



MINUTES OF MEETING

**Algoa Reconciliation Strategy: Administrative and Technical Support Group Meeting No 3,
held on 26 April 2012 at the offices of Aurecon, Port Elizabeth**

Item		Action																																																																														
1.	<p>WELCOME</p> <p>The chairperson, Ms Isa Thompson welcomed everybody to the meeting.</p>																																																																															
2.	<p>ATTENDANCE AND APOLOGIES</p> <p>Attendance</p> <table border="0"> <tr><td>Ms Isa Thompson</td><td>DWA: NWRP (S)</td><td>IT</td></tr> <tr><td>Mr Archinton Thobejane</td><td>DWA: NWRP (S)</td><td>AT</td></tr> <tr><td>Mr Dewald Coetsee</td><td>DWA: NWRI: Southern Operations</td><td>DC</td></tr> <tr><td>Ms Siziwe Blie</td><td>DWA: DD:IE</td><td>SB</td></tr> <tr><td>Mr Theo Geldenhuys</td><td>DWA: CE: Water Resources Management</td><td>TG</td></tr> <tr><td>Mr Pierre Joubert</td><td>Gamtoos IB</td><td>PJ</td></tr> <tr><td>Ms Rienette Colesky</td><td>Gamtoos IB</td><td>RC</td></tr> <tr><td>Mr Stephen Mullineux</td><td>DWA: DCE: Water Use Regulation</td><td>SM</td></tr> <tr><td>Mr Martin Labuschagne</td><td>DWA: ECRO: WR&U-WUE</td><td>ML</td></tr> <tr><td>Mr Stan Groenewald</td><td>NMBM</td><td>SG</td></tr> <tr><td>Mr Stuart Ferguson</td><td>NMBM</td><td>SF</td></tr> <tr><td>Mr Paul du Plessis</td><td>NMBM</td><td>PdP</td></tr> <tr><td>Mr Jeff Govender</td><td>DEAET</td><td>JG</td></tr> <tr><td>Mr Graham Taylor</td><td>Coega IDZ</td><td>GT</td></tr> <tr><td>Mr Willie Olivier</td><td>Coega IDZ</td><td>WO</td></tr> <tr><td>Mr Piet Snyman</td><td>Cacadu DM</td><td>PS</td></tr> <tr><td>Mr Dup van Reenen</td><td>AfriCoast Engineers SA</td><td>DvR</td></tr> <tr><td>Mr Erik van der Berg</td><td>Aurecon</td><td>EvdB</td></tr> <tr><td>Ms Reina Zastron</td><td>Aurecon</td><td>RZ</td></tr> </table> <p>Apologies</p> <table border="0"> <tr><td>Mr Menard Mugumo</td><td>DWA: OA (S)</td><td>MM</td></tr> <tr><td>Mr Elias Nel</td><td>DWA: WRPS</td><td></td></tr> <tr><td>Mr Koos Viljoen</td><td>DWA: NWRI</td><td></td></tr> <tr><td>Mr Stephen Mullineux</td><td>DWA: DCE: Water Use Regulation</td><td></td></tr> <tr><td>Ms Celiwe Ntuli</td><td>DWA: WRPS</td><td></td></tr> <tr><td>Mr Pieter Viljoen</td><td>DWA: WRPS</td><td></td></tr> <tr><td>Ms Jenny Pashkin</td><td>DWA: WRPS</td><td></td></tr> </table>	Ms Isa Thompson	DWA: NWRP (S)	IT	Mr Archinton Thobejane	DWA: NWRP (S)	AT	Mr Dewald Coetsee	DWA: NWRI: Southern Operations	DC	Ms Siziwe Blie	DWA: DD:IE	SB	Mr Theo Geldenhuys	DWA: CE: Water Resources Management	TG	Mr Pierre Joubert	Gamtoos IB	PJ	Ms Rienette Colesky	Gamtoos IB	RC	Mr Stephen Mullineux	DWA: DCE: Water Use Regulation	SM	Mr Martin Labuschagne	DWA: ECRO: WR&U-WUE	ML	Mr Stan Groenewald	NMBM	SG	Mr Stuart Ferguson	NMBM	SF	Mr Paul du Plessis	NMBM	PdP	Mr Jeff Govender	DEAET	JG	Mr Graham Taylor	Coega IDZ	GT	Mr Willie Olivier	Coega IDZ	WO	Mr Piet Snyman	Cacadu DM	PS	Mr Dup van Reenen	AfriCoast Engineers SA	DvR	Mr Erik van der Berg	Aurecon	EvdB	Ms Reina Zastron	Aurecon	RZ	Mr Menard Mugumo	DWA: OA (S)	MM	Mr Elias Nel	DWA: WRPS		Mr Koos Viljoen	DWA: NWRI		Mr Stephen Mullineux	DWA: DCE: Water Use Regulation		Ms Celiwe Ntuli	DWA: WRPS		Mr Pieter Viljoen	DWA: WRPS		Ms Jenny Pashkin	DWA: WRPS		
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3.	<p>ADOPTION OF AGENDA</p> <p>The agenda was adopted. Later during the meeting two items were removed from the agenda, and an item on Coega IDZ water requirements was added.</p>																																																																															

Item		Action
4.	<p>APPROVAL OF PREVIOUS MINUTES</p> <p>The minutes of the meeting held on 15 March 2012 was adopted with no corrections.</p>	
5	<p>RELEVANT PROJECTS & INITIATIVES UNDERTAKEN BY OTHER RESPONSIBLE ENTITIES</p> <p>5.1 Annual Operating rules</p> <p>The model for the operating rules will be run in May to be able to make the decisions regarding water allocations/restrictions for the period Jul 2012-June 2013. No date for such run has been finalised yet. DC has contacted the office of Dr Mwaka for a date and is awaiting a response. A meeting has to be set up to discuss the water allocations. PJ asked that the decision be finalised by mid-June 2012 at the latest.</p> <p>5.2 Establishment of upper Kouga/Kromme Irrigators WUA</p> <p>The <i>status quo</i> stays the same. The idea was that an umbrella WUA would be formed that could act as a spokesperson for all irrigators in the area. The situation is however that many irrigators don't want to amalgamate. The current irrigation boards will therefore be transformed to individual water users associations.</p> <p>5.3 Verification and validation of water use study of a part of the Kromme and Kouga catchment areas</p> <p>This project is the responsibility of the DWA EC Regional Office. Following an invitation for tenders, three tenders were received but only two were responsive. The experience and legal background of the responsive tenderers are doubtful. It came to light that the tender advert didn't clearly state this project to be a study and therefore many companies/consultants didn't tender. IT suggested that the tender be re-advertised. SB will discuss this with her Director and will respond accordingly. IT indicated that the study is very important and should get started as early as possible, as the results are required as input in the update of the water availability assessment study that is urgently required..</p> <p>5.4 Algoa Bridging Study</p> <p>No discussion. The Algoa Bridging study was completed and findings were incorporated in subsequent studies. The final report is still awaited.</p> <p>5.5 Coega IDZ: Power supply overview</p> <p>Coega IDZ currently experiences energy supply constraints, which complicates the situation in terms of attracting new investors. There is currently no guarantee of supply. Dale Liebenberg of Manalec, the energy service provider, made a presentation on the energy situation. He showed the national energy supply constraints, the local constraints as well as the IDZ requirement forecast. The following points were made:</p> <ul style="list-style-type: none"> • All new consumers in the IDZ must produce an Energy Efficiency Plan; • Municipalities are required to reduce their electricity demand by 10% when called upon by Eskom; • Reduction of usage will be done in proportion to sector usage (+- 50% industry); • There will be a register of voluntary demand reduction; • If this is not enough, load shedding will be introduced; • There are ever-increasing requirements for energy efficiency; • The possible introduction of partial own generation (co-generation and/or renewable). <p>It was proposed that Dale should make an updated presentation at the next steering committee meeting to be held on 26 September</p>	<p>BM/DC</p> <p>SB</p> <p>MM</p> <p>WO/DL</p> <p>DL/RZ</p>

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5.6	<p>South African Revenue Protection Group</p> <p>No discussion as this group only meets once a year.</p>																					
6. 6.1	<p>WATER REQUIREMENTS AND USE</p> <p>Coega IDZ water requirements</p> <p>WO announced that Provincial Treasury made an allocation for a water re-use initiative of R18 million for this financial year and an allocation of R43 million for the next financial year. This money will be spent towards the preliminary design of the project. No money has however been made available for construction of the project. This could potentially result in the privatisation of the scheme.</p> <p>As the EIA issued for large Coega industries prescribes that no potable water can be used for industrial use, representatives from DEAET as well as from CDC were invited to discuss the possibility of potable water to be used as bridging industrial supply at CDC. Potential investors in the Coega IDZ need guarantees of water supply.</p> <p>Andrea Holdt of CDC gave background on the water requirements at the Coega IDZ. AfriCoast has investigated the provision of industrial water to the Coega IDZ and DvR gave an overview of the current situation.</p> <p>The latest CDC update on water requirements within the IDZ indicates the following potable and industrial water requirements:</p> <table border="1" data-bbox="256 1039 1291 1205"> <thead> <tr> <th>Water requirements</th> <th>2015</th> <th>2020</th> <th>2040</th> </tr> </thead> <tbody> <tr> <td>Potable (Ml/day)</td> <td>13.7</td> <td>36.2</td> <td>51.6</td> </tr> <tr> <td>Industrial standard (Ml/day)</td> <td>71.7</td> <td>135.8</td> <td>157.1</td> </tr> <tr> <td>Total Water Requirement(Ml/Day)</td> <td>85.4</td> <td>172.0</td> <td>208.7</td> </tr> <tr> <td>Total Water Requirements (million m³/a)</td> <td>31.2</td> <td>62.8</td> <td>76.2</td> </tr> </tbody> </table> <p>NMBM faces a challenge to complete the Nooitgedagt Low Level Scheme (NLLS) by end 2013 due to a funding shortfall. The proposed water re-use scheme (Phase 1) from Fish Water Flats WWTW to supply the IDZ will consist of a 30 Ml/day scheme at a capital cost of R450 million. The EIA has been completed and a ROD is due in May 2012.</p> <p>Once completed, the NLLS will increase the available NMBM water resources by 90 Ml/day which will result in the System having surplus potable water for a period of some 4-5 years.</p> <p>Design and construction of the water re-use scheme will take some 3-4 years to complete. Because of the delayed implementation programme of the scheme, combined with scheme funding problems currently being experienced, the DEA was approached for an amended ROD condition, which will permit NMBM to supply potable water in lieu of industrial standard water to the Coega IDZ, for a bridging period of 3 years.</p> <p>The way forward was agreed as follows:</p> <p>A new application for the amendment of the clause of the ROD will be prepared. All stakeholders must provide their motivations for the change. CDC will make the application and discuss it with DWA. DvR will assist CDC with the technical information required. SB and B Kama from DWA will sort out final details regarding licencing. DC will also assist as needed.</p> <p>CDC will call a meeting with all role-players before submission of the application. The conditions on the wording of the amendment, as well as the timeframe of the validity of the revised ROD need to be discussed. DWA will send the final amendment request with the various motivations to DEAET.</p>	Water requirements	2015	2020	2040	Potable (Ml/day)	13.7	36.2	51.6	Industrial standard (Ml/day)	71.7	135.8	157.1	Total Water Requirement(Ml/Day)	85.4	172.0	208.7	Total Water Requirements (million m ³ /a)	31.2	62.8	76.2	<p>CDC DvR SB/BK DC</p> <p>CDC</p> <p>DWA</p>
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<p data-bbox="118 656 161 685">6.2</p> <p data-bbox="118 1016 161 1046">6.3</p>	<p data-bbox="252 264 1305 416">On PJ's comment regarding guarantees (assurances) of water supply being provided to CDC but not to agriculture, IT indicated that nobody will get a 100% guarantee of supply, and that during drought situations business will also have a restricted supply. Guarantees will also be addressed during the meeting on the amendment of the ROD. DC assured PJ that water will not be taken away from agriculture to be given to industry.</p> <p data-bbox="252 434 1305 521">Investors are not currently charged extra for bulk infrastructure provision. WO indicated that Coega IDZ would lose its potential investors if this was put in place, but this possibility could be considered in future.</p> <p data-bbox="252 539 1305 627">JG indicated that a WWTW is planned for the Coega IDZ, but critical mass is a problem. He said that this avenue could be pursued. DvR replied that the option forms part of the water master plan.</p> <p data-bbox="252 656 639 685">Kouga LM water requirements</p> <p data-bbox="252 703 1305 913">AfriCoast, under its assignment for the NMBM WMP review, investigated the water requirement growth of the Kouga Municipality. The combined water requirement growth from the NMBM Kromme River supply system was 10.2% per annum (2000/01 to 2009/10). This additional water is abstracted from the NMBM system. SG indicated that the Metro needs to investigate the matter urgently, as there might be large losses in their distribution system. NMBM will engage with the Kouga Municipality to address the matter. He asked that DvR forward him the relevant information.</p> <p data-bbox="252 931 1305 992">PS from Cacadu DM said that Cacadu is not a water service authority and don't have any authority over Kouga.</p> <p data-bbox="252 1016 639 1046">Kouga LM water requirements</p> <p data-bbox="252 1064 1086 1093">The scenarios will be updated in September for the next SSC meeting.</p>	<p data-bbox="1369 824 1426 884">SG DvR</p> <p data-bbox="1369 1048 1426 1077">EvdB</p>
<p data-bbox="118 1144 129 1173">7</p> <p data-bbox="118 1211 161 1240">7.1</p>	<p data-bbox="252 1144 995 1173">IMPROVING THE CONFIDENCE OF WATER AVAILABILITY</p> <p data-bbox="252 1211 1305 1272">Proposed water availability assessment study – Kouga-Loerie and Churchill-Impofu</p> <p data-bbox="252 1290 1305 1458">Verified and validated water use information from the study for the Kouga dam catchment, as reported under point 5.3, is needed for this study. The study was planned to start in October 2012, but with the delay of the V&V Study, this study would probably start much later. An investigation into the feasibility of the raising of Kouga Dam is dependent on the availability of this information.</p>	
<p data-bbox="118 1487 129 1516">8</p> <p data-bbox="118 1547 161 1576">8.1</p> <p data-bbox="118 1711 161 1740">8.2</p>	<p data-bbox="252 1487 619 1516">OPERATIONAL EFFICIENCY</p> <p data-bbox="252 1547 1235 1576">Darlington Dam Operating capacity and dam safety rehabilitation programme</p> <p data-bbox="252 1594 1305 1659">DC indicated that there have been no new developments. The operating rules and water quality issues still need to be addressed by Dr Beason Mwaka.</p> <p data-bbox="252 1711 826 1740">Additional balancing storage in the LSRGWS</p> <p data-bbox="252 1758 1305 1877">The issue of enlargement of the capacity of the Scheepersvlakte Balancing Dam and canal still needs to be taken up between NMBM, Dewald Coetzee of DWA NWRI: Southern Operations and Menard Mugumo (MM) of DWA Options Analysis. No further discussion.</p>	<p data-bbox="1347 1637 1449 1666">BMwaka</p> <p data-bbox="1347 1809 1449 1839">MM/DC</p>
<p data-bbox="118 1906 129 1935">9</p> <p data-bbox="118 1957 161 1986">9.1</p>	<p data-bbox="252 1906 373 1935">WC/WDM</p> <p data-bbox="252 1957 469 1986">Report by NMBM</p> <p data-bbox="252 2004 1305 2092">SG handed out a graph of historical water use by the Metro. He reported that new interventions like pressure management are on-going. IT asked SG to indicate updated savings achieved, budget and expenditure on WC/WDM on the same graph for the</p>	<p data-bbox="1378 2040 1417 2069">SG</p>

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	Entitlement Description	Average paid per hectare (R)	Cost in cents/m³ at 98% assurance of supply excluding 107,44 cents/ m³ Nooitgedagt tariff	Cost in cents/m³ at 98% assurance of supply including 107,44 cents/ m³ Nooitgedagt tariff	
	Unused entitlements	R22 000	17	124 cents/ m ³	
	Entitlement developed and productive with flood irrigation	R80 000	63	170 cents/ m ³	
	Entitlement developed and productive with centre pivot irrigation	R120 000	94	201 cents/ m ³	
	Many assumptions were made before arriving at the figures, thus the cost could change slightly.				
10.3	Desalination of Sundays River irrigation return flows SM indicated that he is impressed by the work done by AfriCoast. It seems that the water quality is not as bad as was anticipated. No further discussion.				
11	RE-USE OF WATER				
11.1	NMBM Water Master Plan Update DvR indicated that he would report back to the Portfolio Committee on 8 May 2012. The update should be finalised by end May.				
11.2	Re-use of water treated to industrial standards – Coega and Fish Water Flats WWTW's See point 6.1. A planning report has been compiled, including an option for privatisation. WO indicated that the Coega IDZ has requested NMBM to pursue this option but has not yet received any feedback.				
11.3	Re-use of water treated to potable standards A variation of the potable re-use of water intervention has been tabled, making use of surplus effluent from Fishwater Flats WWTW that could be recycled via Loerie Dam The concise write-up of this alternative option was distributed with the agenda.				
12	GROUNDWATER				
12.1	NMBM Groundwater Scheme study in Progress The final borehole siting along the Coega Kop area and the Uitenhage areas is in progress, after which drilling can start. Two drilling tender processes failed as the tenderers were deemed non-responsive on both occasions. The existing DWA regional drilling contracts are now considered as a potential means to undertake the drilling. NMBM planned on using these DWA contracts, but the planned boreholes at Coega Kop will be deeper than what is specified by the DWA contracts. The DWA tenders could therefore only be used for relatively shallow holes. The NMBM plans on asking for quotes for the deep holes, but this still needs to be approved.				
12.2	Other Groundwater Issues No discussion. The final report on the drilling target areas will <i>inter-alia</i> be made available to Kouga LM.				RM
13	SEAWATER DESALINATION				

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13.1	<p>NMBM desalination scheme</p> <p>The Swartkops Desalination plant designs have been put on ice. The NMBM plans to buy the land to be able to keep this option as an emergency scheme. This is however proving challenging, as the owner of the land expects to be paid an exorbitant amount. In the longer run a larger scheme to the western side of the metro would be needed. Funding for the investigations of such a scheme is in place and the NMBM has appointed a consultant to undertake a feasibility study. The consultant should consider contracting the NMMU for monitoring of the seawater quality and temperature.</p>	NMBM
13.2	<p>Seawater desalination prospects at Coega IDZ</p> <p>WO noted that this option currently seems very unlikely. This would only realise if no treated waste water is available for Coega. Energy supply for such a scheme would be problematic. It would only be a possibility if Eskom signs up as an investor at the IDZ.</p>	
13.3	<p>Monitoring of Seawater Quality</p> <p>DvR liaised with the NMMU regarding monitoring activities. The following was reported at the Steering Committee Meeting:</p> <ul style="list-style-type: none"> • Prof Eileen Campbell of NMMU Botany Department has been monitoring the Algoa Bay waters for three years – the start was a bit step-wise (i.e. not all stations were monitored from the beginning) – but this will continue as long as funding is available. They are monitoring 7 stations in the Bay, 5 shore-based stations in the eastern sector of the Bay and 5 stations in the western sector. • Irregular (temporal) data from as far back as 20 years, for most of the shore-based sites and a dataset for a portion of the Bay from 10 years ago are available. • A fortnightly dataset between Ngqura and Gamtoos, sampled over a year and taken some 3 years ago, is available. <p>The shore-based sampling is done by NMMU and the rest is done under a partnership between NMMU and SAEON (Dr Tommy Bornman). SAEON is the SA Environmental Observation Network which works together with the NRF (National Research Foundation) which is linked to most universities. The datasets have not yet been loaded onto the SAEON site, so the data is not currently available. This will happen during the next year. NMMU is collating all the different datasets for synthesis and will probably have completed that by mid-year 2012. SAEON has been collecting data, all within Algoa Bay, since 2007.</p> <p>SAEON sampling includes:</p> <ul style="list-style-type: none"> • Biological – zooplankton and phytoplankton; • Nutrients - phosphates, silicates, nitrates, nitrites and ammonia; • Physico-chemical – pH, DO, turbidity, temperature, salinity and currents. <p>At present there is no continuous sampling on the wild side (west of Cape Recife), however there is a PhD project being conducted on the reefs at Sardinia Bay. No details are yet available on the sampling for this project.</p> <p>AfriCoast has started the registration process with SAEON. Both NMMU and SAEON are conducting ongoing monitoring and AfriCoast will work with them and access their data.</p>	

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14	<p>LOCAL SURFACE WATER DEVELOPMENT</p> <p>Kouga Dam Safety Work in light of Potential Raising DWA's Directorate Dam Safety has started an investigation into the rehabilitation and stabilisation of the Kouga Dam wall. If the study points out that significant construction would be needed for the rehabilitation, the Dam could potentially also be raised at the same time. This will be determined by the investigations and modelling still to be undertaken.</p> <p>A meeting scheduled, for mid-April, was unfortunately postponed. PJ mentioned that there will be a delay as an EIA is needed. The upgrading of the road will probably only start in April 2013 and construction at the dam will start one year later.</p>	
15 15.1	<p>COMMUNICATION</p> <p>Media Release The media release has been drafted and is on the way to DWA management for their approval before release. The release will soon be sent out.</p>	
16 16.1 16.2	<p>IMPACTS ON YIELDS OF EXISTING DAMS: ECOLOGICAL RESERVE AND CLIMATE CHANGE</p> <p>Implementing the Reserve for existing dams DC stated that no instruction of implementation of the signed Reserve has as yet been received.</p> <p>Climate Change No discussion</p>	
17.	<p>GENERAL Nothing noted under general.</p>	
18.	<p>NEXT MEETING The next meeting will take place on Thursday 16 August 2012 at 08h30.</p>	
19.	<p>CLOSURE The meeting was adjourned at 13h00.</p>	

Enclosed:

1. Discussion document by Stephen Mullineux on Trading of Orange River Irrigation Authorisations – Upper Fish River (strictly not for further distribution)
2. Kromme Reserve Summary Document