Comments received on the draft Basic Assessment Report - Proposed development of a hardened water reservoir and associated piping at the Koeberg Nuclear Power Station located on the Farm Duynefontyn No.1552, Melkbosstrand

**Comment period: 25 April 2017 – 29 May 2017** 

NO	DATE	COMMENT	I&AP, Stakeholder or Authority	RESPONSE	RESPONDENT
1.	2017-05-29	The Draft Basic Assessment Report ("BAR") dated April 2017 as received by the Department on 21 April 2017, refers. The Department has, in principle, no objection to the proposed development, subject to consideration of the following consolidated comment from various Directorates within the Department.	Department of Environmental Affairs and Development Planning (DEA&DP)	Noted.	Adél Groenewald - DJEC
		Directorate: Development Management (Region 1) – Melanese Schippers     Schippers     The Heritage Impact Assessment dated	Melanese Schippers – DEA&DP: Development Management (Region	The significance of the impacts associated with Alternatives 1 and 2 are similar after the management and mitigation of measures have been implemented.	Adél Groenewald – DJEC
		December 2016 compiled by ACRM indicates that no archaeological heritage resources were encountered at Site Alternative 2. Archaeological resources graded as having a low significance were observed at Site Alternative 1. The applicant's preferred site alternative is Alternative 1. Please be advised that the identification of feasible and reasonable alternatives is inextricable linked to the impacts identified. This Directorate would	1)	From a botanical perspective, the potential impacts of the proposed development, at either of the proposed alternative sites, are acceptable since the development is not expected to have any detrimental effects on any botanical resources after mitigation measures are implemented. Therefore Alternative 1 could be approved as the preferred alternative.	Nick Helme - Botanist
	therefore like to highlight that the alternative with the least impacts should be deemed as the most reasonable and feasible alternative.	should be deemed as the most reasonable and feasible p alternative.	The potential impacts of the proposed development, at either of the proposed alternative sites, are acceptable from a heritage perspective. The proposed development is not expected to have any detrimental effects on any heritage resources after mitigation measures are implemented. Therefore Alternative 1 could be approved as the preferred alternative.	Jonathan Kaplan – ACRM	
				From a technical and safety perspective, Alternative 2 is not the preferred option as the vicinity surrounding Alternative 2 has significantly more potential exposure to mobilisations of missile by external events including tornadoes, high winds, explosions and tsunamis which may damage the tanks or the piping. In addition, Alternative 2 is located in an area that may be utilised for other projects or office areas and is thus in greater demand.	The Applicant - Eskom

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				The EAP is of the opinion that Alternative 1 can be authorised as the preferred alternative since the significance of the impacts associated with the proposed activities is the same for both alternatives. Furthermore no impacts, associated with Alternative 1, are expected to have a detrimental effect on the environment or will result in any environmental fatal flaws since the proposed development site is located within the already developed boundary of the KNPS.	Adél Groenewald – DJEC
		2.2. It is noted that water for the reservoirs will be obtained from the local authority (City of Cape Town). Confirmation must be obtained from the local authority that they have sufficient spare, unallocated capacity to provide water to the proposed development. Proof of confirmation must be included in the Final BAR to be submitted to the competent authority. (In this regard, also see comment 4.1 below).		Confirmation was obtained from the local authority that they have capacity to provide water to the proposed development. Refer to Appendix J1 of the final BAR proof of confirmation.	Adél Groenewald - DJEC
		2.3. The diameter of the proposed pipeline as well as the start, middle and end coordinates of the pipeline route must be included in the Final BAR to be submitted to the competent authority.		Noted. This information was included under Section A (2)(a) of the Final BAR. A list of coordinates of the pipeline route was also included under Appendix J3 of the Final BAR.	Adél Groenewald - DJEC
		2.4. The list of interested and affected parties ("I&APs) and a comments and response report responding to comments raised by I&APs must be included in the Final BAR to be submitted to the competent authority.		A list of registered I&APs is included under Appendix E5 of the Final BAR.  This comments and response report responding to comments raised by I&APs is included under Appendix E3 of the Final BAR.	Adél Groenewald - DJEC
		2.5. The final comment from Heritage Western Cape ("HWC") on the Heritage Impact Assessment must be included with the submission of the Final BAR to the competent authority. Please be advised that Appendix J2 of the Draft BAR is not the final comment from HWC, but is rather their response to the Notice of Intent to Develop, requesting that a Heritage Impact Assessment be conducted.		The final comment from HWC has not been received to date. Comment will be forwarded to the competent authority once received.	Adél Groenewald - DJEC
		2.6. Proof of public participation conducted must be included in the Final BAR to be submitted to the competent authority. Please note		Proof of public participation conducted is included under Appendix E of the Final BAR	Adél Groenewald - DJEC

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		that the proof must, inter alia, the following:			
		2.6.1. Copies of the newspaper advertisements (newspaper clippings"), indicating the name of the newspapers and date of publication;			
		2.6.2. Photographs showing the notice displayed on site and a copy of the text displayed in the notice; and			
		2.6.3. With regards to the written notices provided, the following must be included in the Final BAR:			
		<ul><li>(i) if registered or regular mail was sent, a list of the registered or regular mail sent, as obtained from the post office;</li></ul>			
		(ii) if a facsimile was sent, a copy of the facsimile report;			
		(iii) if an electronic mail was sent, a copy of the electronic mail sent and delivery reports; and			
		(iv) if a "mail drop" was done, a signed register of "mail drops".			
		<ol> <li>Directorate: Waste Management – Stefan Milandri</li> <li>This Directorate is satisfied that the Environmental Management Programme ("EMPr") dated April 2017 adequately addresses waste management aspects (including waste management hierarchy) and hazardous materials handling.</li> </ol>	Stefan Milandri – DEA&DP: Waste Management	Noted.	Adél Groenewald - DJEC
		3.2. The electronic copy of the Draft BAR contains an appendix entitled "Application Form". Please be advised that the appendix is an Amendment Application form for the proposed mixed use development on portion of the Remainder of Erf No. 1897, Blue Downs. The correct Application Form must be included with the Submission of the Final BAR to the competent authority.		This mistake was rectified and the correct Application form was provided to the competent authority.	Adél Groenewald - DJEC
		<ul> <li>Directorate: Pollution and Chemicals Management – Gunther Frantz</li> <li>As per comment 2.2 above, confirmation must be obtained from</li> </ul>	Gunther Frantz – DEA&DP: Pollution and Chemicals	Confirmation was obtained from the local authority that they have capacity to provide water to the proposed development. Refer to Appendix J1 of the final BAR proof of confirmation.	Adél Groenewald - DJEC

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		the City of Cape Town that they have sufficient capacity to provide water to the proposed development, especially in the light of the current drought situation.	Management		
2.	27-05-30	CapeNature would like to thank you for the opportunity to comment on the proposed development and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the proposed development.  The application is for a water reservoir for additional water storage for cooling purposes in the case of potential extreme events. Two alternative locations have been proposed, both within the high security area of the property. The property is classified as Protected Area according to the Western Cape Biodiversity Spatial Plan. It should be noted that the entire property (Cape Farm 34) forms part of the Koeberg Nature Reserve.  With regards to the Koeberg Nature Reserve, it should be noted that the private nature reserve proclaimed under the Western Cape Nature and Environmental Conservation Ordinance, 1974 (Ordinance 19 of 1974), has been made compliant with the provisions of the National Environmental Management: Protected Areas Act (NEM:PAA – Act 57 of 2003). A stewardship agreement was signed between Eskom and CapeNature in March 2015 and a protected area management plan (PAMP) has been compiled in terms of NEM:PAA (termed the Management Plan for the Koeberg Nature Reserve). This PAMP has approved by the MEC for Local Government, Environmental Affairs and Development Planning.  All development or changes from a natural condition within a protected area should be controlled by the approved PAMP in terms of NEM:PAA. None of the proposed alternative locations are within the Conservation Zone of the nature reserve. Both location alternatives are within the Developed Zone – Noxious Industrial and are therefore compliant with the PAMP. Any alternative locations within the Conservation Zone would be non-compliant.	Rhett Smart - CapeNature	The EAP is of the opinion that Alternative 1 can be authorised as the preferred alternative since the significance of the impacts associated with the proposed activities is the same for both alternatives. Furthermore no impacts, associated with Alternative 1, are expected to have a detrimental effect on the environment since the proposed development site is located within the KNPS.	Adél Groenewald - DJEC

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		Strandveld listed as Endangered. There are no wetlands or watercourses located within the direct vicinity of the proposed reservoir location alternatives or where they could be affected, therefore no specialist studies are considered necessary in this regard.			
		A botanical specialist study was undertaken which confirmed that the two alternative sites do contain natural vegetation, which had re-established after the initial construction of the nuclear power station. Therefore the natural vegetation is relatively species-poor containing mainly common disturbance tolerant species and the likelihood of any threatened species occurring was considered to be low.			
		Alternative 2 in the south was selected as the preferred alternative by the botanical specialist, as the cover of natural vegetation for this site was approximately 15% of the affected area as opposed to 75% for Alternative 1 in the north. The remainder of Alternative 2 has been transformed by construction activities. CapeNature agrees with the recommendation of the botanical specialist of Alternative 2 as preferred from a biodiversity perspective. It should be noted that there are several other applications for the subject property which have also required specialist studies which can be used to cross-check the current application, and we support the findings as stated above.			
		The overall preferred project alternative is Alternative 1 based on technical and safety factors. The botanical specialist report does indicate that both of the two alternative locations are acceptable, with the impact being of Low Negative (Alternative 1) or Very Low Negative (Alternative 2) significance. Therefore although Alternative 2 is preferred from a biodiversity perspective, CapeNature does not object to the authorisation of either alternative, provided the proposed mitigation measures are implemented.			
		CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.			
3.	17-05-29	City of Cape Town: TDA: Environmental & Heritage Management     Branch	Morné Theron City of Cape Town:	1.1 This error was rectified.	Adél Groenewald - DJEC

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		1.1. Section 10(e) of the Executive (page 27) incorrectly refers to the car park development. Whilst an EIA (DEA reference 14/12/16/3/3/1/1736) is currently being conducted for the on-site car park expansion it is unclear why the car park, instead of the Hardened Water reservoir, is being discussed in this section? This must be corrected.	Environmental & Heritage Management – Northern Region		
		Section 13: Water Use (page 34) of the DBAR states that the reservoir will be filled with municipal water. In this section please include the following:		1.2.1. The amount of water to be used is described under section A(1) of the BAR. The hardened water reservoir will have a total usable volume of approximately 9 500 m <sup>3</sup> .	1.2.1 Adél Groenewald – DJEC
		<ul><li>1.2.1. Stipulate the amount of water required (cross-reference this with page i of the Executive Summary);</li><li>1.2.2. Clarify how and from where the water will be transported to the reservoir.</li></ul>		1.2.2. Water will not be transported or trucked in to fil the reservoir, thus there will be no need for roads. Municipal potable water will be piped in. The piping will connect the reservoir to the closest municipal line.	1.2.2 & 1.2.3 The Applicant - Eskom
		1.2.3. Given the current drought and pressure on the City of Cape Town's potable water supply, it is questioned why the reservoir cannot be filled from the on-site borehole supply?		1.2.3. The water quality of the bore-holes is too poor to use it straight from the ground. Operational experience gained, by using water samples from on-site boreholes at Koeberg Nuclear Power Station, has highlighted that the underground water at Koeberg Nuclear Power Station has a large amount of dissolved Iron and Manganese. When this water is extracted the Iron and Manganese oxidises result in a fine precipitate that could negatively affect, filters, pumps, and steam generators.	
				A tsunami, as postulated in the design extension conditions, has the potential of increasing the water salinity. Water of high salinity may result in stress corrosion cracking in the steam generators resulting in tube failure.	
				Potable water has reduced levels of Iron and Manganese and the design of the tanks will ensure that a tsunami as specified in the design extension conditions will not adversely affect the water quality of the stored potable water.	

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				A filtration plant will have to be installed to utilise the bore-hole water the nature of which is being developed by the desalination project.	
		1.3. The preferred location appears to be adjacent to the proposed Weskusfleur substation (DEA 14/12/16/3/3/2/508), the new Koeberg-Dassenberg 132KV powerline (DEA 12/12/20/2557) and the new Transient Interim Fuel Storage Facility (DEA 14/12/16/3/3/2/947). Yet the Layout Plan (Appendix A2) is unclear as to how the proposed hardened water reservoir will be spatially located in relation to the aforementioned structures/facilities. The need for a composite map is therefore required.		Refer to Appendix A4: Composite Layout Plan included in the Final BAR.	Adél Groenewald - DJEC
		Annexure A of the HIA refers to a Palaeontological Assessment that is not attached to the document, this must be provided.		The Palaeontological Assessment was added to the HIA included under Appendix D2 of the Final BAR. Please note that the findings of the Palaeontological Assessment were incorporated in the Draft BAR that were provided for public comment and the Palaeontological Assessment report was mistakenly omitted from Appendix D2.	Adél Groenewald - DJEC
		<ul> <li>1.5. The site is located in an area of known high archaeological and palaeontological sensitivity and range from local to international significance.</li> <li>1.6. However the recommendations by the heritage specialist on pages 6-7 of the HIA are deemed appropriate and therefore supported. It is noted that the said recommendations by the heritage specialist are included on page 46 of the EMPr.</li> </ul>		Noted and agreed.	Adél Groenewald - DJEC
		City of Cape Town: Specialised Environmental Health: Air Quality Management  Dust mitigation, is to be strictly enforced during all phases of development of proposal, i.e. any site clearing/preparation, the excavations grading, bulldozing, compaction, loading, hauling, stockpiling, etc. during the construction phase of the project in order to prevent dust emission from causing a nuisance to the surrounding environment.		<ul><li>1.1. Noted and agreed.</li><li>1.2. Noted and agreed.</li><li>1.3. Only non-potable water will be used for dust suppression.</li><li>1.4. Noted, the amendment was made in the Final BAR.</li></ul>	Adél Groenewald - DJEC

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		1.1. In this regard, the conditions stipulated in the National Dust Control Regulations (GN. 36974) dated 1 November 2013 must be adhered to at all times during the development process.			
		1.2. Should it be deemed necessary by the Air Quality Management office during the development of the site, a more detailed site specific dust management plan may be requested which is to be submitted to the Head: Specialised Environmental Health at 246 Voortrekker Road, Vasco.			
		1.3. Considering the fact that water restrictions may be on-going for some time, dampening of soil with potable water is to be avoided and alternative means of dust control is to be implemented, which may include the use of non-potable water.			
		1.4. Please note that the City's Air Quality Management by-law has been amended and reference to the 2.10 by-law (page 34 of the report) must be amended to reflect the City of Cape Town Air Quality Management By-law, 2016.			
		City of Cape Town: TDA: Land Use Management     The proposed preferred location and alternative location of the reservoir are being positioned within the area zoned for Risk Industry and as such a primary land use right		Noted and agreed.	Adél Groenewald - DJEC
		4. City of Cape Town: Utility Services, Water & Sanitation  Bulkwater  No infrastructure under the control of the City of Cape Town's Bulk Water Branch exists in the immediate vicinity of the proposed hardened water reservoir shown in the application.  The City of Cape Town's bulk supply system has sufficient water.		The Bulk Water department already indicted, via the attached City comment, that the City will avail available capacity for this strategic Koeberg Nuclear Power Plant facility. The City recommended that the timing of when the Hardened water reservoir is filled, will require timeous upfront application directly to City of Cape Town's Bulk Water department and that filling of the reservoir shall not comment prior to the approval being received from City of Cape Town's Bulk Water department.	Adél Groenewald - DJEC
		The City of Cape Town's bulk supply system has sufficient water resource, treatment, bulk storage and conveyance capacity to supply the 9500 kl of potable water of the combined two tanks		Please refer to Appendix J3 for the Confirmation letter from COCT.	

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		required for a once off filling. In light of the current drought restrictions the filling shall be limited to off-peak demand periods, and shall be subject to prior discussion and agreement with the Bulk Water Branch.			
		Water Reticulation			
		There is water supply to the southern boundary of the Cape Farm 1552 by means of the existing 400mm water supply located off Otto du Plessis Street (refer to the Water Distribution system plan, Drawing No: CTN-R51, attached Figure 1).			
		The peak pressure in the 400mm water main is about 74m. The 400mm supply is capable of delivering 144 l/s maximum. In practice this means it will take about 18,5 hrs to fill the reservoir.			
		[Note: There is also a 500mm water main along the Westcoast Road however the 500mm water main is dedicated to the far north (i.e. Atlantis, Pella and Mamre) and not suitable to draw from]			
		<u>Sewerage</u>			
		Sewerage is not affected nor required due to the nature of this project.			
		5. <u>City of Cape Town: TDA, Assets &amp; Maintenance</u> It is mentioned in the report that the total footprint will be 2 000m², however it is unclear whether this will be all hard surfaced. Stormwater run-off from a 2 000m² area will be negligible, yet irrespective of the aforementioned uncertainty, the report should address how stormwater run-off will be managed.		Stormwater run-off will be managed according to the management measures described in Section 2.9.2 of the EMPr included under Appendix G of the Final BAR.	Adél Groenewald - DJEC
4.	17-05-29	The application form and the draft basic assessment report (DBAR) received by the Department 24 April 2017 and the acknowledgement of receipt thereof dated 24 April 2017 refers.	Department of Environmental Affairs – Constance Musemburi	The listed activities applied for is relevant to the proposed development.	Adél Groenewald - DJEC

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		This Department has the following comments on the abovementioned application:  i. 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.			
		ii. If the activities applied for in the application form differ from those mentioned in the final BAR, 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. Please note that the activities you applied for are in line with the amendment regulations of April 2017.		The activities applied for are in line with the NEMA EIA Regulations, 2014 (as amended).	Adél Groenewald - DJEC
		iii. The Environmental Assessment Practitioner (EAP) must ensure that an adequate motivation on the applicability of each listed activity that triggers the proposed development is provided. The applicability of each activity against the actual threshold for the proposed development must be verified.		The EAP is of the opinion that adequate motivation on the applicability of each listed activity that triggers the proposed development was provided.	Adél Groenewald - DJEC
		iv. Please ensure that all issues raised and comments received during the circulation of the BAR from registered I&APs and organs of state which have jurisdiction in respect of the proposed activity are adequately addressed in the final BAR. Proof of correspondence with the various stakeholders must be included in the final BAR. Should you be unable to obtain comments, proof of the attempts that were made to obtain comments must be submitted to the Department. The Public Participation Process must be conducted in terms of Regulation 39, 40, 41, 42, 43 & 44 of the EIA Regulations 2014.		The EAP is of the opinion that all comments received were adequately addressed in this comments & response report.	Adél Groenewald - DJEC
		v. Please ensure that all issues raised and comments received during the circulation of the draft BAR from registered I&APs and organs of state which have jurisdiction in respect of the proposed activity are adequately addressed in the final BAR. Proof of correspondence with the various stakeholders must be included in the final BAR. Should you be unable to obtain comments, proof of		The EAP is of the opinion that all issues raised and comments received during the circulation of the draft BAR from registered I&APs and organs of state which have jurisdiction in respect of the proposed activity were adequately addressed in the final BAR.	Adél Groenewald - DJEC

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		the attempts that were made to obtain comments must be submitted to the Department.			
		vi. Please provide a description of all 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 environment and on the community that may be affected by the activity as per Appendix 1 (2) (e) and 3 (1) (h) (i) of GN R.982 of 2014. Alternatively, you should submit written proof of an investigation and motivation if no reasonable or feasible alternatives exist in terms of Appendix 1.		A description of all 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 environment and on the community that may be affected by the activity were provided in the final BAR.	Adél Groenewald - DJEC
		vii. The final BAR must provide an assessment of the impacts and mitigation measures for each of the listed activities applied for.		An assessment of the impacts and mitigation measures for each of the listed activities applied for were provided in the final BAR.	Adél Groenewald - DJEC
		viii. Cumulative impacts of similar type of developments in the area must form part of the studies that must be assessed as part of the final BAR process.		Cumulative impacts were assessed and provided in the final BAR.	Adél Groenewald - DJEC
		ix. The final BAR must provide the technical details for the proposed facility in a table format as well as their description and/or dimensions.		Please refer to Appendix C of the final BAR.	Adél Groenewald - DJEC
		<ul> <li>x. In terms of Appendix 1 of the EIA Regulations, 2014, the report must include an undertaking under oath or affirmation by the EAP in relation to: <ul> <li>The correctness of the information provided in the reports;</li> <li>The inclusion of comments and inputs from stakeholders and I&amp;APs</li> <li>The inclusion of inputs and recommendations from the specialist reports where relevant;</li> <li>Any information provided by the EAP to interested and affected parties; and</li> <li>Responses by the EAP to comments or inputs made by interested or affected parties.</li> </ul> </li> </ul>		Please refer to Appendix H of the final BAR.	Adél Groenewald - DJEC

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		xi. In terms of Appendix 1 (3) (1) (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.		Please refer to Appendix H of the final BAR.	Adél Groenewald - DJEC
		xii. You are further reminded that the final BAR to be submitted to this Department must comply with all the requirements in terms of the scope of assessment and content of BAR in accordance with Appendix 1 of the EIA Regulations, 2014.		Note.	Adél Groenewald - DJEC
		xiii. Further note that in terms of Regulation 45 of the EIA Regulation 2014, this application will lapse if the applicant fails to meet any of the timeframes prescribed in terms of the these Regulations, unless an extension has been granted in terms of Regulation 3(7). Please submit a CD together with the final BAR.  You are hereby reminded of Section 24F of the National Environmental management Act, Act No 107 or 1998, as amended, that no activity may		Noted.	Adél Groenewald - DJEC
		commence prior to an environmental authorisation being granted by the Department.			
5.	18-07-2017	Minutes on HOMS meeting (please note that the minute is subject to edits).  It was agreed that the matter was referred to APM.  HOMS recommends that the proposal be approved. ECO to be trained in fossil finds procedure.	Andrew September - HWC	Final comment from HWC has not been received to date.  It is evident from the meeting minutes that the proposal can be approved on condition that the ECO has to be trained in fossil finds procedure.  Final comment from HWC will be forwarded to the competent authority when received.	Adél Groenewald - DJEC