



MINUTES OF MEETING

**Algoa Reconciliation Strategy: Administrative and Technical Support Group Meeting No 2,
held on 15 March 2012 at the offices of Aurecon, Port Elizabeth**

Item		Action																																																																								
1.	WELCOME The chairperson, Ms Isa Thompson welcomed everybody to the meeting.																																																																									
2.	ATTENDANCE AND APOLOGIES Attendance <table><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>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 Elias Nel</td><td>DWA: WRPS</td><td>EN</td></tr><tr><td>Mr Andrew Lucas</td><td>DWA: WRTU</td><td>AL</td></tr><tr><td>Mr Galelo Mbambisa</td><td>DWA: WSS</td><td>GM</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 Fanus Fourie</td><td>DWA: WRPS</td><td>FF</td></tr><tr><td>Mr Willie Olivier</td><td>Coega IDZ</td><td>WO</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> Apologies <table><tr><td>Mr Menard Mugumo</td><td>DWA: OA (S)</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><tr><td>Mr Martin Labuschagne</td><td>DWA: ECRO: WR&U-WUE</td><td></td></tr></table>	Ms Isa Thompson	DWA: NWRP (S)	IT	Mr Archinton Thobejane	DWA: NWRP (S)	AT	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 Elias Nel	DWA: WRPS	EN	Mr Andrew Lucas	DWA: WRTU	AL	Mr Galelo Mbambisa	DWA: WSS	GM	Mr Stan Groenewald	NMBM	SG	Mr Stuart Ferguson	NMBM	SF	Mr Paul du Plessis	NMBM	PdP	Mr Fanus Fourie	DWA: WRPS	FF	Mr Willie Olivier	Coega IDZ	WO	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)		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		Mr Martin Labuschagne	DWA: ECRO: WR&U-WUE		
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3.	PURPOSE OF THE MEETING The purpose of the meeting is to follow up on the identified actions of the Strategy Steering Committee (SSC) meeting.																																																																									

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4.	<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>	
5	<p>APPROVAL OF PREVIOUS MINUTES</p> <p>The minutes of the meeting held on 22 November 2011 was adopted with the following corrections:</p> <p>P1 under 2. Attendance: 'Archington' replaced with 'Archinton'</p> <p>p3 9.2 'LWRGS' to be replaced with 'LSRGWS'</p> <p>p4 10.2 par 3 'SG assured her that the metering system installed...' to be replaced with 'SG assured her that the flow limiters installed....'</p>	
6.	<p>RELEVANT MATTERS ARISING FROM ATSG1 MINUTES</p> <p>There were no matters arising not covered by the agenda.</p>	
7	<p>WATER USE AND DEMAND</p>	
7.1	<p>Change depiction of water use to Jul-Jun</p> <p>EvdB indicated that the change of annual water use of the system from January-December to July-June will be done before September 2012, for the SSC Meeting.</p>	EvdB
7.2	<p>Water use license application to abstract from Kouga-Loerie system</p> <p>There was an extended discussion on the increased yield of Loerie Dam, as a result of operating the dam at a lower level. The expected increased yield needs to be quantified. The NMBM still needs to apply for a license for an additional yield (>23Mm/a) from Loerie Dam, following the quantification.</p> <p>The discussion also focussed on the use of water by irrigators when Kouga Dam is spilling. The Gamtoos irrigation Board wants to increase irrigation in such periods of spill, in excess of their allocation. IT indicated that this needs to be tabled at the operation rules study meeting and that the systems operation team needs to attend to this matter. Different operating rules could potentially be applicable when the dam spills.</p>	NMBM / DWA-EC DWA-EC
7.3	<p>Verification and validation study of the Langkloof area</p> <p>SB reported that the project has gone out to tender. Three tenders were received and the tender should be awarded by the end of March. It will be a 20 month contract, but only covers the upper portion of the Langkloof area. SB indicated that the funding of this study remains a problem as R18 million would be needed for the study of the full area. As this study is now a ministerial priority, money could be made available. IT asked for closer coordination on this issue and indicated that the information will be needed for the planned water availability assessment study of the Kromme-Kouga system.</p>	
7.4	<p>Coega IDZ water requirements</p> <p>AfriCoast is reviewing the provision of industrial water to Coega IDZ, as part of the current updating of the NMBM Water Master Plan. The recommendation in the Master Plan is to use potable water for industrial use for the first two years, as no industrial water will be timeously available. EvdB noted that the Coega IDP's expectations of industrial water supply need to be available to reconcile the requirements of the whole area.</p>	DvR

Item		Action
	<p>WO said that in terms of the EIA issued for large industries, no potable water may be used, and if no industrial water is available, it poses serious challenges to attracting development to the Coega IDZ. To address this challenge, EvdB suggested arranging a meeting in April with the Department of Environmental Affairs, to table the NMBM Water Master Plan and to discuss the plan to supply water to Coega. This was agreed and RZ will arrange this meeting. DvR will provide WO with the latest information he has on Coega's water requirements. WO will ensure that information available to the A&TSG is up to date.</p>	<p>RZ DvR WO</p>
<p>8</p> <p>8.1</p>	<p>IMPROVING THE CONFIDENCE OF WATER AVAILABILITY</p> <p>Water availability assessment – Kouga-Loerie and Churchill-Impofu</p> <p>IT said that PSPs for the water availability assessment study (WAAS) would be appointed by the end of the 2012. Verified and validated information from the study for the Langkloof just getting underway will be used. Satellite imaging is available. The Algoa Bridging Study reports and information must be obtained to be used for this study. The Integrated Hydrological Planning Section is busy with a groundwater feasibility study in the Baviaans Local Municipality. One component of the study is to investigate the possibility to use water in Beervlei Dam (that is situated in the Groot River) to artificially recharge an aquifer along the Groot River to supply water to Willowmore and Steytlerville. A hydrological analysis of the Groot River and Beervlei Dam are being done to improve the WR2005 analysis and to obtain the required information for the artificial recharge analysis. The Groot River is one of the two main tributaries of the Gamtoos River. The data could also be used for the planned WAAS.</p>	<p>IT</p>
<p>9</p> <p>9.1</p> <p>9.2</p>	<p>OPERATIONAL EFFICIENCY</p> <p>Operating capacity of Darlington Dam</p> <p>As there are concerns regarding the stability of the dam, a DWA dam safety investigation is scheduled to start soon. Currently the maximum operating capacity of Darlington Dam is only 43% (78 million m³) of its full storage capacity (181 million m³). The increase in the storage capacity of the dam will lower the risk in terms of upstream failures in the system.</p> <p>Additional balancing storage in LSRGWS</p> <p>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. Neither MM nor DC was present at this meeting. TG suggested that the raising of the Korhaansdrift Weir also be considered for balancing purposes.</p>	<p>DC</p> <p>MM/DC</p>
<p>10</p> <p>10.1</p>	<p>WC/WDM</p> <p>Guidelines for effective use of rainwater tanks</p> <p>Water use from rainwater tanks could potentially be a health concern. SG indicated that the NMBM will put out a warning that rainwater abstracted from tanks should not be considered fit for drinking without proper caution or treatment. AL suggested that rainwater tanks for irrigation, washing etc. should be promoted for urban use. On IT's suggestion, WO indicated that rainwater tanks at all new buildings is already a requirement at the Coega IDZ.</p>	<p>NMBM</p>

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10.2	<p>Report on Progress per Municipality</p> <p>NMBM</p> <p>SG indicated that, according to the annual audit, the year on year real water losses has dropped from 26.3% to 23%. This relates to a saving of 13 MI/day, bringing about a saving of R45.5 million annually. The saving target of real losses is 37MI in 5 years. 33% has been realised in the first year, which is quite an achievement.</p> <p>No savings at schools has yet realised as no funds are available for repairs. No money was received from the Department of Education since February 2011. Savings of 20MI/day could be realised by repairing the schools in the Metro. AL reported that DWA is prepared to match any money the Department of Education makes available for repairs at schools. NMBM has put out tenders for repairs at schools, and the tenders have been awarded. As soon as any money becomes available, repairs will start.</p> <p>SG reported that three pilot schemes for pressure management systems were initiated.</p> <p>Other Municipalities</p> <p>On EvdB's question on whether other municipalities should be invited to this meeting, SG indicated that it would be difficult to get somebody to attend. IT asked SG to try to get relevant information and to report back on behalf of the municipalities at the next meeting.</p> <p>DvR said that, according to the update of the NMBM Water Master Plan, the water requirements of the smaller municipalities are growing significantly. He will report back on this matter at the next meeting. The suggestion was made to invite Piet Snyman from Cacadu DM to the next steering committee meeting.</p>	SG
11 11.1	<p>ORANGE RIVER INTER-BASIN TRANSFER SCHEME</p> <p>Nooitgedagt Low Level Scheme (NLLS) Implementation</p> <p>Phase 1 of the project incorporates the minimum contracts required to bring water from the Gariep Dam to NMBM. All seven contracts of Phase 1 have been awarded. Progress on the two pipeline contracts is a bit behind schedule, but should not be a problem. Construction should be completed by October 2012.</p> <p>These contracts are as follows:</p> <ul style="list-style-type: none"> • Extensions to Nooitgedagt WTW (Civil); • Olifantskop 10MI reservoir and Connecting Pipework; • Electrical Transformer for Nooitgedagt WTW; • Rising Main Pipeline to Olifantskop; • Gravity main Pipeline to Motherwell and Coega IDZ; • Motherwell and Bethelsdorp Booster PS (Mechanical and Electrical); • Motherwell and Bethelsdorp Booster PS (Civil). <p>R220 million has already been spent on the project. R450 million drought relief funds were received from National Treasury, but an additional R351 million is needed to complete all phases of the project. SG reported that the NMBM had discussions with Andrew Starkey to schedule a high level meeting with National Treasury.</p> <p>AL indicated that the name 'drought funding application' should be changed. SG said that the NMBM needs to strategize on how to secure the necessary funds to complete the project. IT said that it is worrying that no other means for funding is in place.</p> <p>WO indicated that it is alarming as Coega was informed that 60MI / day will be available to the IDZ after the completion of NLLS. He said that investors always ask about the availability of water and electricity. If this will not be available, nobody will invest in the Coega IDZ.</p>	

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11.2	License application by NMBM to make new allocation permanent Point 11.2 was removed from the agenda.	
11.3	Trading of Orange River Irrigation Authorisations – Upper Fish River The possibility of this trading stays on the table for the NMBM to consider. IT said that the Metro needs to seriously consider this option. Biofuel (targeting the sugar beet industry) is currently buying up land with water licences. The NMBM urgently has to get plans in place to target this affordable water source. EvdB indicated that legwork should be done to get the necessary information, however IT stressed that this is the responsibility of the NMBM.	NMBM
11.4	Orange River water use evaluation: Phasing of Orange River water use, synergies of Coega IDZ desalination option and Scheepersvlakte Balancing Dam storage No discussion. This will be removed from the agenda.	
11.5	Desalination of Sundays River irrigation return flows No discussion. DvR will get the records from Mr Duppie Erasmus.	DvR
12	RE-USE OF WATER	
12.1	Potential integrated re-use of water Covered under the updated NMBM Water Master Plan.	
12.2	Indirect re-use of water treated to potable standards – new intervention A variation for the potable re-use of water has been tabled, making use of surplus effluent from Fishwater Flats WWTW that could be recycled via Loerie Dam. 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. The concise write-up of this alternative option will be distributed again.	NMBM
13	GROUNDWATER	
13.1	NMBM Groundwater Scheme study in Progress The final borehole siting along the Coega Kop area and the Uitenhage areas is planned for April 2012, 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 contract. The DWA tender could therefore only be used for shallow holes. A decision regarding the way forward needs to be taken soon. The full report received from Ricky Murray is attached with the minutes.	NMBM
13.2	DWA borehole information – to be made available to Kouga LM The final report on the drilling target areas will be made available to Kouga LM.	RM
13.3	Capping of unused artesian boreholes An updated report on the status on these boreholes was completed by Ilse Viljoen. Since it will be almost impossible (or very costly) to cap these boreholes, the strategy is to drill the new production boreholes and keep them in running order so as to drop the pressure in the aquifer and prevent free-flowing artesian water.	

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13.4	<p>Wellfield monitoring - monitoring of well-field abstractions and groundwater levels</p> <p>A strategy will be put in place after the drilling and test pumping has been completed. It will involve automated monitoring with frequent analysis and regular reporting.</p>	NMBM
14	<p>SEAWATER DESALINATION</p> <p>14.1 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. NMBM is trying to secure funds for the investigation of such alternative sites.</p> <p>14.2 Seawater desalination: Coega IDZ/ Straits Chemicals</p> <p>WO noted that this option currently now seems very unlikely. This would only realise if no return effluent is available for Coega. Energy supply for such a scheme would be problematic.</p> <p>14.3 Monitoring of Seawater Quality</p> <p>DvR liaised with the NMMU regarding monitoring activities. He reported as follows:</p> <ul style="list-style-type: none"> • Prof Eileen Campbell of NMMU Botany 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 have 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 over a year, taken some 3 years back is available. <p>The shore-based sampling is done by NMMU and the rest is done under a partnership between NMMU and SAEON (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 in 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 lots of 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 on-going monitoring and AfriCoast will work with them and access their data.</p>	NMBM

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15	LOCAL SURFACE WATER DEVELOPMENT Kouga Dam Safety Work in light of Potential Raising DWA has started an investigation on the rehabilitation of the dam. 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. Funding also needs to be addressed.	
16	ECOLOGICAL RESERVE	
16.1	Implementing the Reserve for existing dams An evaluation of the potential implementation of the Reserve for other existing dams of the Algoa system needs to be done. IT has sent a request to DWA Head Office to determine whether they have such a program in place but has not yet had any response to her request. IT indicated that the Reserves should be maintained as best as possible.	IT
17	CLIMATE CHANGE	
17.1	Climate change impacts study DWA has appointed a Director for climate change to evaluate the effect of climate change. Current indications are that climate change would not have a significant impact on the AWSS area.	
18.	GENERAL	
18.1	Financing of NMBM implementation plans Discussed previously under 11.1	
18.2	Establishment of Langkloof Irrigators WUA SB reported that this project is under way. Many irrigators do not want to amalgamate into a blanket WUA. This will receive attention in the next DWA financial year (Apr '12 - March '13)	
18.3	South African Revenue Protection Group This point stood over as Martin Labuschagne was not present at the meeting.	
19.	NEXT MEETING The next meeting will take place on 26 April 2012 at 10h30.	
20.	CLOSURE The meeting was adjourned at 14h00.	