



**ENVIRONMENTAL IMPACT ASSESSMENT
THE SOUTHERN WASTE WATER TREATMENT WORKS (SWWTW) SOLIDS REMOVAL AND TREATMENT
FACILITIES UPGRADE**

KEY STAKEHOLDER MEETING

DATE: 14 April 2014

TIME: 10h00

VENUE: SWWTW Boardroom

PURPOSE OF THE MEETING

- To introduce the EIA and the proposed project;
 - To provide information containing all relevant facts regarding the project;
 - To provide an opportunity to submit comments / concerns regarding the project; and
 - To clarify the roles of each stakeholder.
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AGENDA

1.	WELCOME & INTRODUCTION	Rod
2.	PURPOSE OF THE MEETING	Rod
3.	CONDUCT OF MEETING	Rod
4.	BACKGROUND & NEED	RHDHV/ EWS
5.	TECHNICAL PRESENTATION ON EIA	RHDHV
6.	TIMELINES	RHDHV
7.	DISCUSSION	All



**Royal
HaskoningDHV**
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EIA AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED SWWTW SOLIDS REMOVAL AND TREATMENT FACILITIES UPGRADE, KWAZULU-NATAL

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

*KEY STAKEHOLDER MEETING
DATE: 14.04.2014*



OBJECTIVE OF PRESENTATION

- Introduce the Environmental Impact Assessment (EIA) & the proposed project;
- Begin the Public Participation Process;
- Address any queries with regard to the environmental authorisation process.

PROJECT PURPOSE

- Develop the Southern WWTW *Solids Removal Facility* with a long term goal of disposal out to sea containing significantly less solids.
- Objective of upgrades: to remove more primary sludge before discharging out to sea.

PROJECT DESCRIPTION

- AIM: reduce the quantity of solids being disposed of through the sea outfall by re-commissioning existing and developing new sludge treatment facilities.

- Therefore a suite of upgrades are proposed to be undertaken on:
 - Preliminary treatment;
 - Primary sedimentation;
 - Sludge processing;
 - Electrical work;
 - General works.

BASIC LOCALITY



CURRENT WORKS



PROPOSED WORKS



LEGEND	
SOUTHERN WORKS BOUNDARY	
LOCATION OF EXISTING ZONES TO BE REHABILITATED / UPGRADED	
LOCATION OF PROPOSED NEW WORK ZONES	

SITE DETAILS
 LOCATION: (30°52'22.54"E, 29°57'22.57"S)
 THE SOUTHERN WASTEWATER TREATMENT WORKS IS LOCATED ON 2 BADDULLA DRIVE, MEYERBURN ON THE NORTH-EASTERN BANK OF THE UMKAS CANAL. THE WWTW IS SURROUNDED BY RESIDENTIAL AND INDUSTRIAL DEVELOPMENT.
 ACCESS: TO ACCESS THE SOUTHERN WWTW, TAKE EXIT 8 OFF THE M4 SOUTHERN FREEWAY INTO DURANTA ROAD, HEADING TOWARDS MEYERBURN. TURN LEFT INTO HAIL FEBRUARY ROAD WHICH THEN CONTINUES INTO BADDULLA DRIVE, LEADING TO THE WORKS.

ZONE	PROCESS	DESCRIPTION	CO-ORDINATES	
			POINT	X
UPGRADE TO ETHERTON SOUTHERN WASTEWATER TREATMENT WORKS				
A	PRIMARY TREATMENT	REHABILITATION OF 2x 30M ² PRIMARY SEDIMENTATION TANKS, EFFLUENT CHANNEL & SPLITTER BOX	A	-2869.235 3315381.374
B	PRIMARY TREATMENT	UPGRADE & REHABILITATION OF EXISTING PRIMARY SLUDGE PUMP STATION	A	-2864.260 3315314.922
C	SLUDGE THICKENING	INSTALLATION OF SLUDGE DEWATERING FACILITY	A	-2868.527 3315314.154
D	SLUDGE THICKENING	REHABILITATION OF EXISTING SLUDGE THICKENER & PUMP STATION	B	-2869.502 3315321.874
E	SLUDGE THICKENING	CONSTRUCTION OF A NEW SLUDGE THICKENER & PUMP STATION	C	-2812.642 3315291.106
F	SLUDGE DIGESTION	REHABILITATION OF EXISTING 2x PRIMARY DIGESTERS & ASSOCIATED HEATING & MIXING FACILITY	D	-2866.229 3315274.035
G	SLUDGE DIGESTION	CONSTRUCTION OF 2x NEW PRIMARY DIGESTERS & ASSOCIATED HEATING & MIXING FACILITY	E	-2575.817 3315268.274
H	SLUDGE DIGESTION	REHABILITATION OF EXISTING SECONDARY DIGESTER & PUMP STATION	F	-2817.402 3315244.279
I	SLUDGE DIGESTION	CONSTRUCTION OF A NEW SECONDARY DIGESTER & PUMP STATION	F	-2848.033 3315246.409
J	BIO-GAS STORAGE	REHABILITATION OF EXISTING GAS HOLDER	G	-2532.852 3315304.377
K	BIO-GAS STORAGE	CONSTRUCTION OF A NEW GAS HOLDER	G	-2536.509 3315301.867
L	SLUDGE DEWATERING	CONSTRUCTION OF A NEW SLUDGE DEWATERING FACILITY	H	-2507.289 3315211.303
M	SLUDGE DRYING	CONSTRUCTION OF A NEW SLUDGE DRYING FACILITY	I	-2515.367 3315279.334
N	GENERAL WORKS	CONSTRUCTION OF A NEW TANKER BAY FACILITY AND ACCESS ROAD	J	-2573.968 3315230.845
O	FINAL EFFLUENT DISCHARGE	CONSTRUCTION OF A NEW 21M ³ RAW SEWAGE STORAGE BASIN	K	-2538.494 3315258.845
P	FINAL EFFLUENT DISCHARGE	UPGRADE OF EXISTING LOW-LIFT PUMP EFFLUENT PUMP STATION	L	-2589.040 3315176.375
Q	FINAL EFFLUENT DISCHARGE	PORTION OF LAND BASED SEA-OUTFALL TO BE REPLACED	M	-2819.190 3315196.299
			N	-2381.294 3315103.087
			O	-2578.579 3316054.488
			P	-2573.106 3318150.338
			Q	-2915.417 3316995.118



SITE LAYOUT
SCALE 1:1000

LOCALITY A
SCALE 1:1000

LOCALITY B
SCALE 1:1000

ENVIRO-LEGAL DESCRIPTION

- NEMA EIA listed activities being triggered:
 - GNR. 544 (BA) :11, 12, 13, 14, 16, 17, 18, 40, 42, 43, 45, 55A, 55B & 56
 - GNR. 545 (EIA) : 3, 24, 27
 - GNR. 546 (Geographically determined BA) : 12

- NEM: WA listed waste activities being triggered:
 - Category A (BA) : 1, 3, 9 AND 10

Therefore an EIA and WML Application is to be followed

ENVIRONMENTAL LEGAL REQUIREMENTS

- EIA Regulations Government Notice R. 543 to Notice R. 546 of 2010
- Client requires authorisation from DAEA for the undertaking of the proposed project.

THE FULL SUITE

Authorisations / Licences
to be applied for:

1. Environmental Authorisation as per NEMA
2. Waste Management Licence as per NEM:WA
3. Coastal Waters discharge permit (amendment)
4. Water Use Licence (amendment)

Specialist studies to support
the assessment:

1. Air Quality Impact Assessment;
2. Heritage Impact Assessment;
3. Biodiversity Scan;
4. Major Hazardous Installation Study;
5. Integrated Waste Water Management Plan;
6. Risk Assessment; and
7. Social Impact Assessment

WHAT IS AN EIA?

The process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made

EIA PROCESS

Competent authority

EIA: DAEA

Competent authority

WML: DAEA

SCOPING PHASE:

Identify issues to focus the EIA on and confirm specialist studies required

IMPACT ASSESSMENT PHASE:

Technical specialist studies to assess the potential impacts, both positive and negative

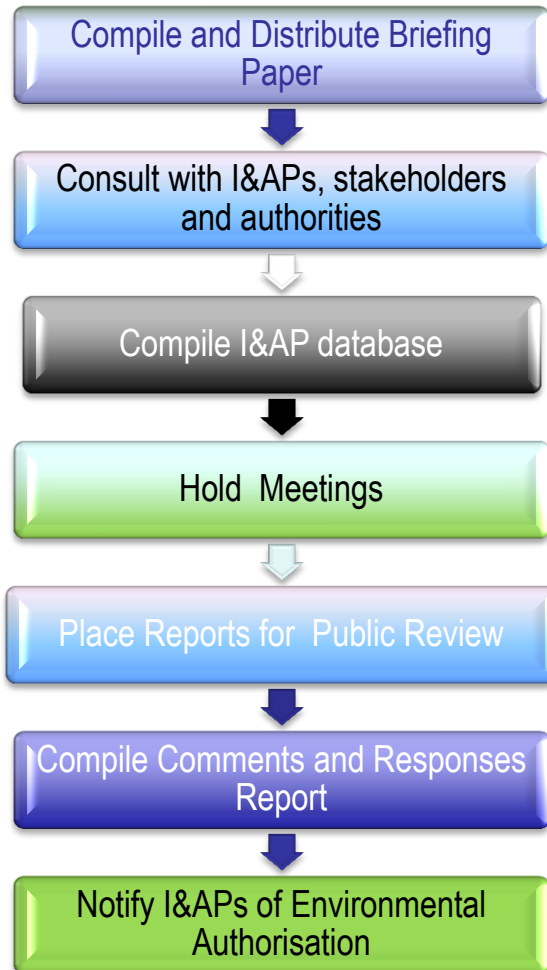
EIAR AND EMPr:

Consolidate the findings and compile a report rating the significance of the impacts and provide recommendations for mitigation

DECISION MAKING:

Authorities assess and review to make a decision

PUBLIC PARTICIPATION PROCESS



- Role of I&APs during the EIA process
 - Raise issues and/or concerns as well as provide input on the proposed project
 - Review of the draft SR & PoS and EIAR
 - Provide the above inputs within the specified timeframes
- All comments received are highly appreciated.

WASTE MANAGEMENT LICENCE

Category A

BA Process

Category B

Scoping and EIA

Category C

Compliance with Norms and Standards stipulated

COASTAL WATERS DISCHARGE PERMIT

- The proposed upgrade specifically addresses the DEA requirement to support the best practical environmental option and is a specific provision for waste avoidance/prevention, waste minimization and recycling.

Competent authority:

DEA

Commenting authority :

DWA .

WULA AMENDMENT

- Southern WWTW currently holds a Water Use Licence which licences the works in terms of Section 21 (h) of the Act,
- amendment of this licence is not warranted – Only DWA consultation

Competent authority:

DWA

Commenting authority :

DEA .

KEY POINTS

- NO CAPACITY INCREASE
- REDUCED SOLIDS TO SEA DISPOSAL
- NO INCREASE IN ODOUR

TIMELINES

- 
- SCOPING PHASE
 - APRIL 2014 – JULY 2014

- 
- EIA PHASE
 - AUGUST 2014 – DECEMBER 2014

- 
- AUTHORITY DECISION
 - APRIL 2015

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- QUESTIONS AND ANSWERS / DISCUSSIONS

ENVIRONMENTAL IMPACT ASSESSMENT





THE SOUTHERN WASTE WATER TREATMENT WORKS (SWWTW) SOLIDS REMOVAL AND TREATMENT FACILITIES UPGRADE





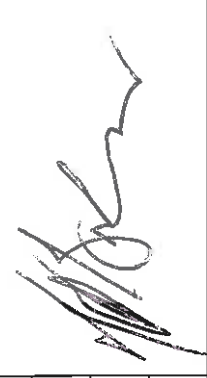






14 April 2014



ATTENDANCE REGISTER TO STAKEHOLDER MEETING

Royal HaskoningDHV
Enhancing Society Together

NAME & SURNAME	AFFILIATION & ORGANISATION	CONTACT INFORMATION	SIGNATURE
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R. BULLMAN F. BURNMAN	Bulman ag	TEL: 035 3564465 FAX/ FAKS: 135 346 1141 MOBILE/ SEL: 2829008584 E-MAIL/ E-POS: 1141 pl/manager.co.zc	

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Rob Dyer	EWS	TEL: 031 311 8664 FAX/ FAKS: — MOBILE/SEL: 083 303 1635 E-MAIL/E-POS: rob.dyer@durban.gov.za	
Shenelle Emmanuel	EWS	TEL: 031 7084361 FAX/ FAKS: — MOBILE/SEL: 084 0583310 E-MAIL/E-POS: Shenelle.emmanuel@durban.gov.za	
Reneshree Pillay	EWS	TEL: — FAX/ FAKS: — MOBILE/SEL: 084 7038215 E-MAIL/E-POS: reneshree.pillay@durban.gov.za	
Sibiso Dlamini	EWS	TEL: 031 311 5992 FAX/ FAKS: — MOBILE/SEL: 078 415 3596 E-MAIL/E-POS: sibiso.dlamini@durban.gov.za	
		TEL: — FAX/ FAKS: —	

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RUGS NORDEN	South Dundee House, 224 Gouretz Crescent Dundee, 224	TEL.: 0849845903 FAX/FAKS: MOBILE/SEL: E-MAIL/E-POS: rugs.norden@gmail.com TEL.: 0843063267 FAX/FAKS: 4681619 MOBILE/SEL: E-MAIL/E-POS: r.norden@telkom.za.net	
ROSHAN KHANDEEN	KRF	TEL.: FAX/FAKS: MOBILE/SEL: E-MAIL/E-POS:	
		TEL.: FAX/FAKS: MOBILE/SEL: E-MAIL/E-POS:	

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Record	Minutes of Introductory Public Participation Planning Meeting
Project and Project Number	The SWWTW Upgrades and Solids Removal Facility EIA [T01.DUR.000274] DAEA Reference No. DM/0032/2014 and DM/WML/0050/2014
Date and Venue	14.04.2014 SWWTW

Attendance

Name	Organisation	Attended
Sharleen Moodley (SM)	RHDHV	X
Ashley Pillay (AP)	EWS	X
Keith Brackenbury (KB)	EWS	X
Rod Bulman (RB)	Phelamanga Projects	X
Fiona Bulman	Phelamanga Projects	
D. Ramchurren		X
Bongani Mthembu	SDCEA	X
Priya Pillay	SDCEA	X
Eunice Abbey		X
Mrs. Perumal	SDCEA	X
P.Lupke	SDCEA	X
Sipho Mabaso	EWS	X
Rob Dyer	EWS	X
Shenelle Emmanuel	EWS	X
Reneshree Pillay	EWS	X
Sibusiso Dlamini	EWS	X

Item	Discussion/ Resolution	Action
1	RB welcomed all and explained the procedure for the	N/A

Item	Discussion/ Resolution	Action
	meeting.	
2	SM presented the EIA process with assistance from AP who presented the proposed project description which included an explanation on the current and processed process at the SWWTW.	N/A
3	The BID was requested electronically	SM to distribute
4	It was confirmed upon queries that there will be public meetings, the scoping phase PM is to take place early May.	N/A
5	RB reiterated that this is an introductory meeting not a public meeting.	N/A
6	AP explained the process of the primary settling tanks in response to a question regarding the mechanisms of breaking down sludge. The flow is slowed down by dispersing radially hence settling the solids. AP further explained the process of clarified effluent which goes over the weirs and the secondary treatment. AP explained the conventional treatment process, explaining suspended and dissolved solids.	N/A
7	<p>Concern was raised over the community affected by odour (smell) and the nuisance. This was perceived to be a smoke screen to build capacity to deal with more sludge from other areas. Sludge was brought from Kwamashu previously without consultation. No figures are reported on. Studies show that there are high levels of asthma and other illnesses. Therefore this "expansion" will result in further impacts.</p> <p>AP responded that this is a valid concern and referred to the BID stating that it explains the process. Previous projects did try for additional flows but the community was against this and therefore it was stopped.</p> <p>AP responded to say that sludge from Kwamashu was brought to the SWWTW previously without EWS knowledge and he therefore apologised. Kwamashu did not have sufficient infrastructure at the time to deal with the flow.</p>	N/A
8	<p>If the community objects to this, is there another way to deal with the processes by not having expansions?</p> <p>The meeting in its extent served to explain that the proposed upgrades will be beneficial and will in fact address many of the issues raised with current shortfalls.</p>	N/A
9	<p>The presence of a Veolia Water representative was queried because there was instance of raw sewage leak.</p> <p>RB stated that this is a valid point however, it must be noted</p>	Noted going forward.

Item	Discussion/ Resolution	Action
	that legislatively the EIA is project focused and hence the scope of this project must be focused on.	
10	<p>Smell and odour was raised again, there is a hotline which does not operate (telephone is not answered).</p> <p>Will the smell increase due to the digesters?</p> <p>Anaerobic digesters are fully enclosed and therefore will not increase odours</p> <p>Will noise increase due to the pumps?</p> <p>The new pumps are high-tech and more efficient and are hence more silent. This was disputed. Studies were requested.</p>	Scoping and EIAR to elaborate further.
11	<p>Digesters were taken on 7 years ago, the CSIR reports state that the sea is getting worse (degrading) therefore why is there is a new project when the digesters there, why do we need consultants to refurbish? The EWS engineers should have picked this is up, EIA and consultants are not needed. This is a waste of rate payer's money.</p> <p>SM explained that EWS is the proponent and hence did pick up the need for the project but the legislation requires that an independent EAP is appointed because refurbishments (not only expansions) require an EIA. Hence the need for consultants. There are also design consultant engineers because the EWS is under capacitated and furthermore specialist design is required.</p>	N/A
12	<p>It was queried whether the pipeline between Mondi belongs to EWS?</p> <p>It was confirmed that it does not.</p>	N/A
13	<p>The presence of operations staff was queried and they were introduced. This was asked because the process as explained was the ideal process; however, in practice this does not take place. For example, summer rains result in overflows and the flow goes directly out to sea without monitoring. What will be the response to this?</p> <p>AP explained that this is the reason why extra storage capacity is proposed. Current pump station storage is not enough and the pump cannot cope.</p>	N/A
14	<p>What has been planned for the coming summer rains?</p> <p>KB explained that the bigger tank will mitigate against this.</p> <p>However, that will take time; but by then more people will be</p>	N/A

Item	Discussion/ Resolution	Action
	<p>killed.</p> <p>It was queried who was killed over this. The health impact was explained and there were ample discussions on why these upgrades are required. It was later explained that the fatalities relate to consumption of fish when the fish are contaminated by sewage and furthermore to the prevalence of asthma.</p>	
15	<p>Where will the machinery coming be from? Will this be internationally sourced?</p> <p>It was explained that this is a supply chain and national treasury aspect. Contractors will be appointed for maintenance.</p>	N/A
16	<p>The presentation was referred to. The WML was queried, why are they combined?</p> <p>This was explained via the presentation. It was explained the November 2013 amendments to regulations saw wastewater moved to the mandate of the provincial DAEA. In the interest of inclusivity, the process is run together.</p>	N/A
17	<p>Why are the specialists not independent? It was stated that their rights to request further studies by independent specialists will be observed.</p> <p>This was explained via the presentation. Internal specialists are according to NEMA allowed, however the DEA stipulates that an independence declaration is signed and an external review done.</p> <p>This explanation was not accepted.</p>	N/A
18	<p>Please map out the process?</p> <p>This was explained via the presentation and dates were given.</p>	N/A
19	Can the CSIR documentation be forwarded to them?	To be forwarded.
20	<p>The quality of life in the surrounding area is very poor due to noise and odour.</p> <p>The studies will evaluate these and propose odour abatement.</p>	N/A
21	<p>Is the EWS monitoring Veolia Water?</p> <p>There is a Public Private Partnership between EWS and Veolia Water and a 10 year contract. Veolia are ISO accredited and not monitored by EWS.</p>	N/A

Item	Discussion/ Resolution	Action
22	Knock and drops were requested and stakeholders and the greater public must be involved. Access to information was requested.	Noted and to be carried out.
23	Rob Dyer was requested to introduce himself. He is from the planning department.	N/A
24	In Sylhiet Place there is a pump station which poses a significant problem due to intense odours. Numerous complaints have been placed.	To be followed up.
25	<p>Current capacity is 130MI, is there any plan to increase capacity due to development growth in the area?</p> <p>The catchment for this works is fairly developed, Umlazi, Chatsworth up to pavilion and therefore an increase is not envisaged to the works, and in fact the flow has shown a decrease in recent years. But with plans to densify and rural development, greater transport will be needed but not waste water.</p>	N/A
26	With reference to the presentation, it was stated that no odour increase would occur but in terms of current odour, the air quality assessment will address this.	Odour abatement plan to be developed.
27	The presentation was requested electronically.	To be forwarded.
28	Neil McLeod was requested to attend the Public Meeting.	Noted.
29	The meeting was closed after distributing extra BIDs.	N/A