharge scenarios, (Scenario 1 with adjustments) be implemented to achieve maximum dispersion, and minimum environmental impact; 2. It is critical that the “end of pipe limits” be adhered to, in order to safeguard the integrity of Algoa Bay, the Addo Elephant National Park MPA and other bay users. Following the “end of pipe” recommendations of PRDW 2020 and Lwandle 2020, as per Marine Ecological Assessment report; 3. It is critical that the applicant, the Coega Development Corporation (CDC) convey the end of pipe requirements, and hold accountable for these requirements, the tenants/investors who will be discharging effluent via the outfall infrastructure; 4. Mitigations measures as listed in the Final Marine Ecological Assessment report, (page v-vii) must be implemented;	CES can confirm that the mitigation measures will be legally binding on the applicant. In terms of the EA, the applicant will be legally bounded to implement all mitigation measures as stipulated in the EA as well as the EMPrs. In terms of the CWDP, the applicant will be legally bounded to ensure that the relevant water quality parameters as set by DEFF: Oceans and Coasts are adhered to.

I&AP	COMMENT	RESPONSE
	5. Impact Management Outcomes, as per Draft EIR (pages 222-228) must be adhered to.	
Andre Riley **SANParks**	**Environmental monitoring** 1. Monitoring of the site should take place before construction, as a baseline, and sub sequent to completion of construction, to monitor recovery of the site and biodiversity; 2. Monitoring requirements during the construction and operational phase as per the draft EMPr should be implemented; 3. All personnel and vessels conducting monitoring within the footprint of the MPA, must adhere to the regulations of the Addo Elephant National Park MPA Gazette no 42479, R no 777 of 23 May 2019.	1. Noted and agreed. The Operational EMPr states that: "*A monitoring program at the edge of each RMZ must be implemented **prior** to construction to better determine ambient water quality and to ensure that required Water Quality Guidelines (WQGs) are being met at the edge of the RMZ. This can be achieved by mooring a data logging instrument capable of measuring conductivity (i.e. salinity), temperature at a depth (CTD) 1 m above the ocean bottom for **a period of one month pre- and one year after operations commences**. This monitoring is required in order to validate parameters used in the dispersion modelling. Monitoring must also be undertaken to assess dissolved oxygen levels, microbiological indicators (Enterococci sp. and/or E. coli) turbidity, ammonia, nitrate and pH (refer to measurable variable in Table 3.1). Monitoring for salinity and temperature must take place continuously (via the moored instrument), while the other environmental water quality parameters should be assessed quarterly (i.e. four times per year) by the CDC.*" 2. CES can confirm that the mitigation measures will be legally binding on the applicant. 3. Noted and agreed. This mitigation measures has been incorporated into the FEIR.
Andre Riley **SANParks**	**Draft Environmental Management Program reports (DEMPr) – Operational and Construction** Conditions to include in the draft EMPs: 1. SANParks is recognised as the management authority of the Protected Area in which most of the sea based development will take place, and the area in which all of the effluent will be received; 2. CDC to set up a joint implementation and monitoring team for construction and operational activities within the Addo Elephant National Park MPA; 3. CDC to consult SANParks in the development of a monitoring plan and evaluation and reporting of results;	SANParks is recognised as the management authority in terms of the legal chapter included in the EIR. The mitigation measures outlined under points 2-7 have been incorporated into Table 9.5 of the FEIR and Table 3.1 of the Construction and Operational EMPr (whichever is relevant). In addition, a high level project specific emergency response plan has been developed by the CDC. This plan (included as Table 7.1 in the Operational EMPr), outlines the proposed infrastructure, possible failure scenarios and the contingency plans in the event of failure. The plan has also been circulated to SANParks.

I&AP	COMMENT	RESPONSE
	4. CDC to communicate each new user of the infrastructure to SANParks prior to/at the start of the EIA, as SANParks is the direct receiver of the output of the servitude user; 5. CDC to communicate any incident/failure of infrastructure to SANParks with immediate effect; 6. CDC to develop an Emergency response plan for incidences of failure or accidents, and need to consult SANParks in such a plan; 7. All personnel and vessels used in the construction and operational phase, within the footprint of the MPA, to adhere to the regulations of the Addo Elephant National Park MPA Gazette no 42479, R no 777 of 23 May 2019.	
Andre Riley **SANParks**	Addo Elephant National Park MPA is the last stronghold of the African Penguin in the world and any further cumulative impacts can add to the pressures on this species.	Please note that a comprehensive list of impacts (i.e. increased water temperature and nutrients on the persistence of harmful algal blooms, impact of effluent on water turbidity and turbidity dispersion, temperature and turbidity impacts on plankton, the pelagic food web and small pelagic fish species, accumulation of discharge elements in the sediments and benthic habitats and associated impacts, amongst others) were assessed in the marine ecological assessment conducted for the proposed project. This document is an integral part of the EIA process.
COMMENTS ON THE DRAFT EIAR RECEIVED FROM DFFE		
DFFE	The Application for Environmental Authorisation and draft Environmental Impact Assessment Report (EIAR) received by the Department on 13 November 2020 and 06 April 2021, respectively, refer. This letter serves to inform you that the following information must be included in the final EIAR:	Statement: No response necessary. Specific issues dealt with below.
DFFE	**(a)Specific comments**	Please note that while the DEIR does include the mitigation measure of implementing a water quality monitoring programme to validate the hydrodynamic modelling study, this is not the only mitigation measure included. The DEIR and FEIR and the respective specialist studies include specific parameters for each industry that may not be exceeded. These include but are not limited to the following: • Wastewater 1 outfall effluent must have a maximum end of pipe effluent salinity of 17 PSU.

I&AP	COMMENT	RESPONSE
	In discussing the uncertainty and the impacts associated with the water quality and measures that will be put in place should the minimum requirements in terms of the Coastal Waters Discharge Permit (CWDP) measure are not met or prove unsuccessful, the draft EIA report refers to monitoring. The Environmental Assessment Practitioner (EAP) states that "investors conduct regular effluent quality monitoring to ensure an understanding of their effluent quality'. Monitoring per se is not a mitigation measure but is only an action to determine (monitor) if the impact predictions and mitigation measures is consistent with the findings of the EIA Report. What will be the impact of to the operations if they cannot discharge water? It is reported that Ecoli tests takes about 3 days to get the results, where will water be stored and treated while they are waiting for test results? Are there provisions to store water onsite while they are treating it before they discharge the water?	• Wastewater 1 outfall to limit the maximum allowable effluent concentrations (end of pipe) for TKN + NH4 to below 5 mg/l (wastewater must be treated on land to meet appropriate standards prior to discharge). • The brine and fin fish effluents are to be discharged separately; otherwise, the ammonia, nitrate and nitrate end of pipe concentrations must be reduced to below 13.37 mg/l. • Wastewater 1 outfall to limit the maximum allowable effluent concentrations (end of pipe) for TSS to below 50 mg/l (wastewater must be treated on land to meet appropriate standards prior to discharge). • Wastewater 1 outfall to limit the maximum allowable effluent concentrations (end of pipe) for sulphide to below 0.21 mg/l; for Hg to below 0.062 mg/l, Co to below 0.21 mg/l; Cu to below 1.04 mg/l, and Cd to below 0.83 mg/l. • Wastewater 1 outfall to limit the maximum allowable effluent concentrations (end of pipe) for COD to below 3110 mg/l (wastewater must be treated on land to meet appropriate standards prior to discharge). • The dosing of sodium metabisulphate must be at levels low enough to avoid an “oxygen sag” in the marine environment receiving the effluent. Environmental best-practise is to ensure aeration of the effluent prior to discharge. The reason that the mitigation measures specifically reference the effluent from the WWTW is because dispersion modelling has shown that all other effluent to be discharged (i.e. cooling and heating water, brine, finfish and abalone effluent) meet the required dilutions and water quality standards at the 300 m RMZ and as such no additional treatment or mitigation for these effluent streams are required, other than the relevant required monitoring. In addition, a high-level project specific emergency response plan has been developed by the CDC. This plan (included as Table 7.1 in the Operational EMPr), outlines the proposed infrastructure, possible failure scenarios and the contingency plans in the event of failure. The plan has also been circulated to SANParks. In terms of the design of the WWTW, the following has been included: • Phase 1: Treated effluent to be put through reed beds after discharge from the WWTW, then discharged to Coega River, then into the Port of Ngqura. • Phase 2: Treated effluent to meet Municipal and Industrial effluent quality guidelines prior to discharge into marine pipeline.

I&AP	COMMENT	RESPONSE
		• Preferred option is that all return effluent be reused within industrial operations in the SEZ. Alternatively, planned design in accordance with the recommendations of the marine dispersion modelling report Rev 01, PRDW, 12 Oct 2020. • The EIA still to be done for the WWTW will address the technology and design of infrastructure. Please note that the potential for *E. coli* is only associated with the WWTW, none of the other industries will have levels of *E. coli* in the effluent. A separate EIA will have to be undertaken for the proposed WWTW, this EIA will have to incorporate the need for effluent storage facilities, where effluent can be stored until such time as the relevant testing has been conducted prior to discharge. The EAP appointed to undertake the EIA Process will have to ensure that all mitigation measures, monitoring protocols, etc. is catered for within their EIA.
	What are the baseline and thresholds of acceptable change against which monitoring will take place, and what actions are proposed if the monitoring results detect change?	All the discharges considered must meet the applicable water quality guidelines (WQGs) (The marine WQGs currently in force are those defined in DWAFF (1995). These have been reviewed and updated in DEA (2019) but these are still in draft form and are not yet gazetted. Therefore, here the DWAFF (1995) version of the guidelines are followed primarily, but are augmented by WQGs from other jurisdictions where required, e.g. ANZECC (2000), IFC (2009), along with peer-reviewed toxicity test data) within the 300 m mixing zone.
	What are the socio-economic and ecological implications should the proposed mitigation measure not be successful?	If the mitigation measures fail to be affective, the resultant marine impacts assessed in the EIR and the relevant specialist reports will be at pre-mitigation significance ratings. Four (out of a possible 17) of which are considered to be HIGH (without mitigation), these include: • Elevated nutrients from aquaculture effluent and wastewater effluent • Increased trace metal and inorganic constituent concentrations • Pathogens present in effluent • Impact on linefish fisheries No further additional impacts to those already assessed will occur.

I&AP	COMMENT	RESPONSE
	The EAP added that "The requirements of the CWDP would need to be met by each investor prior to discharge of effluent from individual investor sites. It is recommended that this be a condition of the Environmental Authorisation.' Please note that the competent authority must be able to apply its mind to all the potential risks and the mitigation/corrective measures thereto associated with the impacts on the water quality prior to decision-making. Deferring decision-making subject to a condition in a EA that investors must meet requirements of the CWDP, constitutes conditional and incremental decision-making, which results in the competent authority not applying its mind to all the potential risks and the mitigation measures, All the potential risks and mitigation measures associated with the impacts on the water quality must, therefore, be fully assessed and be addressed in the final EIA report so that the competent authority can make decisions based on a full understanding of the risks involved and the controls that are available. In addition, consideration needs to be given as to how realistic and practical the mitigation measures are and what costly commitment and assurances have been provided by the applicant to implement these measures. Gaps, uncertainties, and assumptions must be clearly reported. Long-term maintenance burden must also be adequately considered and reported on.	Please note that the following statement quoted by the Case Officer: "The requirements of the CWDP would need to be met by each investor prior to discharge of effluent from individual investor sites. It is recommended that this be a condition of the Environmental Authorisation", was a statement made by the CDC (i.e. the applicant) in the ELC meetings and has been minuted as such. The EIAR does not make reference to this. The EIAR does however state that the applicant must apply for a CWDP from DFFE: Oceans and Coasts and that they will be legally obligated to comply with the relevant conditions of the permit. If standards are exceeded this will have to reported to Oceans and Coasts by the CDC as they will no longer be compliant with the relevant conditions from the CWDP. The actions to be taken as a result will be determined by the relevant authorities, i.e. Oceans and Coasts and management authorities, SANParks. Please note that all gaps, uncertainties and assumptions have been included in the EIR in Section 12.3, and include the following: • The magnetometer picks up magnetic anomalies in and below the seabed. All the hits may not be Maritime and Underwater Cultural Heritage (MUCH) sites, in addition, searches may not find the cause. Their status may only be revealed during the development process. The process gives the developers an idea of where MUCH sites may be uncovered. • Some anomalies may be obvious shipwreck material while others may be covered in conglomerate and/or sand. The inshore area within Algoa Bay is very rocky and there are only sandy patches on the deeper anomalies. The rocks hamper circular searches. The Impact Zone, where the most anomalies were noted is very close to the shore, the bathymetry of the seabed is steep, within 3 km it drops from c.3m to 23m. This caused a big surge which hampered searches for MUCH sites. • The EIAR and associated specialist studies are based on the project description and the site layout provided to CES by the Proponent. • Descriptions of the natural and social environments are based on limited fieldwork and available literature. However, the time available in the field was sufficient to provide enough information to conclude on the status of the affected area, and there is a large body of knowledge available. • A detailed faunal survey was not conducted. The faunal survey was limited to a desktop study, using information from previous ecological surveys conducted in the area, supplemented by opportunistic observations of

I&AP	COMMENT	RESPONSE

		animal species encountered during the site survey.
		• It should be emphasised that terrestrial ecological sampling could only be carried out at one stage in the annual or seasonal cycle – in this case late winter (August). Therefore, it is possible that some spring or summer flowering plant species may have gone undetected.
		• Species of Conservation Concern (SCC) are difficult to find and identify, thus species described in this report do not comprise an exhaustive list.
		• The information, as presented in this document, only has reference to the study site as indicated on the project maps. Therefore, this information cannot be applied to any other area without a detailed investigation being undertaken.
		• The following assumptions were made with respect to the current EEIA:
		  ○ It is assumed that the significance of environmental economic impacts (impacts to ecosystem goods and services) is directly linked to the significance of environmental impacts as determined by the:
		  ✓ Final Scoping Report; and
		  ✓ Specialist Marine Impact Assessment (Anchor, 2021).
		  ○ The time value of money and discounted future cashflows, was not considered.
		  ○ VAT is excluded.
		  ○ Pumping capacity of 15,000 Kw for the western routing of effluent is based on the WSP assessment of the capacity required to pump water to Zone 13 in the SEZ at a height of 70 Metres ASL.
		  ○ There are inherent uncertainties and gaps in knowledge with respect to the valuation of ecosystem goods and services. It is still a developing discipline and attaching values to less tangible goods and services that have no material benefit to which one can attach a monetary value. Subjective estimates or ranges, and qualitative descriptions may be necessary.
		Long-term maintenance burden has also been considered in the EIR, a mitigation measure to this effect has been included in the EIR as well as the operational EMPr, it states the following:
		• Ensure that there are regular maintenance inspections
		As the CDC will be legally bound to the implementation of the EMPr, the responsibility for this will fall on them.

I&AP	COMMENT	RESPONSE
DFFE	**(b) Listed Activities** Please ensure that all relevant listed activities are applied for, are specific and can be linked to the development activity or infrastructure as described in the project description. Only activities applicable to the development must be applied for and assessed.	The listed activities applied for are specific and can be linked to the development activity or infrastructure as described in the project description. Only activities applicable to the development have been applied for and assessed. The listed activities presented in the EIR are the same as those presented in the application form and the approved Final Scoping Report.
DFFE	If the activities applied for in the application form differ from those mentioned in the final EIAR, an amended application form must be submitted. Please note that the Department's application form template has been amended and can be downloaded from the following link https://www.environment.gov.za/documents/forms .	Noted, the listed activities included in the EIR are the same as those included in the application form and the approved FSR, as such no amended application will be submitted to the DFFE.
DFFE	It is imperative that the relevant authorities are continuously involved throughout the environmental impact assessment process as the development property possibly falls within geographically designated areas in terms of numerous GN R, 985 activities. Written comments must be obtained from the relevant authorities and submitted to this Department	Comments have been obtained from SANParks (managing authority), DFFE: Biodiversity and Conservation, SAHRIS as well as DFFE. A meeting was held with Oceans and Coasts on the 11th of April 2021. Two ELC meetings have been conducted on the EIR. All comments received to date as well as the minutes of meetings held with relevant authorities are included in Appendix 2 of this report. A detailed issues and response trail are included as a separate document, labelled Appendix 3.
DFFE	(c) Public Participation Process	CES is confident at all I&AP concerns have been adequately addressed. Please refer to Appendix 3 for a comprehensive Issues and Response Trail. Please note that some of the issues previously submitted by SANParks on the Scoping Report has been re-visited and the responses updated with the relevant information from the Marine Ecological Assessment which was not available at that time.

I&AP	COMMENT	RESPONSE
	From the information presented in the draft EIAR, it is noted that there are concerns from interested and Affected Parties (I&APs) with regards to, inter-alia, the impact of discharges on the water quality, impact of blasting on the marine environment and the storm water management. You are required to adequately address these concerns. The preferred alternative intake servitudes and preferred alternative discharge servitudes to be presented in the final EIA phase must meet both the Coega Development Corporation (CDC) requirements as well as addressing concerns raised by I&APs, (including SANParks) during the environmental authorisation process.	
DFFE	Please ensure that all comments from all relevant stakeholders are submitted to the Department with the final EIAR. Further ensure that all issues raised, and comments received during the circulation of the draft EIAR from registered I&APs and organs of state which have jurisdiction in respect of the proposed activity are adequately addressed and responded to in the final EIAR. Proof of correspondence with the various stakeholders must be included in the final EIAR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments.	CES is confident at all I&AP concerns have been adequately addressed. Please refer to Appendix 3 for a comprehensive Issues and Response Trail. In addition, please refer to Appendix 2 for proof of correspondence.

I&AP	COMMENT	RESPONSE
DFFE	A Comments and Response trail report (C&R) must be submitted with the final EIAR. The C&R report must incorporate all comments for this development. The C&R report must be a separate document from the main report and the format must be in the table format. All comments from I&APs must be responded to adequately. A response such as "noted" is not regarded as an adequate response to I&AP's comments. Comments from each submission must be responded to individually. The dates in which comments were received must be recorded in the C&R.	All comments received during the mandatory public participation period on the DEIR as well as comments received the during the Scoping Phase as well as historical comments received on previous applications have been incorporated into a separate Comments and Response Report (Appendix 3).
DFFE	The Public Participation Process must be conducted in terms of Regulation 39, 40, 41, 42,43 & 44 of the EIA Regulations,2014, as amended,	The PPP process has been conducted in line with these regulations (refer to Chapter 6 of the EIAR) and the approved PPP Plan.
DFFE	**(d) Cumulative Assessment** Should there be any other similar projects within a 30km radius of the proposed development site, the cumulative impact assessment for all identified and assessed impacts must be refined to indicate the following: Identified cumulative impacts must be clearly defined, and where possible the size of the identified impact must be quantified and indicated, i.e. hectares of cumulatively transformed land.	By definition, cumulative marine environmental impacts emanating from the proposed project are related to the overlap with various other sources of anthropogenic disturbance in the vicinity of the proposed servitudes. The “zone of impact” where cumulative impacts may be of concern has been defined by the dispersion modelling results (i.e. the zone size was determined by analysing the figures produced by the dispersion model and measuring the largest plume size on Google Earth by the Marine Ecological Specialist). Under the worst-case scenario, this zone of impact extents some 10 km along shore, and ~ 3 km offshore. Cumulative impacts are only of concern within this “zone of impact”. Anthropogenic disturbances outside this zone of impact will have no influence on the extent or significance rating of the impact and are therefore not relevant to this assessment i.e. impacts occurring outside of this zone of impact but within the 30 km radius are not applicable to this assessment because they will not take place. There are three identified anthropogenic impacts within the zone of impact as defined by the dispersion modelling: 1) the impacts of the simultaneous operation of the multiple pipeline servitudes described in the proposed development; 2) the impacts of the Port of Ngqura, and 3) the development of the Algoa 7 fin-fish aquaculture. This section has been updated in both the Marine Ecological Assessment as well as the EIR.

I&AP	COMMENT	RESPONSE
DFFE	Detailed process flow and proof must be provided, to indicate how the specialist's recommendations, mitigation measures and conclusions from the various similar developments in the area were taken into consideration in the assessment of cumulative impacts and when the conclusion and mitigation measures were drafted for this project.	As above
DFFE	The cumulative impacts significance rating must also inform the need and desirability of the proposed development.	Cumulative impacts have been considered for the needs and desirability.
DFFE	A cumulative impact environmental statement on whether the proposed development must proceed.	This is included in Section 10.1 of the EIR.
DFFE	**(e) Specialist Declaration of Interest** Specialist Declaration of Interest forms must be attached to the final EIAR. You are therefore requested to submit original signed Specialist Declaration of Interest forms for each specialist study conducted. The forms are available on Department's website (please use the Department's template).	Specialist declarations has been included in Appendix 15 of the Final EIR, with the exception of the Wetland Assessment and the Archaeological Assessment that was conducted previously for the greater CDC. The forms are scanned versions of the original signed specialist declaration forms to allow for electronic submission.
DFFE	**(f) Undertaking of an Oath** • Please note that the final EIAR must have an undertaking under oath/ affirmation by the EAP. • Based on the above, you are therefore required to include an undertaking under oath or affirmation by the EAP (administered by a Commissioner of Oaths) as per Appendix 3 of the NEMA EIA Regulations, 2014, as amended, which states that the EIAR must include: "an undertaking under oath or affirmation by the EAP in relation to: i. the correctness of the information provided in the reports; ii. the inclusion of comments and inputs from stakeholders and I&APs; iii. the inclusion of inputs and recommendations from the specialist reports where relevant; and	An undertaking of an Oath has been included in the FEIR as Appendix 17.

I&AP	COMMENT	RESPONSE
	(M any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties'.	
DFFE	**(g) Details and Expertise of the EAP** Please ensure that the Final EIAR includes the details and expertise of the EAP, including a curriculum vitae, in order to comply with the requirements of Appendix 3 of the NEMA EIA Regulations, 2014, as amended.	The EAP for the project is Dr Alan Carter. This is outlined in Section 1.6 of the EIR. Section 6.1 also provides a short overview of his expertise, as well as the expertise for the remaining project team. A CV for Dr Carter is included in Appendix 1 of this document.
DFFE	**h) Environmental Management Programme** The EMPr must also include the following: All recommendations and mitigation measures recorded in the EIAR and the specialist studies conducted.	We have gone through all the relevant documents and double checked that all recommendations and mitigation measures recorded in the EIAR and the relevant specialist studies have been incorporated into both the Construction and Operation EMPrs.
DFFE	An environmental sensitivity map indicating environmental sensitive areas and features identified during the assessment process.	The preferred layout, superimposing all terrestrial and marine based sensitive features have been included as Figure 1.2 in the Construction EMPr as well as the Operational EMPr.
DFFE	In addition to the above, the EMPr must comply with Appendix 4 of the EIA Regulations, 2014, as amended.	Both the Construction and the Operational EMPrs include a Table (Table 1.1), which outlines the requirements of the EMPr as set out in Appendix 4 of the NEMA EIA Regulations (2014 and subsequent 2017 amendments) and this has been cross-referenced it to where those specific requirements are addressed in the documents.
DFFE	**(i) General** Please ensure that the final EIAR includes the period for which the Environmental Authorisation is required and the date on which the activity will be concluded as per Appendix 3 of the NEMA EIA Regulations, 2014, as amended.	The EAP has included that the activity will commence within 5 years of receiving the EA, with an option to apply for an extension for a further 5 years. This is in line with other EA's received from DFFE in regard to projects within the SEZ. Appendix 3, Section (r) of the EIA Regulations state: "Where the proposed activity **<u>does not</u>** include operational aspects, the period for which the environmental authorisation is required and the date on which the activity will be concluded and the post construction monitoring requirements finalised". The operational aspects of this project have been included in the EIR as linked to the listed activities applied for and these operational aspects will be valid for the life of the project. No decommissioning of these servitudes are anticipated at this time.
DFFE	You are further reminded to comply with Regulation 23(1)(a) of the NEMA EIA Regulations, 2014, as amended, which states that'. "The applicant must within 106 days of the acceptance of the scoping report submit to the competent authority -	CES can confirm that the Draft EIAR, specialist studies and EMPrs have been subjected to the required 30 day I&AP comment period from 7 April – 10 May 2021 (refer to Chapter 6 of this document).

I&AP	COMMENT	RESPONSE
	{a) an environmental impact assessment report inclusive of any specialist reports, and an EMPr, which must have been subjected to a public participation process of at least 30 days and which reflects the incorporation of comments received, including any comments of the competent authority."	All comments received during this period have been incorporated here, as well as in a stand-alone IRT inclusive of all comments received on the project to date. This report is available as Appendix 3. Based on our calculations the Final EIR is due to the Department on the 17th of June 2021. Regulation 23 (1) states that "The applicant must within 106 days of the acceptance of the scoping report submit to the competent authority….." Regulation 3 (5) states that: "Where a prescribed timeframe is affected by one or more public holidays, the timeframe must be extended by the number of public holiday days falling within that timeframe." There are 7 public holidays during that period: 21 March – Human Rights Day 22 March – Public Holiday as Human Rights Day Fall on a Sunday 2 April – Good Friday 5 April – Family Day 27 April – Freedom Day 1 May – Workers Day 16 June – Youth Day The 26th of April is a school holiday as Freedom Day falls on the Tuesday, as this is a school holiday this has not been factored this into our calculations. The approval of the Scoping Report was dated 24th of February 2021 (Received by the EAP on the 1st of March).

I&AP	COMMENT	RESPONSE
DFFE	Should there be significant changes or new information that has been added to the final EIAR or EMPr which changes or information was not contained in the reports or plans consulted on during the initial public participation process, you are required to comply with Regulation 23(1)(b) of the NEMA EIA Regulations, 2014, as amended, which states: "The applicant must within 106 days of the acceptance of the scoping report submit to the competent authority - (b) a notification in writing that the reports, and an EMPr, will be submitted within 156 days of acceptance of the scoping report by the competent authority, or where regulation 21(2) applies, within 156 days of receipt of application by the competent authority, as significant changes have been made or significant new information has been added to the environmental impact assessment report or EMP4 which changes or information was not contained in the reports or plans consulted on during the initial public participation process contemplated in sub regulation (1)(a) and that the revised environmental impact assessment report or EMPr will be subjected to another public participation process of at least 30 days'. Should you fail to meet any of the timeframes stipulated in Regulation 23 of the NEITIA EIA Regulations, 2014, as amended, your application will lapse. You are hereby reminded of Section 24F of the National Environmental Management Act, Act No. 107 of 1998, as amended, that no activity may commence prior to an Environmental Authorisation being granted by the Department.	CES can confirm that there have not been any significant changes or inclusion of new information other than: • Additional mitigation measures proposed by SANParks with respect to mitigation and monitoring; and • Details on potential infrastructure failure scenarios for the various effluent streams, and proposed contingency plans.

<table>
<tr><th>I&AP</th><th>COMMENT</th><th>RESPONSE</th></tr>
<tr>
<td>Maxhoba-ayakhawuleza Jezile Environmental Officer Directorate: Sustainable Aquaculture Management Department of Environment, Forestry and Fisheries</td>
<td>Department of Forestry, Fisheries and the Environment, Branch Fisheries Management is the only Department with Marine Aquaculture monitoring and development. The Department has undertaken an Environment Impact Assessment for a sea-based Aquaculture Development Zone and a positive Environmental Authorisation was granted in the beginning of 2020 and the project is under appeals. The ADZ has 3 precents one of them being in front of the Port of Ngqurha (Coega). We would like to know who was part of the I&APs from Branch Fisheries? How far is the process? We would like to receive the document so that we can review and submit comments if there is still time to engage on this process.</td>
<td>The Coega Development Corporation (CDC) intends to develop marine intake and outfall infrastructure servitude(s), the purpose of which is the provision of seawater for various industries (aquaculture, power provision and desalination) via a number of seawater intakes, and the discharge of treated effluent into the marine environment. As such, infrastructure related to this project needs to be constructed along the coast.

A short description of the proposed infrastructure is included below:

Intake Infrastructure
The rationale for developing combined marine intake servitudes is to have a common user servitude in which a number of possible industries can establish infrastructure required to abstract seawater from the marine environment for their specific purposes. The types of industries that will require seawater can be grouped as follows:
• Aquaculture (Finfish)
• Aquaculture (Abalone)
• Desalination
• Power stations (cooling water)
• LNG Gas hub

The following maximum (worst-case) seawater intake requirements are projected:
<table>
<tr><th>Purpose</th><th>Worse case intake flow rates</th></tr>
<tr><td>Cooling Water: Once-through Cooling</td><td>14.70 m^3/sec</td></tr>
<tr><td>Cooling Water: Wet Mechanical Draft Cooling</td><td>0.42 m^3/sec</td></tr>
<tr><td>Aquaculture flow through system for abalone</td><td>5.00 m^3/sec</td></tr>
<tr><td>Aquaculture recirculation system for finfish</td><td>0.94 m^3/sec</td></tr>
<tr><td>Desalination</td><td>2.03 m^3/sec</td></tr>
<tr><td>Total</td><td>23.09 m^3/sec</td></tr>
</table>
There will be two seawater <u>abstraction servitudes</u> with associated infrastructure:
1. Inside the Port of Ngqura for Once-through and Wet Mechanical power station cooling water requirements; and</td>
</tr>
</table>

I&AP	COMMENT	RESPONSE
		2. East of the Port of Ngqura to meet the more specific water quality requirements of the aquaculture industries, and for desalination. Within each servitude, a number of different seawater abstraction technologies will be utilised, depending on industry requirements. Therefore, ALL the following types of abstraction technologies will be implemented: • Abstraction basin with concrete intake channels (within the Port); • Seawater abstraction pipelines; • Vertical beach wells; • Onshore pump stations and screening facilities; and • WEROP wave pumps. Detailed descriptions of these technologies are provided in the Draft Environmental Impact Assessment Report. **OUTFALL Infrastructure** The rationale for developing an integrated marine discharge servitude is to have a common user servitude in which a number of possible industries can establish infrastructure required to discharge effluent into the marine environment. The types of industries that may require discharge of effluent can be grouped as follows: • Aquaculture (Finfish) • Aquaculture (Abalone) • Brine from desalination • Discharge for power stations • Discharge for LNG Gas hub • Waste water from Waste Water Treatment Works (WWTW) The following maximum (worst-case) effluent discharge requirements are projected:

I&AP	COMMENT	RESPONSE

Purpose	Type of effluent	Worse case discharge flow rates
Cooling water: once through cooling	Seawater at 28°C and salinity of 35 ppt	14.70 m^3/sec
Cooling water: wet mechanical draft cooling	Seawater at 23°C and salinity of 53 ppt	0.30 m^3/sec
Aquaculture flow through system for abalone	Seawater with projected concentrations of ammonia, nitrate, nitrite, TSS, COD.	5.00 m^3/sec
Aquaculture recirculation system for finfish	Seawater with projected concentrations of ammonia, nitrate, nitrite, TSS, COD.	0.94 m^3/sec
Desalination brine	Brine at 60 ppt	1.22 m^3/sec
Wastewater	Treated domestic and industrial wastewater with projected concentrations of ammonia, nitrate, nitrite, TSS, COD, salinity heavy metals and E.coli	0.93 + 0.46 m^3/sec
Stormwater	Rainwater	Uncertain
TOTAL		**23.55 m^3/sec**

ALL the following technologies will be implemented to discharge the various effluent streams from the various proposed land-based uses into the sea:

- Tunnel discharge;
- Pipeline discharge; and
- Surf zone discharge.

Detailed descriptions of these technologies are provided in the Draft Environmental Impact Assessment Report (Draft EIAR).

I&AP	COMMENT	RESPONSE
		STORMWATER Stormwater derived from Zone 10 will be attenuated on land behind the foredune area, approximately 40-50 m from the HWM. The stormwater outlet channel will run parallel to the HWM but behind the foredune, and will comprise of gabions and reno mattresses to break the flow of water before it enters a gently sloping lined channel (0%-0.5% slope). This will attenuate the stormwater and allow for the infiltration of water into the underlying sandy substrate. The stormwater structures have been designed to attenuate the 1:5 year storm event. Three outlet channels will be constructed. A berm surrounding the outlet channel will prevent the overflow of stormwater into the surrounding beach environment. A large reno mattress and associated gabions on the far end of the outlet channel will extend to the rocky shoreline to ensure the system can accommodate major rainfall events (>1:5 year) which may result in the overflow of water from the stormwater outlet channel. **FURTHER DETAILS** The proposed Marine Intake and Outfall Infrastructure Servitude Project triggers a Scoping and EIA Process in terms of the 2014 EIA Regulations (as amended in 2017) due to the proposed development triggering Listing Notice (LN) 2 activities, including LN 2 GNR. 984: Activities 6, 14 and 26. In addition to the aforementioned LN 2 activities, the proposed development will trigger numerous activities in LN 1 (GNR. 983) and LN 3 (GNR. 985). Coastal & Environmental Services (Pty) Ltd, trading as CES, has been appointed to undertake the required Scoping and EIA Process on behalf of the proponent. The Marine Intake and Outfall Infrastructure Servitude Project Draft EIAR was available for public review from the 7TH of April until the 10th of May 2021. We are currently in the process of finalising the Final EIAR. However, a copy of the Draft EIAR can still be accessed and/or downloaded via the following links: • CES website: http://www.cesnet.co.za/marine-intake-and-outfall-infrastructure-servitude • CDC website: https://www.coega.co.za/DocumentList.aspx?cmd=browse&objID=80&catID=51

I&AP	COMMENT	RESPONSE
		Please note that you have now been registered as an I&AP on the Stakeholder Database for the abovementioned project. As such, you will be notified of the submission of the Final EIAR to the Department of Forestry, Fisheries and Environment (DFFE). Comments on the Final EIAR can still be submitted to the case officer, Ms Constance Musemburi (email: CMusemburi@environment.gov.za). Please do not hesitate to contact me should you have any queries. Please note that the following officials from DFFE were notified of the proposed development: Milicent Solomons, Luyanda Veto, Wayne Hector, Constance Musemburi, Masina Litsoane, Rose Masela, Stanley Tshitwamulomoni, Yazeed Peterson, Reuben Molale, Tandiwe Njajula, Mulalo Tshikotshi and Mpho Ligudu. As far as we are aware, this sub-unit is responsible for aquaculture environmental interactions, which entails commenting on the impact to the environment assessments associated with aquaculture activities. Please note that the aquaculture component of this application has already been approved (EA received on the 7th of February 2018). This application only deals with discharge infrastructure from the various industries (inclusive of cooling and heating water from power plants, land based abalone and finfish aquaculture, brine from desalination plant, stormwater), which is the mandate of Oceans and Coasts.
COMMENTS RECEIVED AT ELC MEETING ON THE 20TH OF MAY 2021		
Ms Solomons (DFFE)	All is fine with the report and submission to date, as stated by Ms Solomons from DFFE. Noted that the comment raised by the EAP, relating to a comment raised at the previous ELC meeting held in Feb '21, is included in the IRT (comments raised by the DFFE on the DEIR) and the EAP should address the comment via the response contained in the IRT.	All comments will be addressed in the FEIR and the IRT will be updated to reflect all updated information and responses.
Ms Solomons (DFFE)	All comments made by SANParks must be addressed in detail in the Final EIR and the IRT.	All SANParks comments are included in the FEIR.
Ms Solomons (DFFE)	Please confirm the date of when the FEIR is due for submission.	The FEIR is due on the 17th June 2021.

I&AP	COMMENT	RESPONSE
Ms Shirley (CDC)	Enquired whether the DFFE would like a site visit.	DFFE Response: Confirmed no site visit required at this stage. I had a conversation with the reviewing team and we are satisfied with the information presented in the reports to date.
Dr Bezuidenhout (CES)	One of the requests from DFFE is that the FEIR includes 1) the period for which EA is required and 2) the date on which the activity will be conducted, as per Appendix 3 of the NEMA EIA Regulations. In response to the first query, we have included a section in the EIR which states that the activity will commence within 5 years of receiving an EA, with an option to apply for an extension for a further 5 years. This is in line with other EA's received from DFFE for projects within the Coega SEZ. However, we require clarity as regards the second query, which relates to indicating the date on which the activity will be conducted. Section R of Appendix 3 of the EIA Regulations states that where the proposed activity does not include operational aspects, the period for which the EA is required and the date on which the activity will be concluded and the post construction monitoring requirements finalised. This project, however, does have operational aspects and we therefore require clarity on what is required.	DFFE Response: Clarified that DFFE must include a validity period for the EA and a validity period for the operational activities linked to the listed activities applied for. Hence what is required is as it is stated in Appendix 3 of the EIA Regulations.
Ms Shirley (CDC)	We understand the requirements related to the 5-year validity period of the EA. However, we are unsure of the date required for the operational activities, as it is our understanding that the EA will be valid for the lifetime of the project.	DFFE Response (Ms Solomons): It is for the operational aspect. The new EAs that the DFFE issue have a condition that refers to the operational aspects of the activities. Requested Mohammed Essop (DFFE) to clarify. DFFE Response (Mr Essop): The applicant shouldn't stress about this issue. The EIA Regulations stipulate that if there are operational activities linked to the listed activities applied for, then the timeframe of those operational activities must be indicated. So, the question is, do any of the listed activities you have applied for, have an operational in it? If they do, then specify what the validity period of the operational phase of that activity is.

I&AP	COMMENT	RESPONSE
Dr Bezuidenhout (CES)	In the DFFE's approval of the FSR, they indicate that proof must be supplied that a coastal waters discharge permit (CWDP) application has been submitted to Oceans & Coasts (O&C). We want to clarify that we can only submit a completed application to O&C once an EA has been issued, as the EA must form part of the completed CWDP application. Proof of submission of the draft CWDP application to O&C will be provided in the FEIR as an Appendix.	DFFE Response: Proof of communication with the Oceans & Coast Dept must be included in the FEIR. EAP Response: Proof of e-mail correspondence following the meeting held with Oceans and Coasts are included in Appendix 2. In addition, a copy of the CWDP is attached as Appendix 18.
Mr Govender (DEDEAT)	Has Oceans & Coasts provided a timeframe in which they would issue a CWDP?	Oceans & Coasts has indicated that they have 180 days, from receipt of the full application (this means once an EA has been issued), to issue the CWDP.
Mr Govender (DEDEAT)	Out of interest, and assuming all the EA's are issued, how long will it take before CDC implements these projects linked to the marine pipeline EIA?	The first project is the desalination project, followed by a host of proposed aquaculture investments. I cannot confirm obo CDC when the construction will commence. However, the marine pipeline project is a critical project enabling many other projects standing in the queue.