



## Volwaterbaai Desalination Plant

### Notes of meeting with DEA: Oceans and Coasts

**Held: Offices of DEA: Oceans and Coasts, 2 East Pier Rd, V& A Waterfront, 7 March 2013 at 9:00**

**Distribution:** Derick R de Wit (DW): Frontier  
Jack McGhie (JG): RHDHV  
Nitasha Baijnath- Pillay (NBP): Department of Environmental Affairs (DEA):  
Oceans and Coasts  
Thilivhali Merengi (TM): DEA:Oceans and Coasts  
Sharon Jones (SJ): SRK Consulting  
Larissa Heyns (LH): SRK Consulting

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### 1 Welcome and Introduction

SJ and DW opened the meeting, thanks DEA officials for making the time to meet with them and briefly introduced the project. DW provided a brief summary of Frontier's proposed desalination plant and associated infrastructure at Abraham Villiers Bay. SJ indicated that the purpose of the meeting was to engage with DEA: Oceans and Coasts at an early stage of the project so that they could provide input to inform project design, highlight any potential flaws or concerns and confirm any licensing or permitting requirements. NBP elaborated on her role at DEA: Oceans and Coasts in terms of integrated coastal management and explained the roles of the various directorates.

### 2 Project discussion

SJ explained that there are a number of key marine components to the proposed project on which Frontier and SRK would like to request guidance from DEA.

#### 2.1 Seawater extraction

DW briefly explained the process Frontier has gone through in selecting the proposed site for seawater extraction. Beach wells were initially investigated but were found to be unsuitable due to site constraints. Open water intake was thus identified as being the only feasible alternative. A number of sites were investigated for the location of the open water intake pipes. One site was identified as being suitable for this purpose (near Bruinklip). DW indicated that some blasting will be required in the surf zone in order to open up the gully for this purpose.

NBP indicated that the selection and consideration of alternatives will need to be presented in the Environmental Impact Assessment (EIA) and the sites that were identified and the decisions that were taken need to be documented. In terms of permit requirements, NBP indicated that the extraction of sea water is not yet included in Regulations promulgated in terms of the National Environmental Management: Integrated Coastal Management Act 24 of 2008 (NEM: ICMA) and currently falls under the mandate of the Department of Water Affairs (DWA). A future amendment to NEM: ICMA will make allowance for seawater extraction permits to be authorised by DEA: Oceans and Coasts, but this legislation has not

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yet come into effect. The required extraction permits therefore need to be authorised by the DWA, for which a Water Use Licence Application (WULA) will be required. SRK will make contact with DWA in this regard.

SRK

**2.2 Brine discharge**

SJ indicated that two potential sites for disposal of brine had been identified for further investigation.

NPB indicated that a coastal waters discharge permit will be required in terms of NEM: ICMA and that DEA: Oceans and Coasts will be responsible for the issuing of such a permit. NPB indicated that a draft list of assessment criteria has been produced, which provides an overview of the information that must be contained in the permitting application. These are general draft assessment criteria applicable to all applications, although the intention is to develop specialised criteria for different industries in future. NPB indicated that she would provide the assessment criteria to SRK so that these requirements can be taken into consideration when submitting the application. *(These were provided via e-mail following the meeting)*. SRK confirmed that this would be useful as it could inform the scope of the specialist studies that will be undertaken as part of the EIA, to ensure that they also address the requirements for the coastal waters discharge permit. NPB indicated that monitoring of the receiving environment and reporting may be required over the long term and that cumulative impacts would need to be taken into consideration.

NBP

**2.3 Discharge of brine into the surf zone**

NPB indicated that it would not be desirable to discharge brine into the surf zone, which is generally considered a sensitive environment. The disposal of brine into the surf zone will only be permitted if specialist studies, and modelling indicate that there would be sufficient mixing and brine plumes would not result in environmental impacts. As a general principle, it would be preferable to discharge at a point further out to sea.

NPB also indicated that a clear motivation for disposal of brine will need to be provided, including consideration of other alternatives. Potential impacts of the discharge of brine must also take into consideration key habitats or conservation areas close by that may be affected (e.g. birdlife or Marine Protected Areas (MPAs)).

SRK

**2.4 Discharge of solid waste**

DW indicated that there may be some solid material (shells, sand, kelp, etc.) that will be extracted from the ocean and will need to be disposed of. NPB indicated that any unwanted material that is discarded and has no further use is identified as being waste in terms of the National Environmental Management: Waste Act 59 of 2008 (NEM:WA). The disposal of waste into the discharge stream will need to be included in the application and waste should be minimised and avoided as far as possible. NPB indicated that the department would likely request a management plan for dealing with debris/ solid waste. SJ indicated that an Environmental Management Plan (EMP) will be included as part of the EIA, taking the management of waste into consideration.

SRK

**2.5 Position of desalination plant in relation to high water mark**

DW indicated the proposed position of the desalination plant on the property owned by Frontier and requested DEA's comments on the placement of the desalination plant in relation to the high water mark (hwm) of the sea. NPB indicated that the placement could be determined based on engineering requirements, although cognisance must be taken of potential sea-level rise if considering placement close to the hwm. Clear motivation for the selected site must be provided, along with an indication of alternatives considered. TM indicated that coastal setback lines have not yet been determined but that it would be possible to consult with a coastal planner from the department in order to determine the potential requirements in terms of required distances from the coastal zone and the high water mark. TM indicated that she would provide such information to SJ after consulting with a coastal planner from the department.

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**2.6 Blasting**

DW indicated that some blasting may be required during construction, particularly with respect to the sea water extraction point, and asked if there were specific requirements in this regard. TW indicated that their department would comment once the Draft EIA has been submitted in terms of any additional requirements that may be required in terms of blasting.

DEA

**2.7 Permit requirements**

NPB indicated that there will be a number of permit requirements in terms of the application:

- Water extraction permit (issued by DWA);
- Coastal waters discharge permit (issued by DEA: Oceans and Coasts); and
- Permit for driving on the beach (issued by DEA: Oceans and Coasts).

NBP indicated that Environmental Authorisation (EA) would need to be granted before a decision can be taken on the issuing of permits by DEA: Oceans and Coasts. NBP indicated that specialist studies would need to provide specific information in order to comply with the requirements of the permit applications. SJ indicated that the EIA and associated specialist studies will aim to include the information necessary for the permit applications. SRK would aim to submit permit applications along with the Draft EIA Report when submitted to DEA for comment, so that these applications could be considered simultaneously.

SRK

**3 Commenting procedures**

NBP explained the role and authorisation capacity of the integrated coastal management directorate and the various directorates of the DEA: Oceans and Coasts. The processes that are typically followed with the submission of an EIA for authority comment and the permitting mandate of each of the different directorates were briefly discussed.

NPB indicated that the EIA should be submitted to Dr. Razeena Omar for formal comment from the Department. Dr. Omar will pass the documents on to the relevant directorates within the Department for their input. NPB and TW indicated that they should be kept informed of the project as authority representatives and would prefer to receive electronic notifications of the release of the relevant reports in order to facilitate their response.

SRK

**4 Closure**

SJ thanked DEA for their input and assistance, and the meeting was closed.

Minutes taken by: Larissa Heyns

Signed by:

SRK Consulting - Certified Electronic Signature

Date: 13 March 2013



EIA Project Manager: SRK Consulting