



Final Issues Trail for the Solids Removal and Treatment Facilities Upgrade at the Southern Waste Water Treatment Works, Merewent, KwaZulu-Natal: EIA and WML Scoping and EIA Phases

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SWWTW EIA and WML

ISSUES TRAIL

SUMMARY FOR CONCERNS AND SUGGESTIONS RAISED BY INTERESTED AND/OR AFFECTED PARTIES

**Comments dated from:
01 January 2014 to 30 October 2015**

Stakeholders who made contributions to various matters and raised certain issues range across all sectors of society.

This list of issues does not focus solely on a specific area. Instead, it lists all the issues raised by Interested and Affected Parties (I&APs) throughout the study area. In many instances, an issue raised about a particular focus area, is also applicable to other circumstances.

The issues have been arranged into groups of similar content, and are listed in each group more or less in the order in which they were received. The name, affiliation and date of the commentator are also indicated. Comments made during public meetings are included, as well as comments received in other languages.

It is imperative to note that at this early stage of Scoping in the EIA that the Issues Trail (document at hand) holds the comments which will, to a great degree, shape the study going forward and hence many recommendations are offered and considered.

Included in this document is a table of the comments received to the final reports (i.e. final Scoping Report and Final EIA Report) as it serves to depict how each recommendation has been addressed.

Note that the comments under the Scoping Report section reflect that point in time, with those comments being taken forward into the EIA phase, and considered therein. The EIA phase is again taken after the end of stakeholder engagement for that phase.

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TABLE 0-1: COMMENTS AND RESPONSE TABLE FOR SCOPING PHASE

SCOPING PHASE			
ISSUE		RAISED BY	RESPONSE
1. EIA PROCESS (METHODOLOGY, PUBLIC PARTICIPATION & CONSULTATION AND RECOMMENDATIONS FOR STUDY)			
1.1	<p>Digesters were taken off 7 years ago, the Centre for Scientific and Industrial Research (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?</p> <p>The eThekweni Water and Sanitation (EWS) engineers should have picked this is up, Environmental Impact Assessment (EIA) and consultants are not needed. This is a waste of rate payer's money.</p>	<p>Attendee at the Introductory meeting 14.04.2014</p>	<p>EWS is the proponent and hence did pick up the need for the project but the legislation requires that an independent Environmental Assessment Practitioner (EAP) is appointed because refurbishments (not only expansions) require an EIA. Hence the need for consultants.</p> <p>There are also design consultant engineers because the EWS is under capacitated and furthermore specialist design is required.</p>
1.2	<p>Why are the EIA and Waste Management License (WML) processes combined?</p>	<p>Attendee at Introductory meeting 14.04.2014</p>	<p>The November 2013 amendments to regulations saw wastewater moved to the mandate of the then provincial Department of Agriculture and Environmental Affairs (DAEA) (<i>the department has since undergone a name change to the Department of Economic Development, Tourism and Environmental Affairs (DEDTEA)</i>). With one department as the Competent Authority (CA) an “up-scaling” was requested to assess the WML and EIA as an integrated process, for the following reasons:</p> <ul style="list-style-type: none"> • Listing Notice 2 activities are triggered for the development and Category A impacts will in addition to these activities be assessed. There is therefore a situation whereby a full EIA is already required. • As is evident in the Scope of Works, Waste Water Treatment Works projects are very complex, which must be properly assessed during an EIA process, therefore, by incorporating the Category A activities into the Scoping and EIA process, an in depth assessment of these activities will be given effect to. • Undertaking one application process will optimize the EIA and result in reduced administrative load on the

ISSUE	RAISED BY	RESPONSE
		<p>Department.</p> <ul style="list-style-type: none"> • Less report writing would also have a limited impact on the project budget and will allow the applicant to responsibly spend public funding as required by the Public Finance Management Act (PFMA). • Two (2) separate public participation processes (PPP) meeting, or one integrated process which tries to explain to the Interested and/or Affected Parties (I&APs) the nature of two (2) separate permitting processes being run together, may lead to confusion or stakeholder fatigue. • Further, by keeping the BAR-specific activities still on the table during the second iteration of the PPP, it allows I&APs the opportunity to make comments thereon for the duration of the overall process.
<p>1.3</p>	<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>Attendee at Introductory meeting 14.04.2014</p> <p>Internal specialists are according to the National Environmental Management (NEMA) EIA Regulations GNR 543 allowed, however the national Department of Environmental Affairs (DEA) stipulates that an independence declaration must be signed and an external peer review be done. This will and has been followed for this EIA process.</p> <p>Furthermore, it is imperative that the definition of “independence” is noted. According to GNR 543, “independent” means:</p> <p><i>“In relation to an EAP (Environmental Assessment Practitioner) or a person compiling a specialist report or undertaking a specialised process or appointed as a member of an appeal panel, means –</i></p> <p>(a) <i>That such EAP or person has no business, financial, personal or other interest in the activity, application or appeal in respect of which that EAP or person is appointed in terms of these Regulations other than fair remuneration for work performed in connection with that activity, application, or appeal; or</i></p> <p>(b) <i>That there are no circumstances that may compromise the objectivity of that EAP or that person in performing such work.”</i></p>

ISSUE	RAISED BY	RESPONSE
		<p>It can therefore be justified why the DEA accept that specialists from the same company as the EAP may conduct the specialist studies required, provided the assessments are peer reviewed and thus deemed appropriate.</p>
<p>1.4</p>	<p>Knock and drops were requested and stakeholders and the greater public must be involved. Access to information was requested.</p>	<p>Attendee at Introductory meeting 14.04.2014</p> <p>It is imperative to note that several initiatives were undertaken in order to involve the public in the EIA at hand. These include the following:</p> <ul style="list-style-type: none"> a. Vibrant Direct cc was appointed to distribute 3 000 Background Information Documents to the communities surrounding the study area. These were placed in the household post boxes and handed out at the Tara Road intersection. b. 10 Posters were also erected at conspicuous points. While residents had mentioned that these were not seen, photographic evidence of these posters erected is provided in the Scoping Report. The EAP recognizes the possibility of the posters being removed along with election posters, contributing to the reason why residents had not seen them. c. Furthermore, to reach the public, advertisements regarding <i>inter alia</i> the proposed project scope of works, location, details of public meeting and details of locations and date for draft Scoping and Plan of Study Report review as well as details of EAP were placed in the Mercury on 07.05.2014 and the Merebank Rising Sun on 13.05.2014. d. The PPP commenced in April 2014 where an introductory meeting was held with key active groups in the area (see minutes Introductory Meeting 14.04.2014). e. The Focus Group Meeting was held on 19.05.2014 at the works. f. A public meeting held on 21.05.2014 at the Merebank Community Centre. g. The draft Scoping Report and Plan of Study was compiled and the process allowed for 40 days for I&APs to raise their issues and concerns regarding the proposed activity as presented in this report, this

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		<p>period ran from 23.05.2014 to 02.06.2014.</p> <p>h. Email notices are regularly circulated to all registered I&APs.</p>
<p>1.5 As a resident of Merebank and also as an employee of Mondi Paper, I would like more information explaining the impacts to the environment and which road routes will be affected and for how long.</p> <p>I would also like to have a copy of your Major Hazardous Installation Risk Assessment (MHIRA).</p> <p>Can you please include me on the Project Database?</p>	<p>Mr. Gordon Reddy 16.05.2014</p>	<p>An email response was provided on 20.05.2014 and read as:</p> <p>Thank you for your enquiry.</p> <p>Please note that the draft Scoping Report which details the information which you requested below will be out for public review from 23.05.2014 till 02.07.2014 for the public to review and comment.</p> <p>Please also note that a public meeting will be held on 21.05.2014 at the Merebank Community Centre at 18h00, we hope you will attend.</p> <p>In the interim, the BID was provided via email.</p> <p>You have been added to the project database and will receive all project correspondence.</p>
<p>1.6 There has been limited public participation process in the process with regard to the affected residents who lived in close proximity to the Southern Waste water Treatment Works (SWWTW).</p> <p>Residents have complained that they have not seen any knock and drop pamphlets informing them about the upgrade and how is going to impact on the quality of their lives.</p> <p>They further complained that the stench in the air of sewage and volatile organic compounds has increased over the years and therefore proper and meaningful consultation and participation is of the utmost importance to the community.</p> <p>The residents stated the eThekweni Municipality policy of the <i>Batho Pele</i> Principle and a caring city is been ignored by the consultants.</p>	<p>South Durban Community Environmental Alliance (SDCEA) 02.07.2014</p>	<p>Please refer to point 1.4 above.</p> <p>The proponent (eThekweni Municipality) as well as the EAP ensure that cognizance has been taken of the unique and historically disadvantaged situation of the affected community and environment and therefore endeavour to work as transparently and inclusively as possible.</p> <p>The EAP has requested that stakeholders who are presently part of the process circulate emails and create further awareness and have targeted the mobilised bodies in the area with the hope that spreading the awareness will be facilitated through these bodies.</p>
<p>1.7 The major problem we have with this whole document is that from the onset we have called for an independent reviewer who should have been appointed in conjunction with the community from the local universities (University of KwaZulu-Natal or Durban University Technology) who can make comments on our behalf as this EIA has the potential to increase the poor quality of lives of local residents.</p>	<p>SDCEA 02.07.2014</p>	<p>At the introductory meeting held, it was raised that the study must be conducted by an independent consultant and it was clarified that the DEA allows for the EAP and specialists to be of the same organisation provided independent peer reviews are conducted. These conditions have been complied with as requested in the letter from the DEA, where both the air quality and the</p>

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<p>Local residents are already affected with high level of sewage odours, strong chemical emissions from this southern sewage treatment works and any upgrade that is not planned properly will affect the community and the environment.</p> <p>With regard to the appointment of an independent reviewer, we refer you to the letter from your document from the Department of Agricultural and Environmental Affairs; we therefore request that an independent reviewer be appointed from the local university.</p>		<p>social impact baseline studies have been peer reviewed by Sophia Valsamakis of Rayten Engineering Solutions and Hilda Bezuidenhout an independent SIA specialist, respectively. Going forward, the Integrated Waste Water Management Plan (IWWMP) and the Life Cycle Assessments (LCA) will also be independently reviewed.</p> <p>Stakeholders are welcome to engage with specialists, either from established organisations or education institutions to interpret and comment on reports on behalf of the stakeholder.</p> <p>It is noted the specialist jargon is difficult to comment on and therefore every attempt is made to express information in layman terms, as is done in presentations. Nonetheless, facts and data must be reported on.</p>
<p>1.8 We request that knock and drop pamphlets be sent to people living around the SWWTW and in addition, a local meeting be called at the Settlers Primary School in Merebank to inform people about the upgrade and take further comments from the affected community.</p>	<p>SDCEA 02.07.2014</p>	<p>Please refer to point 1.4 above.</p> <p>Please note that a public meeting was held at the Merebank Community Centre on 21.05.2014.</p> <p>Meetings will again be held in the EIA phase planned to comment in August 2014.</p>
<p>1.9 Please provide the details of the existing Coastal Water Discharge Permit (CWDP) and Water Use Licence (WUL) and discuss the activities in context of the requirements for the amendments i.e. in relation to the specific conditions of permit and licence.</p>	<p>Coastwatch KZN 01.07.2014</p>	<p>Coastal Waters Discharge Permit:</p> <p>In terms of the National Environmental Management: Integrated Coastal Management Act, Act No. 44 of 2008 (NEM:ICMA), anyone who wishes to discharge effluent into coastal waters must apply to the Department of environmental affairs for a coastal waters discharge permit within 24 months of commencement of the NEM:ICMA.</p> <p>This is specifically if the discharge is in terms of an existing licence or authorisation issued under the National Water Act (Act No. 36 of 1998) as administered by the Department of Water Affairs (DWA) (<i>now Department of Water & Sanitation (DWS)</i>) – as is the case of the Southern Works sea outfall (existing WUL).</p> <p>It is noted that applications received by DEA were not deemed sufficient to allow for an informed technical assessment and hence the Department reviewed the DWA's "Operational policy for the disposal of land-derived water containing waste to the marine environment of</p>

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		<p><i>South Africa: Guidance on Implementation – Sub-Series No. MS 13.3, (251pp)</i>” to identify interim specific technical criteria to be applied in assessing applications received. These were presented in a draft publication, which is attached for ease of reference, and include detail in respect to:</p> <ul style="list-style-type: none"> • Scope of study area and features; • Biogeochemical processes (water column and sediment); • Marine ecology; • Microbiological Factors; • Hydraulic design; • Achievable dilution; • Sedimentation / re-suspension of solid phase particles; • Compliance with environmental quality objectives; • Pipeline construction and design; • Monitoring programmes; and • Contingency Planning. <p>The proposed upgrade of the SWWTW 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.</p> <p>Therefore, the amendments to the CWDP are with respect to repackaging, collating and presentation of relevant information from existing reports and annual monitoring undertaken, as required by the DEA. As part of this repackaging process, issues / criteria not adequately detailed in the existing reports, etc., will be identified and could require additional scientific assessment which would be beyond the scope of this proposed appointment.</p> <p>Water Use License:</p> <p>The current WUL held by the eThekweni municipality for the SWWTW is a Section 21(h) license, which refers to “<i>Disposing in any manner of water which has been heated</i></p>

ISSUE	RAISED BY	RESPONSE
		<p><i>in, any industrial or power generation process.”</i></p> <p>Despite there being no additions of sites, license holders or change in capacities, at the date of compiling this response herein, the last correspondence with the DWA was the request for an amendment to the existing WUL due to the proposed development of storage basins for raw sewage. Further clarity from the DWA on this matter will be requested and communicated to all I&APs.</p>
<p>1.10 Anaerobic digestion of sludge is appropriate for conditioning sludge for recycling / reuse and minimising odour. As sludge processing forms part of the proposed activities the submission of dried sludge for analysis according to DWA guidelines is needed upfront i.e. before the process of evaluating options for sludge disposal (as part of this assessment) goes further. The results of the analysis would be critical to the selection of options for sludge disposal.</p>	<p>Coastwatch KZN 01.07.2014</p>	<p>Noted.</p> <p>This will be taken forward as a recommendation for the deliverables of the EIA phase, to be assessed as part of the IWWMP.</p>
<p>1.11 Has the community of the south coast been made aware of the project as it would negatively impact on the quality of the water? Tourism industries including the Aliwal Shoal dive schools in the Umkomaas area – consider the current flow.</p>	<p>Deepchund Ramchurren Comment to Draft Scoping Report 12.06.2014</p>	<p>Please refer to point 1.4 above for the initiatives taken to create awareness for this proposed development and this associated EIA.</p> <p>The communities and the organisations brought to our attention are appreciated and will be contacted.</p>
<p>2. OPERATIONS</p>		
<p>2.1. Summer rains result in overflows and the flow goes directly out to sea without monitoring. What will be the response to this?</p>	<p>Attendee at Introductory meeting 14.04.2014</p>	<p>While it is noted that overflows are not best practice, this is the reason why extra storage capacity is proposed. The current pump station storage is not enough and the pump cannot cope. The additional storage tank and new higher efficiency pumps proposed will mitigate against this.</p>
<p>2.2 Is the EWS monitoring Veolia Water?</p>	<p>Attendee at Introductory meeting 14.04.2014</p>	<p>The 10 year contract between EWS and Veolia Water is a public private partnership. Veolia are International Organisation for Standardization (ISO) accredited and not monitored by EWS.</p> <p>It is important to further note that Veolia Water is not responsible for the incidents of pollution which occurred.</p>

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<p>2.3 Current capacity is 130 Ml, is there any plan to increase capacity due to development growth in the area?</p>	<p>Attendee at Introductory meeting 14.04.2014</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 additional waste water treatment.</p>
<p>2.4 (a) What happens to the removed primary sludge? Is it sent to a landfill, and if so which one, or does it get uses as fertilizer, and of so, where, or if it gets incinerated and of where? (b) What does the waste management license cover? Please send me a few slides on this.</p>	<p>Bobby Peak of Groundwork 28.05.2014</p>	<p>Mr. Peak was sent an amended presentation on 10.06.2014 via email which answered his questions and further provided details of how to access the detailed Scoping Report. The responses was as such: (a) The options proposed for the disposal of the dewatered sludge are as follows:</p> <ul style="list-style-type: none"> • Removal off site to agriculture and/or landfill; • Thermal drying and then removal off site to agriculture; and • Manufacture of fertilizer through a separate sludge pelletizing process to be established on site by a private entity (unconfirmed at this stage) and then removal off site. This option may be investigated under a separate study to be undertaken by others and does not form part of this study nor the scope of work described hereunder. <p>(b) NEM: WA listed waste activities being triggered: GNR 921 Category A (BA): 1, 3, 9 and 10 These are elaborated on below:</p> <p>(1) The storage of general waste (sludge) will be undertaken in 350m³ silos on the site, for a period of a few days prior to being trucked to a landfill site. The waste water treatment works facility constitutes a “lagoon” hence the triggering of this activity.</p> <p>(3) The scope of work includes the option of the provision of dewatered sludge to a pelletizing plant which constitutes the recycling of general waste. The pelletizing plant will be outside of</p>

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		<p>the premises of the SWWTW.</p> <p>(9) The options for the disposal of the dewatered sludge (inert waste) initially included disposal to agricultural land or landfill. During the EIA process it became evident that the only option for sludge disposal is to Shongweni Landfill, until such time as the sludge is delisted and the drying facility is installed. This will not exceed 25 000 tons per day.</p> <p>(10) The options for the disposal of the dewatered sludge (inert waste) initially included disposal to agricultural land or landfill. During the EIA process it became evident that the only option for sludge disposal is to Shongweni Landfill, until such time as the sludge is delisted and the drying facility is installed. The land area will not exceed 200 m² and the waste will not exceed 25 000 tons per day.</p>
<p>2.5 The project activities include the construction and operation of primary treatment infrastructure for mixed sewage. Basically this involves the removal of solids prior to discharge to sea and while we regard the improvement of the standard of effluent discharged to the marine environment as positive we find that this is but a single step in addressing the sustainable management of resources and waste.</p> <p>This proposal deals with end-of-pipe treatment, which is technologically archaic, and therefore does not align with accepted best practice.</p> <p>The project (end-of-pipe) needs to form part of an assessment of the sources of sewage and effluent, the flow rates and the type of treatment that is most applicable (from an environmental perspective) – however, it is being viewed in isolation of the bigger picture of resource use and waste management.</p> <p>In addition,</p> <ul style="list-style-type: none"> • The intention should be to get to secondary treatment for the WWTW and not continue to regard the sea as a dump site; • How is the Metro dealing with the problem of using water to convey our wastes, when we should be reducing this type of 	<p>Coastwatch KZN 01.07.2014</p>	<p>Your comment is noted and the facts stated have in fact formed the motivation for this proposed development.</p> <p>The end-of-pipe state of the environment is considered to be in need to immediate action for mitigation of the current negative impact on the marine environment. From the trends in assessments of the CSIR reports and the possibility that the EWS may not be permitted to discharge to sea in the future, it can be seen that solutions are needed to improve the effluent currently discharged to sea.</p> <p>However, this is not being done in isolation of the broader and more sustainable solution. Given the fact the SWWTW was developed in the early 1900's and that several components of infrastructure were mothballed, in order to attain best practices, the works will have to undergo a phased approach to current and best practice technology for which the outcomes can only be best achieved as each phase unfolds.</p> <p>What is gleaned from this comment though, is that a cradle-to-grave assessment process should be explored and this will be assessed going forward into the EIA</p>

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<p>wastage?</p> <ul style="list-style-type: none"> As more people migrate to the Metro, will water-borne sewage continue to be appropriate or should all new high-end developments have dry toilets and grey water recycling prescribed? The WWTW should investigate how to treat industrial effluent independently of the sewage, as there are synergistic impacts from mixing these effluents which have not been considered and are in addition to the impacts related to solids as is reported. Should discharge to sea continue, there needs to be a separate process for industrial effluents and sufficient space between the two pipelines to avoid these additional impacts that occur at sea. 		<p>phase.</p> <p>In this regard, the long term objective of the SWWTW is to reach a state of secondary treatment, while managing the challenges associated with such processes.</p> <p>This is a matter to be looked at in the long term planning of wastewater treatment as a whole for eThekweni and forms part of the city's continual research and development.</p> <p>The Metro will continue with the use of water borne sewage where full pressure water is available. The use of a dry toilet system will not be considered for high end developments as it will be more expensive to operate and maintain. Grey water recycling is being investigated.</p> <p>Noted as recommendations for future development of the SWWTW.</p>
<p>2.6 Appendix A1 – I notice Zinc levels are way above the legislated requirements. I do understand this is the current situation; hence pass this deviation onto Neil McCloud's team.</p> <p>What is the water / waste department doing to rectify this problem?</p> <p>My view is there is insufficient monitoring by waste water personnel at the sites of the industries that contribute to this problem (basically lack of enforcement of permit requirements).</p>	<p>Deepchund Ramchurren Comment to Draft Scoping Report 12.06.2014</p>	<p>This has been brought to the attention of the Pollution Branch of eThekweni Water and Sanitation and is receiving attention.</p>

ISSUE	RAISED BY	RESPONSE
3. ODOUR		
<p>3.1 Concern was raised over the community affected by odour (smell) and the nuisance.</p> <p>The project 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>Attendee at Introductory meeting 14.04.2014</p>	<p>This is noted as a valid concern.</p> <p>Please refer to the BID and the Scoping Report which presents the full scope of works proposed and explains the process. Historically, previous proposals did try for additional flows but the community was against this and therefore it was stopped.</p> <p>Sludge from KwaMashu WWTW was brought to the SWWTW previously as an emergency measure, EWS therefore apologise for this as KwaMashu did not have sufficient infrastructure at the time to deal with the problem.</p>
<p>3.2 The contribution of odour to health and lifestyle challenges in the South Durban Basin cannot be ignored.</p> <p>Improvements must be made rather than the just the <i>status quo</i> being maintained.</p>	<p>Coastwatch KZN 01.07.2014</p>	<p>Noted.</p> <p>The Air Quality Assessment (AQA) being conducted will have as part of its overall deliverable an odour abatement plan which will prescribe measures for the mitigation and control of current and perceived odour.</p>
<p>3.3 Smell and odour was raised, there is a hotline which does not operate (telephone is not answered).</p> <p>Furthermore, the pump on Sylhiet Place often presents significant odour nuisances.</p>	<p>Attendee at Introductory meeting 14.04.2014</p>	<p>This has been duly investigated by EWS.</p> <p>Regarding the Pumpstation, since the reporting of this issue, EWS Systems Branch has been to site to investigate and have provided the complainant with direct contact details.</p>
<p>3.4 Will the smell increase due to the digesters?</p>	<p>Attendee at Introductory meeting 14.04.2014</p>	<p>Anaerobic digesters are fully enclosed and therefore will not increase odours; however, in order to address current odours, the air quality assessment will evaluate the extent of the impact and develop an odour abatement plan.</p>
<p>3.5 According to residents, the odour levels around the premises and the area is unacceptable and any upgrade that will increase the level of sewage at the treatment works should not be approved.</p> <p>Moreover, you indicated at the public hearing that no raw sewage effluent will come from other parts of Durban and we request that this be documented in the final EIA outcome.</p>	<p>SDCEA 02.07.2014</p>	<p>Noted. Odour levels are a warranted concern, however, it is important to note that this proposed project does not propose increased capacities or an increase in the level of sewage and therefore it is not anticipated that odour will increase. In contrary, odour levels should decrease due fully enclosed anaerobic digesters.</p> <p>EWS has given their word that raw sewage will not be brought to the SWWTW from areas outside of those services by these works.</p>

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<p>We noticed that there is no proper plan in the document stating on how the odour is going to be monitored on a monthly basis.</p> <p>The data on air quality is not been forth coming, despite the fact that we have being requesting data since 2010 and we have not received any data yet from the Municipality. This act infringe on our right to information. Though the air quality data is captured in the document we feel it is vague and out dated and no new data from 2010 until June 2014. We want to see an indication on how data on air quality will be forthcoming and will give us an indication whether the environment is improving and whether the upgrade will increase the emissions.</p>		<p>Please note that the AQA will produce an odour abatement plan which will prescribe measures for odour control, including recommendations for monitoring.</p> <p>Reliable and verified data on air quality can and will be shared with the greater public.</p> <p>Noted.</p> <p>The most recent data will be used in the EIA phase; however, it must be noted that the data presented thus far was only to provide a baseline for consideration in the scoping phase. Trends such as requested by the SDCEA will be depicted in the EIA reports.</p>
<p>3.6 A layman's presentation on odour threshold is required.</p> <p>There is a lot written making various comparisons about odours / carcinogens – it seems your air quality consultants are just trying to present a lot of information to confuse the public (my view).</p>	<p>Deepchund Ramchurren Comment to Draft Scoping Report 12.06.2014</p>	<p>Stakeholders are welcome and encouraged to engage with specialists, either from established organisations or education institutions to interpret and comment on reports on behalf of the stakeholder. Furthermore, stakeholders are urged to attend public meetings at which the full team are present and ask questions to facilitate better understanding of the information presented.</p> <p>It is noted that specialist jargon is difficult to comment on and therefore every attempt is made to express information in layman terms, as is done in presentations.</p> <p>Nonetheless, facts and data must be reported on.</p>
<p>3.7 The odours around the site at present are unacceptable.</p> <p>Will the proposed additions improve or degrade even further the breathable air?</p>	<p>Mr. Vishnu Naidu 17.05.2014</p>	<p>Please refer to point 3.4 above.</p>
<p>3.8 The contribution of odour to health and lifestyle challenges in the South Durban Basin cannot be ignored. Improvements must be made rather than the just the <i>status quo</i> being maintained.</p>	<p>Coastwatch KZN 01.07.2014</p>	<p>Please refer to point 3.4 above.</p>
<p>4. NOISE</p>		
<p>4.1 Will noise increase due to the pumps?</p>	<p>Attendee at Introductory meeting 14.04.2014</p>	<p>The new pumps will be of a higher and more current technological quality, more efficient and will be placed under water, and are hence more silent.</p> <p>The scoping phase has therefore found that noise is not a significant concern beyond the expected noise of the construction phase which is forthcoming of all</p>

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		<p>development and easily managed through a Construction Environmental Management Plan (CEMP) which will form part of the EIA's Environmental Management Programme (EMPr).</p> <p>It is therefore not deemed necessary to conduct a noise study for this EIA.</p>
4.2	Noise pollution	<p>Mr. Vishnu Naidu 17.05.2014</p> <p>Kindly note response to point 4.1 above. Should this not be the information you seek, kindly elaborate on your requirements and a detailed response will be provided.</p>
4.3	<p>Noise pollution is a big concern to the residents, yet we didn't see any proper plan on how the noise levels would be minimized. Additionally, there is no indication on how the SWWTW is going to conduct fence line monitoring and how that information is going to be communicated to the public.</p>	<p>SDCEA 02.07.2014</p> <p>Please refer to point 4.1 above. With reference to fence line ambient air monitoring, the SDCEA, the Centre for Health and Environmental Education Awareness (CHEEA) and Groundwork will be contacted for recommendations prior to this being communicated to the greater public.</p>
4.4	<p>Noise levels during the construction phase will increase significantly. All mitigation measures to reduce the frequency of noise events to levels that would not constitute a noise nuisance must be documented prior to construction phase.</p> <p>All activities must only operate 08h00 – 16h00 to further reduce impacts on the neighbouring community.</p> <p>Noise emissions must be minimized to comply with SANS 10103:2008.</p>	<p>Development Planning, Environment & Management Unit: Environmental Planning & Climate Protection Department (DPE&MU EP&CPD); Environmental Health Department 01.07.2014</p> <p>Noted, this will form part of the reporting of the EIA phase.</p> <p>Such recommendations will be prescribed in the EMPr.</p>
4.5	The quality of life in the surrounding area is very poor due to noise and odour.	<p>Attendee at the Introductory meeting</p> <p>Please refer to points 3.4 and 4.1 above.</p>

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	14.04.2014	
5. AIR QUALITY AND CLIMATE CHANGE		
5.1	Risks to the WWTW induced by climate change need to be discussed.	Coastwatch KZN 01.07.2014 Noted. This will be included in the Final Scoping Report and added to the plan of study.
5.2	<p>An Air quality study must be conducted by an independent air quality specialist. The report must contain <i>inter alia</i> but not limited to the following:</p> <ul style="list-style-type: none"> • Current Emission levels • Throughputs / volumes of exhaust fumes / dust generated by vehicles and constructions activities • Projected emission levels after construction • The greatest concern is the increase in odour emissions related to the processing, storage, transportation and disposal of sludge • Planned mitigation controls 	<p>DPE&MU EP&CPD City Health: Environmental Health Services. 01.07.2014</p> <p>Please refer to points 1.3 and 1.7 above.</p> <p>Noted. The recommendations for study will be forwarded to the specialist for assessment in the EIA phase.</p>
5.3	<p>Methane gas- the gas will be flared- indicate the emissions from the combustion as a worst case scenario. Can this gas not be converted to produce electricity to feed into the grid as is currently practiced at the Bissasar Rd and Marianhill Land fill sites?</p> <p>I suggest you request this issue be referred to waste water Department for transmission to the Council's Energy Office.</p>	<p>Deepchund Ramchurren Comment to Draft Scoping Report 12.06.2014</p> <p>Further to the option of flaring the remaining gas, the option of utilising most of the stored gas to dry the sludge through a mechanical thermal drying process and then using the waste heat from the drying process to heat the sludge will also be explored and investigated as the EIA unfolds. It is important to note that the drying of sludge would greatly reduce the road transportation requirements for removal of sludge off site.</p> <p>One of the options explored within the scope of this study is that should thermal drying not take place, then the excess gas will be converted to electricity (in the region of 1 MW) for use within the plant.</p>
5.4	The air quality trends must be updated to 2013.	Rafiq Gafoor; Mondi 29.05.2014 Noted. This will be done in the EIA phase.
6. INFRASTRUCTURE AND SERVICES		
6.1	Please be advised of the following:	Mrs. Schmidt Noted and will be taken cognisance of in the design.

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<ul style="list-style-type: none"> • In order for the Department to ensure operational efficiency of the Provincial Road Network so as to ensure Road Safety is not compromised the Department maintains a level of control over Structures and Services, both within the declared or expropriated road reserve and in that portion of land immediately adjacent to the road reserve, known as the building restriction area, as defined in Section 13(1)(a) & (b) of the Kwazulu-Natal Roads (Act No. 4 of 2001). • No buildings or any structures whatsoever, other than a fence, hedge or a wall which does not rise higher than 2.1 m above or below the surface of the land on which it stands, shall be erected on the land within a distance of 15 m measured from the road reserve boundary of a Blacktop surfaced Main or District Road, or within a distance of 30 m measured from the centre line of a Gravel surfaced Main Road; or within a distance of 25 m measured from the centre line of a Gravel surfaced District Road. • The road reserve boundary shall be determined in consultation with this Departments Road Information Services (Tel: 033 355 8600). • On Main Roads, no single pole power transmission line, telecommunication line, cable, or pipeline with a diameter of less than 100 mm diameter should be placed within a distance of 13 m of the Road centreline. Nor, in addition, should they be more than 2 m inside the road reserve boundary. • Except at approved crossings of the road reserve, the closest point a pipeline exceeding 100 mm in diameter should be at least 17 m from the centreline of a Main Road, carriageway or ramp. In addition, the closest point a pipeline should be located is at least 2 m outside of the road reserve boundary. • On District Roads and Local Roads, no single pole power transmission line, telecommunication line, cable, or pipeline with a diameter of less than 100 mm diameter should be placed within a distance of 8 m of the Road centreline. Nor, in addition, should be more than 2 m inside the road reserve boundary. • Except at approved crossings of the road reserve, the closest point a pipeline exceeding 100 mm in diameter should be at least 12 m from the centreline of a District Road or Local 	<p>(DoT) 19.05.2014</p>	

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<p>Road. In addition, the closest point a pipeline should be located is at least 2 m outside of the road reserve boundary.</p> <ul style="list-style-type: none"> • All Structures and Services are to be approved and placed in consultation with and to the satisfaction of the relevant Cost Centre Manager. • All costs incurred, as a result of these requirements shall be borne entirely by the developer. • Upon receipt of the formal application with a layout plan, this Department shall assess and comment further. 		
<p>6.2 This department has no objection to the proposed development subject to:</p> <ul style="list-style-type: none"> • Building plans being submitted for scrutiny to this department. • Compliance with Major Hazard Installation Regulations in case the proposed development is in close proximity to existing MHIs or the facility itself will be an MHI. • Full compliance with other applicable Legislative requirements. • In terms of the remaining sludge being discharge to the sea, the DWA (DWS) will comment on that. 	<p>Mr. Dlala eThekweni Fire Department 14.05.2014</p>	<p>Noted. Building Plans will be submitted to your department in accordance with regulations. A Risk Assessment and MHI Study will be completed as part of the process with a baselines study as part of the Scoping Phase. Kindly refer to the draft Scoping Report.</p>
<p>6.3 With reference to your application dated 23.05.2014, in connection with the abovementioned proposed “<i>Solids removal and treatment facilities upgrade application</i>”, I have to inform you that the Minister as the Controlling Authority as defined in the Kwazulu-Natal Roads Act No. 4 of 2001, has in terms of section 21 of the said Act, no objections to the proposed application as represented in the Environmental Impact Assessment reference No. DM0032/2014 as this does not affect our Provincial Road Network.</p> <p>This correspondence does not grant authorization or exemption from compliance with any other relevant and applicable legislation.</p>	<p>Department of Transport (DOT) 30.05.2014</p>	<p>Noted. All activities undertaken as part of this development will comply with conditions outlined in comment received by your department dated 19.05.2014 and outlined in point 6.1. above.</p>
<p>6.4 Please provide more details on the need for the HDPE pipe at Cuttings Beach (32 m from Umlaas Canal), i.e. need for the pipe, will the beach be closed during construction, is it a new pipe or replacing an existing pipe.</p>	<p>Deepchund Ramchurren Comment to Draft Scoping Report 12.06.2014</p>	<p>This involves the replacement of an existing and aged portion of the pipe. The construction area will be demarcated for the period of construction; however, closure of the beach is not envisaged. 70 m of the existing landline pipeline will be replaced with 2 x 1 000 mm diameter pipes.</p>

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6.5 Second dam of 23 Ml capacity. Actual location, what chemicals (i.e. toxic or innocuous) will be released from the dam, odour levels expected to be emitted from the dam.	Deepchund Ramchurren Comment to Draft Scoping Report 12.06.2014	This can only be confirmed once the specialist studies on odours have been completed.
7. SOCIO-ECONOMIC		
7.1 The EMPr must take into account odour emissions from the processing, storage, transport and disposal of sludge. It must be noted that the proposed treatment facilities upgrade is conducted in such a manner as not to impose undue risk or negative impacts on the quality of lives of the employees or the surrounding industrial or residential community.	DPE&MU EP&CPD 01.07.2014	Noted, these recommendations will be carried through to the EMPr.
8. TRAFFIC		
8.1 Suggest that vehicles involved during construction use the Mondli Route to the sewer works to avoid congestion at Badulla Drive / Tara Rd intersection.	Deepchund Ramchurren Comment to Draft Scoping Report 12.06.2014	Noted, these recommendations will be carried through to the EMPr.
9. BIODIVERSITY AND ECOLOGY		
9.1 Will the proposed additions improve the discharge to the ocean? Does it conform to international regulations?	. Deepchund Ramchurren Comment to Draft Scoping Report 12.06.2014	The upgrades which form the scope of this project are proposed primarily to improve the effluent currently disposed of to sea, by reducing the solids in the effluent. The disposal of effluent to sea conforms to the South African regulations as set out by the DWA (DWS) and the SWWTW currently holds a Coastal Wasters Discharge Permit.
9.2 The project motivation describes clear evidence in the 2011 Durban outfalls survey of benthic macro-faunal community structure having been modified in close proximity to the outfall because of enrichment with particulate organic material. There is reduced biodiversity and this trend has developed over the past	Coastwatch KZN 01.07.2014	Noted. Such recommendations do however, fall outside of the ambit and scope of this EIA. This EIA will assess the impacts associated with the development activities proposed, while noting that these activities have proposed

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<p>decade. We accept this outcome and support EWS attempting to address this aspect through the proposed activities.</p> <p>However, we have concerns that the impact assessments are fundamentally flawed and are unable to pinpoint that the source of the problem is only the solids.</p> <p>In our opinion this should be the subject of an international peer review (and Coastwatch is able to provide names of recognised experts in the field) for the following issues of concern:</p> <ul style="list-style-type: none"> • The assessment process must be representative and reproducible; • The assessments need to differentiate between the communities that are stressed by identifying the meio- and macro-fauna correctly in order to be able to determine which are sensitive and which are tolerant species; • The sampling grid must be set correctly; • Toxicity testing must follow international best practice (it currently involves just one set of tests - sea urchin fertilisation). 		<p>having arisen from the findings of the Durban Outfalls reports.</p> <p>Having noted this, the marine environment is but one part of the motivation for this development, with best practice being the overall long term motivation.</p> <p>Nonetheless, your points are noted and will be included in the EIA Report as limitations and assumptions.</p> <p>We do however urge that you bring these recommendations to the attention of the CSIR who are responsible for the reporting on annual Durban sea outfall surveys.</p>
<p>9.3 Cumulative and downstream impacts on coastal waters are listed in different sections in the report as a key finding of the scoping process yet it is not addressed in the Plan of Study for impact assessment. This aspect of the operation of the facility needs further attention</p>	<p>Coastwatch KZN 01.07.2014</p>	<p>Noted.</p> <p>Cumulative impacts will be addressed in the EIA phase. This is indicated in section 8 of the report, "<i>potential impacts associated with the project</i>" and particularly section 8. 4 which states that cumulative impacts will be assessed in the EIA phase, however, it is noted that cumulative impacts on coastal waters and downstream impacts are not specifically stated in the PoS. This will also be drawn from specialist studies.</p>
<p>9.4 The SR section 9.2.3.6 lists specific and relevant topics to explore:</p> <ul style="list-style-type: none"> • Waste assessment and categorization, process water use and treatment, stormwater management groundwater management, water reuse and reclamation, and waste minimisation and adds the proviso "<i>as it may be applicable</i>". It needs to be explained what will be applicable to which topic and at what stage of eThekweni's management of resource use and waste. • How will the changes in weather (increased rainfall, and increased intensity) be taken into account? 	<p>Coastwatch KZN 01.07.2014</p>	<p>Noted and will be carried forward as recommendations for the study and IWWMP.</p>

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<ul style="list-style-type: none"> • How will the changes in the absorptive capacity of the catchment be taken into account (more development, less absorption of rainfall with more hardened surfaces and increased peak runoff)? • The WWTW is situated in a flood plain. How will it be able to deal with flood waters and will the designs take this into account by ensuring sufficient allowance for stormwater drainage systems on site to allow for the collection and slow release of peak flows, without impacting the Works, to protect neighbours? • How will power outages affect the WWTW and how will the impacts be minimised? 		
<p>9.5</p> <p>It has been identified that the levels of Zinc in the effluent discharged to sea are elevated and it is said that pollution control efforts will be made to reduce the point source of zinc based effluent discharges. Details of how this will be addressed are required including what timeframes apply?</p>	<p>Coastwatch KZN 01.07.2014</p>	<p>Noted, this will be provided in the EIA Report.</p>
<p>9.6</p> <p>With the current global warming and the adverse effect on the planet, we think the project has not taken in to consideration the destruction of a vast area to make room for the project. We think the project will impede on the biodiversity and the ecosystem.</p>	<p>SDCEA 02.07.2014</p>	<p>Climate change and its role in the development will be addressed in the phases going forward. It is however, important to note that no areas will be destructed; the majority of this project is refurbishment with the remainder (which forms the new construction aspects of the development) is situated entirely within transformed areas. Furthermore, the motivation and intention behind the development are to reduce pollution with regard to marine, air / atmospheric and noise pollution. In this regard impacts to the natural environment are minimal. The EAP is not clear on the ecosystem being referred to, however, if it is the marine environment which is receiving the effluent discharged then it is important to note that this project serves to move toward a more sustainable practice and as a short term goal, lessen the solids going out to sea.</p>
<p>9.7</p> <p>The aim of the proposed SWWTW upgrade is to reduce the quantity of suspended solids being disposed of to the sea. We have witnessed a number of incidents such as pollution of the rivers and the ocean, fish and other marine lives dying due to</p>	<p>SDCEA 02.07.2014</p>	<p>Your concerns are warranted and noted, and furthermore can and has been captured as part of this EIA process, recorded herein this issues trail. It is, however important to note that such monitoring and</p>

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<p>discharge. We however, request that period and times for water testing must be documented and also regular water samples results must be made available to the community and interested parties.</p> <p>More than 12 000 fisherfolks in Durban depends on the water resources for their daily livelihoods and leisure and we request that proper contingency measure have to be placed in the document in case of any pollution of the sea and the rivers.</p> <p>No documents or reports are provided by the eThekweni Municipality Water Waste Sanitation and Pollution Department to the SDCEA, despite the fact we have brought the pollution complaints to their attention.</p> <p>We do not see any mention of how the officials will deal with pollution incidents or provide written feedback to interested and affected parties once this upgrade is approved.</p>		<p>water sampling falls outside of the responsibility of the project proponent.</p> <p>Furthermore, sampling, monitoring and reporting on such is taking place annually by the CSIR and provided as the Durban Outfalls Surveys. This is a public document and can therefore be available to the greater public.</p> <p>Your concerns are documented here; however, these are recommendations or requests specific to the operations department.</p>
<p>9.8 With regard to the plan of study for the EIA, the proposed biodiversity impact assessment study must include the mitigation measures to remediate and rehabilitate the areas in close proximity to the outfall as well as alien plant control.</p>	<p>DPE&MU EP&CPD 01.07.2014</p>	<p>Noted, this will be carried forward in the EIA phase and included in the PoS.</p>
<p>9.9 The identified potential environmental impacts of the proposal, including levels of current contamination must be assessed. Feasible measures to mitigate the identified must be evaluated and presented on the EMP.</p>	<p>DPE&MU EP&CPD 01.07.2014</p>	<p>Noted, this will be carried forward in the EIA phase and included in the PoS.</p>
<p>9.10 Environmental Planning & Climate Change Protection Department supports the upgrade of the works since it will reduce the amount of suspended solids being disposed off to sea.</p> <p>The no-go alternative is therefore not desirable as it will mean that the long-term ecological threats to the receiving environment in close proximity to outfall will increase.</p>	<p>DPE&MU EP&CPD 01.07.2014</p>	<p>Noted, this will be carried forward in the EIA phase and included in the PoS.</p>
<p>9.11 All waste removed during the construction phase must be documented, transported and disposed of in a manner that does not contravene with the National Environmental Management Waste Act of 2008.</p>	<p>DPE&MU EP&CPD 01.07.2014</p>	<p>Noted, this will be carried forward in the EIA phase and included in the PoS. Compliance with all bodies of legislation is ensured.</p>
<p>10. HERITAGE</p>		
<p>10.1 We noticed in the document you refer to offsetting, however we are requesting for a proper plan which will consider the heritage of</p>	<p>SDCEA</p>	<p>The project is currently at the very early stage of scope, whereby issues for focus are scoped. It is therefore</p>

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<p>the site. We also noticed that there is no official letter from the Amafa Heritage, despite the fact that no approval has been given and your information in the document is showing a nod of approval of the project.</p>	<p>02.07.2014</p>	<p>stressed that no approvals will be provided at this stage as no assessment on the impacts has been conducted. Therefore, there will not be a letter from Amafa as the online South African Heritage Resource Internet System (SAHRIS) is a formal system which requires the upload of all information and then the submission of a rejection or approval by Amafa. It is currently too early in the process for such approval or any other approval. It should also be noted that no offset is required for the heritage of the site as the heritage is not at all being impacted on. The Scoping report is not intended to depict any approval or “nod” of the project but rather serves to explain and introduce the project, explain the legislative process, involve the public, and develop a plan of study for the EIA.</p>
11. OTHER		
<p>11.1</p>	<p>Please advise if this upgrade is successful will you been giving work out to local business</p>	<p>Mr. Naidoo 15.05.2014</p> <p>Thank you for your enquiry. Kindly note that RHDHV has been appointed to conduct the Environmental Impact Assessment only. Our services to not involve construction, design or procurement. We are not certain of your area of expertise or business, however, should the upgrades be approved you may contact the Southern Waste Water Treatment Works directly with your query.</p>

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<p>11.2 You failed to consider the health studies conducted in south and north Durban looking at the health status of children. We have attached the summary report and the recommendation of the 2002 and 2006 health studies conducted by the Nelson Mandela Medical School, University of KwaZulu Natal.</p> <p>We noticed that your document just glance over the health issues and did not properly mentioned the addition emission and pollution that would deteriorate the poor health of already affected community members who live in the neighbourhood.</p> <p>We request that more work be done on the effect the upgrade is going to have on the health status of the community.</p> <p>We request for permanent monitoring stations by independent people and also free access to information.</p> <p>Information must be accessible and if possible should be given without going through the processes of PAIA.</p>	<p>SDCEA 02.07.2014</p>	<p>Thank you for your recommendations.</p> <p>The Social Impact Assessment (SIA) baseline study does elaborate on the health status of the study area and further outlines how this aspect with form part of the detailed impact assessment of the social study. Please refer to Appendix C2 of the Scoping Report.</p> <p>The reports forwarded are indeed useful and will be incorporated into the study going forward. The Health status of the study area and the knock on affects are indeed a vital aspect of this EIA.</p>
<p>11.3 The eThekwini Electricity Department has checked this application against its records and has no objections or comments to the proposed upgrade of the waste treatment works. However, should any upgrades be undertaken to the sewer pipelines which feed the plant, the plans for such must be submitted to the department as there are existing underground cables which could be affected by trenching.</p>	<p>DPE&MU EP&CPD Electricity Department 01.07.2014</p>	<p>Noted.</p> <p>Should any upgrades to the sewer pipelines be undertaken, this will be communicated with your department and conducted in association with your department.</p>
<p>11.4 The Framework Planning Branch has no objection to the proposed upgrade of the SWWTW as there is no proposed change in land use.</p>	<p>DPE&MU EP&CPD Framework Planning Branch 01.07.2014</p>	<p>Noted.</p> <p>The Framework Planning Branch will none the less remain a part of the project database and be informed of progress.</p>
<p>11.5 No Concerns from Disaster Management</p>	<p>DPE&MU EP&CPD Disaster Management 01.07.2014</p>	<p>Noted.</p> <p>The Framework Planning Branch will none the less remain a part of the project database and be informed of progress.</p>
<p>11.6 eThekwini Fire and Emergency Planning Unit has no objection to the proposed development subject to:</p>	<p>DPE&MU EP&CPD</p>	<p>Noted.</p> <ul style="list-style-type: none"> This will be carried forward to the EMPr.

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<ul style="list-style-type: none"> • Full compliance of the waste storage facility with Interim Code Relating to Fire Prevention and Flammable liquids and Substances. • The option of MHI status being declared by an MHI specialist. • Full compliance with other applicable legislative requirements. 	Fire and emergency planning unit. 01.07.2014	<ul style="list-style-type: none"> • The facility has been declared an MHI by independent specialists and the EIA phase will involve a complete Risk Assessment of the MHI. • Compliance with all bodies of legislation is ensured.
11.7 Environmental Health Department has no objection to the proposed treatment facilities upgrade subject to the mitigation measures being considered in the relevant categories noise, air quality and other.	DPE&MU EP&CPD Health Department 01.07.2014	Noted. Mitigation measures for all identified impacts will be provided in the EIA Report and carried through to the EMPr.
11.8 It is recommended that an Occupational Health Risk Assessment be conducted to identify potential stressors and all controls be engineered into the project.	DPE&MU EP&CPD 01.07.2014	The EIA currently includes a Life Cycle Assessment and a MHI Risk Assessment. The combination of these studies should adequately assess Occupation Health Risk. Furthermore, there are no significant changes to current operations hence any further risk assessments are not believed to be warranted.
11.9 The processing, storage, transportation and disposal of sludge will attract flies and in this regard, a detailed mitigation plan is required to prevent impacts to the community.	DPE&MU EP&CPD 01.07.2014	Noted. This will be carried through in recommendations for study in the PoS.
11.10 The location of the future pelletizing of sludge plant. (although not part of the current EIA). The exact location needs to be determined with due consideration in terms of prevailing winds and proximity to the residents. A situation should not arise whereby the present expansion is completed and the pelletizing plant is built near residents due to a lack of space.	Deepchund Ramchurren Comment to Draft Scoping Report 12.06.2014	The pelletizing plant will not be housed within the borders of the SWWTW as it presently cannot accommodate the plant. The exact location of the pelletizing plant is not known.
11.11 Appendix C3 – Fig. 1/2/3. Consideration should be given to some sort of barrier to prevent residents being affected by an explosion. Furthermore, this specific area will fall within the ambit of an MHI (OHS Act section 2.2 & 9.3)	Deepchund Ramchurren Comment to Draft Scoping Report 12.06.2014	Noted. A MHI Risk Assessment is being conducted and will recommend such precautions.
11.12 Water Use and Authorization <ul style="list-style-type: none"> • It is noted from the Report that at the Northern portion of the 	Department of Water Affairs	Further to discussions between Ashwin Seetal and the DWA official to whom RHDHV presented the project, Mr

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<p>study area, there is a wetland that borders the boundary fence. Please note that the occurrence of a wastewater treatment works (WWTW) within a 500 metre radius from the boundary of a wetland constitute water use in terms of Section 21 (c) and (i) of the National Water Act , 1998 (Act 36 of 1998), (NWA)and must be authorised such as Section 21 (c) and (i) water uses are defined as “impeding or diverting the flow of water in a watercourse” and altering the bed , banks course or characteristics of a watercourse” respectively in terms of the NWA.</p> <ul style="list-style-type: none"> • Should an activity be identified as a possible Section 21 (i) water use the application must delineate the watercourse and riparian habitat using the Departmental guideline. ‘A practical field procedure for identification and delineation of wetlands and riparian areas’ and indicate the proposed activity location in relation to the riparian area, the 1:50 and 1:100 year floodlines on a map of appropriate scale. The application will require an authorisation from the Department for any activity within the riparian habitat or 1:100 year floodline, whichever is the greatest distance from the watercourse. It is mentioned in the Report that the SWWTW lies within the 1:100 year floodline. • The construction of facilities for the storage and/or handling of wastewater and storage of waste in a lagoon constitutes a water use in terms of section 21(g) of the NWA and must be authorised as such. The disposal of sewage sludge and/or waste on land also constitutes section 21(g) water use. Section 21(g) of the NWA is defined as ‘the disposing of waste in a manner which may detrimentally impact on a water resource. <p>The following supporting documents are required for a Section 21 (c) and (i) Water Use Licence Application which must be submitted for attention the Regional Head:</p> <ul style="list-style-type: none"> • Licence application forms for section 21(c) and (i) water uses • Section 21(c) and (i) water use supplementary questionnaire • Legal map • Master Layout plan • Design Drawings 	<p>11.07.2014</p>	<p>Sibusiso Mathonsi, it can be stated that:</p> <p>Following the meeting with DWA which took place on 05 June 2014 at the DWA KZN Regional Office where RHDHV were advised that DWA only required an amendment to the existing WULA indicating the purpose of the WWTW upgrades (slide 3) and the impact of the upgrades (slide 12) – specifically wastewater and sludge volumes and quality. The slides are from the presentation made at the meeting with DWA.</p> <p>The Section 21(c) and (i) information and applications, as per the DWA letter are not required since any impacts on these would have been addressed in the current WULA issued by DWA (now DWS) in 2012.</p>

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<ul style="list-style-type: none"> • Environmental authorization reports (EIA, BAR, etc.) & Record of Decision • Environmental Management plan • Proof of public participation including minutes • Detailed stormwater management plan • Design report for water routing structures • Geohydrological investigation report • Geotechnical investigation report • Work method statement • Riparian/wetland delineation and functionality assessment • Riparian/wetland management and rehabilitation plan • Management and rehabilitation plan (watercourse, rivers, etc.) • Monitoring programme • Section 27 Motivation • R114.00 licencing fee is payable once the applicant is notified by this department to do so. • It must be noted that all water uses at the SWWTW will need to be applied for in a one Integrated Water Use Licence (IWUL) application. • The conditions of the discharge of treated effluent into the marine environment as authorised by this Department under a Water Use Licence (WUL) for SWWTW remain binding until the applicant is issued with Coastal Waters Discharge Permit. • It is mentioned in the Report that options for the management of dewatered sludge to a pelletizing plant that situated outside the premises of SWWTW and the disposal of the sludge to agricultural land or landfill. Please note that sewage sludge must be classified and disposed of in accordance with to the “Guidelines for the Utilization and Disposal of Wastewater Sludge” (Volumes 1-5) and as amended time to time. <ul style="list-style-type: none"> ▪ In terms of Section 117 of the NWA: <p>(c) “dam with a safety risk” means any dam</p> <p style="padding-left: 40px;">(i) Which can contain store or dam more than 50 000 m³ of water, whether that water contains any substance</p>		<p><i>This is noted, and the sludge will be disposed of to the Shongweni Landfill until the sludge is delisted according to these guidelines.</i></p>

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<p>or not, and which has a wall of a vertical height of more than five meters, measured as the vertical difference between the lowest downstream ground elevation on the outside of the dam wall and the non-overspill crest level or the general top level of the dam wall;</p> <ul style="list-style-type: none"> The Water Resource Management Section of this department must be contacted (031 336 2700) with regards to the requirements and registration of dams with dam safety risk. The onus is on the applicant to submit a complete water use licence application to this Department for water uses under Section 21 of the NWA occurring, and those that will be exercised in time to avoid unnecessary delays. <p>Watercourses</p> <ul style="list-style-type: none"> The wetlands must be included as part of the detailed Stormwater Management Plan should a certain percentage of stormwater from the site to be allowed to drain towards the wetlands. It is vitally important that any stormwater discharging to the wetland is dissipated prior to entering the permanent, seasonal or temporary zone of the wetland so that it does not cause gully erosion or negatively impact on the hydrological functioning of the wetland. Adequate measures must be put in place to protect the water resources that flow next to as well as through the said property from being polluted and/or degraded. Visible marking showing / demarcating the buffers must be provided on site during the construction phase. Any development that takes place within the 1:100 year floodline of a watercourse must be authorised by this Department. <p>Sewage and Waste Water Management</p> <ul style="list-style-type: none"> The use of temporary chemical toilets during the construction phase of the development must not cause pollution to water resources as well as pose a health hazard. The contents of these toilets must be emptied and safely disposed of. In addition, these toilets must be situated out of the 1:100 year floodline of a watercourse or outside 100 m from the watercourse, whichever is greater. 		<p><i>Noted and carried forward to the EMPr.</i></p> <p><i>Noted and carried forward to the EMPr.</i></p>

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<p>approved by the eThekweni Municipality.</p> <ul style="list-style-type: none"> The storm water drainage network system must be kept separate from the waste water (water containing waste) system. After construction, the site should be contoured to ensure free flow of runoff and to prevent ponding of water. Drainage must be controlled to ensure that runoff from the site will culminate in off-site pollution or result in damage to properties downstream of any stormwater discharge. The applicant must also address the management of stormwater discharged to the wetland in the water use licence application. <p>Erosion</p> <ul style="list-style-type: none"> Soil erosion on site must be prevented at all times i.e. Pre-, during- and post construction activities. Extra precautions must be taken in areas where soils are deemed as highly erodible. If soil erosion cannot be prevented, it must be minimized. Erosion control measures to be implemented in areas sensitive to erosion such as near water supply points, edges of points, edges of slopes, etc. these measures could include the use of sand bags, hessian sheets, retention or replacement of vegetation. <p>General</p> <ul style="list-style-type: none"> No forms of secondary pollution should arise from the disposal of sewage and refuse. Any pollution problems arising from the above development are to be addressed immediately by the applicant. The storage of materials, chemicals, fuels etc. to be used during the construction phase must not pose a risk to surrounding environment. Such storage areas must be located out of the 1:100 year floodline of any water resource and unauthorised to these areas must be controlled. Temporary bunds must be constructed around chemical or fuel storage areas to contain possible spillages. It is important that any significant spillages of chemicals, fuels, etc. during the construction phase are reported to this office and other relevant authorities. In the event of a spill, the following steps can be taken: 		<p><i>Noted and carried forward to the EMPr.</i></p> <p><i>Noted and carried forward to the EMPr.</i></p>

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<ul style="list-style-type: none"> a) Stop the source of the spill b) Contain the spill c) All significant spills must be reported to this Department and other relevant authorities d) Remove the he spilled product for treatment or authorised disposal e) Determine if there is any soil, groundwater or other environmental impact f) If necessary, remedial action must be taken in consultation with this Department. g) Incident must documented • The development must comply with all relevant local municipal plans and Bylaws. • An Environmental Management Programme (EMPr) must be developed for the project. Compliance to the final approved EMPr must be audited regularly by the designated Environmental Control Officer. • Notwithstanding the above, the responsibility rests with the applicant to identify any sources or potential sources of pollution from his undertaking and to take appropriate measures to prevent any pollution of the environment. Failure to comply with the requirements of the National Water Act, 1998 (Act No.36 of 1998) could lead to legal action being instituted against the applicant. 		<p><i>Noted and carried forward to the EMPr.</i></p>
<p>11.13 The Ezemvelo KZN Wildlife Planning staff, following a fleeting review of the documentation, is of the opinion that this application made in terms of the National Environmental Management Act (Act No. 107 of 1998) is unlikely to have a significant residual impact on biodiversity provided that the mitigation (both recommended and implied in your assessment) is included in the authorisation – should this application be approved.</p> <p>Naturally, Ezemvelo KZN Wildlife reserves all rights in this matter.</p> <p>Should any biodiversity issues arise, please do not hesitate to contact this office</p>	<p>eZemvelo KwaZulu-Natal Wildlife (EKZNW)</p>	<p>Noted with thanks.</p> <p>Should any biodiversity impacts be identified during the EIA process, this will be duly brought to the attention of the EKZNW.</p>
<p>11.14 The aim of the proposed Southern Waste Water treatment works (SWWTW) is to reduce the quantity of suspended</p>	<p>Department of Economic</p>	

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<p>solids being disposed off to sea.</p> <ul style="list-style-type: none"> The expected percentage change in quantity of the suspended solids disposed off to sea should to be indicated. Any additional improvement to the quality of the sea outfall effluent such as pH, COD, chemical concentrations, discolorations etc., needs to be discussed. Any likely changes in volumes of effluent to the sea (litres per day) need to be highlighted. <p>The site does not hold Coastal Water Discharge Permit (CWDP)</p> <ul style="list-style-type: none"> The current and future monitoring plans of the sea outfall need to be included. The compliance monitoring analysis between the current SWWTW system and the Coastal Waters Discharge Permit conditions need to be discussed. Any improvement to the compliance of effluent outfall, this project is proposing need to be discussed. <p>Annex 1 list the priority heavy metals for analysis in the sludge:</p> <ul style="list-style-type: none"> Current chemical analysis of the effluent disposed off to sea need to indicated. 	<p>Development, Tourism and Environmental Affairs- (EDTEA) - Coastal and Biodiversity Management: Head Office</p> <p>04.08.2014</p>	<ul style="list-style-type: none"> It is expected that the reduction is suspended solids will be in the range of 63.5%. Bullet pt 2: Noted, this will be elaborated on in greater detail in the EIA phase and communicated to the EDTEA and discussed. <p>Noted, this will be elaborated on in greater detail in the EIA phase and communicated to the EDTEA and discussed.</p> <p>The site currently holds a CWDP under the Department of Water Affairs and as part of this EIA will undergo the transition of amending this Permit according to the requirements of the DEA.</p> <p>The points highlighted here will be included in the amendment of the CWDP.</p>

TABLE 2-1: COMMENTS AND RESPONSE TABLE FOR EIA PHASE

EIA PHASE

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12.EIA PROCESS (METHODOLOGY, PUBLIC PARTICIPATION & CONSULTATION AND RECOMMENDATIONS FOR STUDY		
12.1	<p>Please be advised this Department has no objections to the proposed project as our provincial road network is not affected. The official letter will follow in the post shortly.</p>	<p>KZN DoT</p> <p>Comment to invitation to comment on draft</p> <p>Noted with thanks.</p> <p>Will the KZN DoT then be ok with a hardcopy of the EIA Report NOT being sent to your offices for</p>

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<p>Yes, that is correct; there is no need to send us a hardcopy.</p>	<p>EIAR 01.04.2015</p>	<p>comment? Noted.</p>
<p>12.2 With regards to the application and the provided summary of the findings from the Biodiversity Assessment that was conducted on the proposed site and based on this information, we do not require any additional information or document to be sent to our offices for review and comment, as there are no features of conservation significance on the proposed site. In addition to the above, the request by the applicant to protect the indigenous trees on the site is supported, and we trust that all the appropriate measures to safeguard the ecological integrity of the receiving environment will be implemented in accordance with the sustainable development principles of the National Environmental Management Act (Act No. 107 of 1998).</p>	<p>EKZNW Comment to invitation to comment on draft EIAR 01.04.2015</p>	<p>Noted. Should there be any issues of biodiversity / conservation, this will be brought to the attention of EKZNW.</p>
<p>12.3 Alternatives: Following the responses given to issues which were raised in the scoping process with respect to sludge disposal, that options would be investigated, it is not clear what options for sludge disposal and use of biogas have been evaluated and which options are being proposed. The EIR in Section 4.1 describes the scope of works and provides the following options:</p> <ul style="list-style-type: none"> • Removal off site for agricultural purposes and/or landfill; • Thermal drying using sludge gas and then removal off site for agricultural purposes; • In not thermal drying, sludge gas will be used for the generation of electricity in the region of 1 MW, to be used internally on the plants; and • Manufacturing of fertiliser (an option to be investigated under a separate study). <p>While the settled solids will be stabilised through anaerobic digestion, followed by a dewatering process, the preferred alternative for the latter is not described nor is it known how the dried sludge will be disposed of.</p> <p>It is not specified in the Water and Sanitation Development Plan</p>	<p>Coastwatch Comment on dEIAR 26.05.2015</p>	<p>The primary reason for the options provided to the sludge is that the grading of the sludge in terms of heavy metal contents is unknown at this point of the project; hence, Coastwatch is correct in listing the options / alternatives proposed in the previous columns as quoted from section 4.1 of the dEIAR.</p> <p>Therefore, after considering these alternatives through the progression of the EIA, the applicant (EWS) will be disposing of the sludge to a registered landfill and the gas will be used to produce electricity for use within the plant.</p> <p>Therefore, the preferred alternative is to dispose to landfill and will be pursued.</p>

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<p>either (Appendix 8 of the IWWMP).</p>		
<p>12.4 Impact Mitigation:</p> <ul style="list-style-type: none"> The potential impacts which have been identified are explained per phase of the project and mitigation measures are provided in the EIAR 9.3 – <i>Rating of Potential Impacts</i>. Table 0-2 gives certain mitigation measures which we find are not specific and therefore not enforceable. Impact 4. Mitigation: <i>“One of the options is to thermal dry the primary sludge with the use of the biogas generated in the anaerobic digestion process. If this is done, then this impact (sludge with high moisture content) is negated in its entirety. The process of dewatering also reduces odour”.</i> What is the preferred option for dewatering / odour control? Impact 22. Groundwater pollution through off-site sludge application on land/soil. Mitigation: <i>“Design of a lined pond with leakage detection system. Ongoing groundwater monitoring”.</i> Without the preferred method of sludge disposal having been given it is unclear what, and who, the mitigation measure (lined pond) refers to, noting that the impact results from <i>“offsite sludge application on land/soil”.</i> Impact 34. Odour / sludge retention time. Mitigation: <i>“The pre-treatment of septic sewage using nitrate salts (while this is offered as odour mitigation, it must be considered in detail because the effluent will not be afforded biological treatment to remove nitrates, which have been identified in the sea outfall monitoring. Hence, this mitigation measure must be applied with caution. A reduction”</i> As a prescribed mitigation measure it is a bit vague and requires further consideration – in detail as recommended. Impact 36. Odour. Mitigation: <i>“Possible minimization of odour emissions can be implemented at certain stages ... An effective method may be to use a low rate biological treatment step such as extended aeration of sewage or a high rate process within a building to avoid primary treatment. However, there are cost implications and is dependent on the size of the plant”.</i> Similarly, what is the mitigation measure – is low rate biological treatment a 	<p>Coastwatch Comment on dEIAR 26.05.2015</p>	<ul style="list-style-type: none"> Noted. The mitigation measures have been made stringent and where possible, enforceable. Where mitigation measures must be adhered to and not only considered as recommendations, they are brought forward into the Environmental Management Programme. Impact 4: It is important to note that the process is interlinked and oftentimes this means that where one impact can be mitigated / avoided, it may lead to another impact at another part of the overall process, as in this case, where dewatering will not be carried out, the high moisture content does pose an impact, however, <i>to a lesser significance</i>. The mitigation can be re-worded to a more enforceable action, however, it must be noted that the auditable document is the EMP which will be worded to be more enforceable. The preferred option for dewatering is belt filter presses, and for odour control, the preferred option is ventilation. Impact 22: It should be clarified that there will be no off-site sludge application to land (agricultural land or soil). Sludge will be disposed of the Shongweni Landfill. Impact 34: This is noted, the mitigation measures will be re-worded to provide clearer and actionable mitigation methods. Impact 36: While it would be optimum to

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<p>recommendation which is to be implemented?</p> <p>It also appears that some of the recommended measures would need intervention prior to sewage entering the WWTW. Can these municipal functions be set as conditions of Environmental Authorisation for the specific scope of work under discussion? Perhaps the adoption of the Integrated Water and Waste Management Plan (IWWMP) addresses these issues.</p> <ul style="list-style-type: none"> • Impact 8. Excessive heavy metals in sludge. Mitigation: <i>“Point source pollution control procedures must be put in place by the relevant authority e.g. from galvanizing industries ...”</i> • Impact 11. Excessive chemical loading. Mitigation: <i>“Sampling of every load that is tankered. Inventory control must be implemented. Manage within trade effluent discharge by-law requirements”</i>. 		<p>institute mitigations measures at point source, the SWWTW received domestic and industrial waste water from numerous sources with varying organisational sizes, which makes it a significantly difficult task to implement at this stage and furthermore would only be possible to implement at a by-law level, which still would be of little benefit to the SWWTW as this would be difficult to implement retrospectively. It is therefore unlikely that the environmental authorisation, if granted, could include such a condition as it would be governed at a higher level than that of the eThekweni Water and Sanitation (in whose name the EA would be in) and hence will be holding the applicant to an unfair condition of authorisation, or one which is outside of their mandate. Nonetheless, the IWWMP has put forth such recommendations as such aspects would be an ideal situation and one which the authorities are advised to work towards, i.e. the adoption and formalisation of such plans and eventual integration into by-laws.</p> <ul style="list-style-type: none"> • Impact 8 and 11 comments are noted.

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<p>12.5 The following considerations arise from the document -</p> <p>Coastal</p> <ul style="list-style-type: none"> • Authorisation to drive on the beach to be obtained from the relevant municipal official. Can it be confirmed that authorisation for the use of vehicles on beaches is a municipal function? • Sand to be sourced from “sand-rich” beach areas for use in restoration work after approval or clearance from the ECO. What criteria have been set to determine “sand-rich” areas, and by whom? • 18.1.4 Rehabilitation – The EIR, in Section 6.1.3 Ecological Significance, notes that <i>“It has been requested that over time that all such invader species (across the entire site) must be eradicated and be replaced with indigenous species native to the area to create more of a natural ecosystem with different types of natural habitat”</i>. The enhancement of the site with the creation of natural habitats as well as the planting of vegetation buffers as recommended in the specialist report would be of value however this is not addressed in the post-construction EMPr. 	<p>Coastwatch Comment on dEIAR 26.05.2015</p>	<ul style="list-style-type: none"> • Permission would need to be obtained from municipal officials. • Sand-rich areas must be determined in consultation with the ECO whose responsibility it is, together with the applicant and contractor must consult with a specialist such as the ecological specialist and Tandi Breetzke of Royal HaskoningDHV. • Noted with thanks, the recommendation of an alien invasive eradication programme will be added to the EMPr.
<p>12.6 My concerns / comments / feedback are as follows:</p> <p>I don't feel that the community is fully aware and engaged at their level of understanding;</p> <p>I perceived the question, from Mrs Perumal on what the 'Screening' and 'Grit' and other terms were, as rhetorical in nature and not an implication to change technical documents but rather that oral presentation and verbal communication to the community should be without technical jargon, *as their understanding is essential and required for the sake of their health and safety.</p> <p>From the EIA draft report, it shows that only 2 adverts (correct me if I am wrong) were placed, 1 in the Rising Sun and 1 in the Mercury? I think more ads could have been placed in the free local paper, the Rising Sun from 2013, at least once every</p>	<p>Kaishia I&AP and Resident 29.04.2015 Comment on dEIAR</p>	<p>Your points are noted with thanks, and as stated in response to the questions and points raised at the public meeting of the EIA phase, the task of public participation presents numerous challenges which the EAP must consider. It is for this reason that the expertise of Phelamanga Projects was commissioned, to streamline and refine the communication process.</p> <p>While we note that technical jargon is a hindrance to communication, it is also important to note that the principles of integrated environmental management (IEM) by which environmental practitioners must abide, is the requirement to be transparent. Hence the EAP must present the true picture and then the reason meetings are held with the project team in</p>

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<p>month.</p> <p>Another concern, also noted in the EIA report that posters were put up around election time, and posters were pulled down, in order to put up election posters. Could there perhaps not have been a drive around with loud public announcement, even this year, or was there one?</p> <p>It is also Easter and school holidays, which is celebrated or at least preoccupies almost all members of the public; some spend 1 or 2 months preparing for programs and activities around this time, some for school holiday programs, some are away on holiday.</p> <p>Some elderly citizens may not be able to read, particularly the small fine print as in the booklet sent out in the postbox. May I suggest that most senior citizens listen to radio stations such as Radio Lotus (If that is still the name) and could have been advertised there, if it had not been.</p> <p>With regards to the question raised by Mr Babs Govender on whether this is an 'upgrade' or 'expansion'; I feel that Phase 2 of the project, which shows an increase in incoming effluent, should have been made transparent during Fridays presentation, which would have been an assurance there is nothing to hide.</p> <p>Overall, I feel the communication was ineffective in that it was:</p> <ul style="list-style-type: none"> • Far too complicated, with too much information on the presentation slides or either difficult to notice anything, such as the use of an actual photograph of the site that looked like one taken from 'Google earth' and the use of the red laser pointing at details far too small to notice; • Instead, a simpler box diagram of the process (such as a Process Flow Diagram) could have been used to create understanding of the basic process, the risks at each stage and the mitigation/preventative measures in place. Such as the anaerobic digestion producing a flammable gas, more solids handling more smell, more treatment more chemicals released and the proposed safety measures to have been clearly or more clearly pointed out. 		<p>presence is to provide clarity that may be sought. It is therefore a twofold challenge</p> <p>Advertisements were placed in the Rising Sun and the Mercury per phase of the project, hence four advertisements were placed. In addition site notices were erected and 5000 background information documents (BIDs) circulated. The advertisements in the Rising Sun were charged for. It is also important to note that the Department only stipulates the December and Easter holiday periods in which no PPP can take place.</p> <p>The EAP also instated the assistance of local NGOs to assist with the circulation of BIDs and generation of awareness of the project. Your concerns are however duly noted and will be considered lessons learned going forward.</p> <p>Upgrade / Expansion: There will be no increased influent to the works and no increased effluent to the sea outfall, the volumes remain the same, and however, the upgrades will provide for increased treatment to existing volumes. Every attempt was made to be transparent in this manner; however, we appreciate you raising this aspect.</p> <p>Communication in general:</p> <p>These points are noted with gratitude and will be considered going forward as lessons learned.</p> <p>The presentation did include slides which demarcated and zoomed into each section of the Works which would be upgraded, however, the presenter does often find it a better method to talk through the proposed upgrades while drawing the audience attention with the use of a pointer. We must however maintain that every effort was made to address all questions with clear answers.</p>

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<ul style="list-style-type: none"> • Not transparent enough and not enough effort to inform and engage the public. • A sincere concern for the residents was not felt; an accompanying neighbour remarked that the answers were even sarcastic. 		<p>It should also be noted that the legislative process does not require meetings, yet the project team has to date held six (6) meetings to accommodate and address all community needs and queries.</p>
<p>12.7 The South Durban Community Environmental Alliance (SDCEA) is a non-governmental coalition of 17 community and environmental organisations concerned with environmental justice and sustainable development in South Durban and eThekweni (the broader Durban municipal area).</p> <p>After having one through all specialist reports, we state that this entire EIA process should restart with independent, qualified, experts appointed in conjunction with representatives of the communities of South Durban. We hereby state that on the independent review of S. R Chetty of the Durban University of Technology, we agree completely that the sludge coming in through the Southern Waste Water Treatment Works at Merewent needs to be fully assessed as this will have a devastating impact on the people of South Durban.</p> <p>We would like to see that this process take into consideration all the important comments made by S. R Chetty and that all information is made available to us so that we can clearly see if all comments have been considered and an action plan developed.</p> <p>In regards to the comments made by David McFarlane and Associates, we echo that the traffic assessment needs to consider the growth and change in the volume of waste water and in addition to the final output. We further need to understand how this increase in traffic by road tankers is going to be assessed as well as the cumulative traffic of the entire area which includes 3000 vehicles per hour (According to recent traffic reports done by KSEMS consultants for the Clairwood Racecourse Development project).</p> <p>To the specialist's review of the atmospheric study, we fully agree with the comments of uMOYA-NILU and clearly the consultants and specialists did not consider the seriousness and importance of Air Quality and its impacts on the residents of South Durban. Therefore we urge the consultants to do a full</p>	<p>SDCEA 03.07.2015</p>	<p>The SDCEA's comments are noted with thanks.</p> <p>The EIA has been conducted by independent consultants. Royal HaskoningDHV is an independent consultancy. The specialist studies which are conducted to support the EIA are not required to be conducted by specialists outside of the EAP company, but must be reviewed for any bias nature by an external specialist, which has been completed. The SDCEA and other NGO's in the study area have been consulted from the inception of the EIA and were also consulted with regards to the terms of reference of the specialist studies and also allowed to nominate independent reviewers (refer to minutes of meetings of the introductory meeting held on 14.04.2014 and the NGO specialist discussion meeting held on 20.01.2015 in addition to the focus group meetings and public meetings held for the project).</p> <p>The SDCEA's agreement with the independent review findings is noted, and the relevant specialist studies have been updated / amended in response to these reviews, or responded to accordingly. These amended reports will be made available together with the final EIAR for a 21 day comment period to all I&APs.</p>

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<p>assessment on Air Quality taking into account all chemicals including Benzene and we believe that an Air Quality inventory of monitoring these chemicals should be developed. The impacts on residents health and quality of life are already compromised by industry and pollution the area, hence our concern for monitoring chemicals and pollution in variance to health and well-being of residents from this expansion of the facility. We also request that information be provided on odour control and emission reductions and what methods / practises will be used. We would like to have reports on whether covers will be provided on all your open tanks. We request a holistic approach to the Air Quality monitoring including source base, ambient Air Quality and fenceline monitoring be done for a period of time on the presence site before any EIA might be granted. This information with a reduction strategy should be placed before all stakeholders for their input and comments before it is sent through to the Department for a decision.</p> <p>In conclusion we reiterate Prof. Diane Scott in her Peer Review of the Social Impact Assessment Report: Upgrade of Southern Wastewater Treatment Works, May 2015 where she states that <i>“this review finds that the study does not meet the requirements of a social impact assessment as the following is absent / inadequate in the report:</i></p> <ul style="list-style-type: none"> a) <i>There is no conceptual and methodological framework</i> b) <i>There is no methodology to show how evidence is gathered</i> c) <i>There is no primary data produced and analysed by the SIA</i> d) <i>The description of the social context is inadequate</i> e) <i>Therefore, the knowledge base on which to assess the significance of the social impacts of the proposed development is inadequate.</i> “ 		
<p>12.8 We would like to state that a third option that being moving the upgrade to another facility or area be investigated.</p>	<p>Mr Roshan Krishna Rabibal Foundation 11.05.2015</p>	<p>It is imperative to note site alternatives were not considered due to the fact understandably the costs to decommission the SWWTW and construct an entirely new one elsewhere will not result in zero impact, but simply transfer the impact at a greater significance due to both decommissioning and new construction.</p>

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		<p>It is safe to say that the negative impacts for this option will be significant enough to negate any positive impacts of the proposed upgrades</p> <p>The need for new waste water treatment works is not warranted for the services catchment as the forecasts show very little growth to accommodate.</p> <p>Having stated the reasons above, the impact to the South Durban Basin is not ignored, or of less importance by any standard.</p>
<p>12.9 The EMPr must take into account odour emissions from the processing, storage, transportation and disposal of sludge.</p> <p>It must be noted that the proposed treatments facilities upgrade is conducted in such a manner as not to impose undue risk or negative impacts on the quality of lives of the employees, or the surrounding industrial or residential community.</p> <p>Should any problems arise, this department reserves the right to call for further mitigation measures.</p>	<p>eThekwini City Health / Environmental Health Services: 02.06.2015</p>	<p>Noted.</p> <p>This is included in the EMPr.</p>
<p>13. OPERATIONS</p>		
<p>13.1 We recognise eThekwini's proposed improvement to the treatment of sewage at the Southern WWTW, however we strongly urge the City to strive for continual improvement in effluent quality and to include ongoing investigations into sludge pelletizing for fertiliser, water re-use and other measures to relieve the increasing pressure on the limited potable water supply.</p> <p>Thank you for the information and opportunity to participate in the application process.</p>	<p>Coastwatch 26.05.2015 Comment on dEIAR</p>	<p>Noted.</p> <p>Such recommendations are more in line with a strategic objective of the eThekwini Municipality. We will relay it to the Municipality</p>
<p>13.2 Waste management:</p> <p>Details are required in relation to storage, treatment, transportation and disposal of sludge generated on site.</p> <p>All waste removed during the construction phase must be documented, transported and disposed of in a manner that does not contravene with the National Waste Management Act</p>	<p>eThekwini City Health / Environmental Health Services: 02.06.2015</p>	<p>Noted, this is included in the EMPr.</p>

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of 2009.		
14.ODOUR		
<p>14.1 What tests have been done to test for the odour?</p> <p>Innovative measures need to be put in place to get rid of the nuisance of the smell.</p>	<p>Mr Roshan Krishna Foundation Rabilal 11.05.2015</p>	<p>Review of existing literature was undertaken in a baseline study. Thereafter passive sampling was undertaken for identified pollutants, one of which was H₂S, for odour.</p> <p>Innovative mitigation measures have been explored, however, the best practicable options will be implemented in accordance with the impact and cost implications.</p>
15.NOISE		
<p>15.1 Noise levels during construction phase will increase significantly. All mitigation measures to reduce the frequency of noise events to levels that would not constitute a noise nuisance must be documented prior to construction phase.</p> <p>All construction activities must only operate 08h00 to 16h00 to further reduce impacts on the neighbouring community. Noise emissions must be minimized to comply with SANS 10103: 2008</p>	<p>eThekweni City Health / Environmental Health Services: 02.06.2015</p>	<p>Noted, such measures are included in the EMPr.</p>
16.AIR QUALITY AND CLIMATE CHANGE		
<p>16.1 Firstly I just want to thank you for the opportunity of allowing community members to have some input in this process.</p> <p>I've read through the document that was sent to us. I must admit, a lot of the information was difficult to understand due to all the technical terms and jargon used.</p> <p>I would simply like to know if we as community members will be exposed to any further noxious smells that emanates through the community (as it is, our community is already exposed to so much of pollution from surrounding industries). What are the long term, negative consequences for us if such a project is undertaken?</p>	<p>Mrs Chetty I&AP 21.04.2015</p>	<p>Email response dated 21.04.2015:</p> <p>Thank you kindly for your email and your interest in the project.</p> <p>I will respond in detail to your questions in a following email. I will also add you to the project database.</p> <p>Also please note that you will be formally responded to in the projects Issues Trail.</p> <p>Please further note that answers may be obtained by attending the public meeting scheduled for this Friday at 18h00 at the Merebank Community Centre</p>

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		<p>on Krishna Rabilall Road.</p> <p>Furthermore, a detailed EIA Report will be circulated from this Friday, and copies can be obtained from our website: www.royalhaskoningDHV.co.za as well as from the SWWTW, The Merebank Library, the SDCEA and CHEEA offices.</p> <p>Detailed response:</p> <p>The Air Quality Assessment does identify the exceedance of H₂S in phase 2 of the project. Phase 2 does not have a timeframe or programme for implementation at this stage.</p> <p>Based on the dispersion modelling simulations, the main conclusions can be summarised are as follows:</p> <p><u>Phase 1:</u></p> <p>All hourly, daily and annual maximum average concentrations of pollutants were below the respective standards. There were no exceedances of any guidelines.</p> <p>The odour perception threshold was below the 50% recognition for a given population size.</p> <p>The concentrations were highest during the primary treatment particularly from the Primary sedimentation tanks.</p> <p><u>Phase 2:</u></p> <p>All hourly, daily and annual average concentrations of pollutants for phase 2 were below the respective standards. There were no exceedances of any guidelines.</p> <p>The odour perception threshold was below the 50% recognition for a given population size, with the exception of Hydrogen sulphide which exceeded the detection limit.</p> <p>The concentrations were highest at the Primary</p>

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			<p>sedimentation tanks.</p> <p>There are expected to be nuisance impacts associated with the phased upgrades at the SWWTW, this would be primarily the result of the release of Hydrogen Sulphide into the atmosphere during phase 2. These impacts are noted to extend beyond the site boundary for hydrogen sulphide. Due to the high concentration of Hydrogen Sulphide, passive sampling was carried to determine the accuracy of the model outputs.</p> <p>All other pollutants evaluated during the assessment were compliant with their guidelines and thresholds.</p>
16.2	<p>An air quality assessment must be conducted by an independent air quality specialist. The report must include <i>inter alia</i> but not be limited to the following:</p> <ul style="list-style-type: none"> • Current emission levels; • Throughputs / volumes of exhaust fumes/ dust generated by vehicles and construction activities; • Project emission levels after construction; • The greatest concern is the increase in odour emissions relating to the processing, storage, transportation and disposal of sludge; and • Planned mitigation controls. 	<p>eThekwini City Health / Environmental Health Services:</p> <p>02.06.2015</p>	<p>The Air Quality Assessment does address the points required and while it was conducted by Royal HaskoningDHV it qualifies as an independent study as it has been peer reviewed by uMoya-Nilu.</p>
17. INFRASTRUCTURE AND SERVICES			
17.1	None.		
18. SOCIO-ECONOMIC			
18.1	<p>Have residents living adjacent to the treatment works been surveyed?</p> <p>Please include our concerns in your report and we would like answers to our queries.</p>	<p>Mr Roshan Krishna Foundation</p> <p>Rabilal</p>	<p>Residents have not been surveyed. Royal HaskoningDHV note that such a methodology would have most probably resulted in the repetition of issues which have been repeatedly reported at each</p>

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		11.05.2015	of the points of engagement with the community. While surveys do have their advantaged, the disadvantage is that it is limiting and can lead to errors in data. The EIA process afforded ample opportunity for comment and input from the public and all correspondence was used in the social impact assessment to draw conclusions and where necessary further engagement was probed.
18.2	Occupational Health and Safety: It is recommended that an occupational health risk assessment be conducted to identify possible stressors and all controls be engineered into the project.	eThekwini City Health / Environmental Health Services: 02.06.2015	The process risk assessment undertook a Hazard Identification (HAZID) workshop which includes impact associated with the work force and surrounding communities. The recommendations from this study are drawn into the EMPr.
19. TRAFFIC			
19.1	Has the impact of the increase in traffic arising out of the development of the Clairwood Racecourse been taken into account?	Mr Roshan Krishna Foundation Rabilal 11.05.2015	The Traffic Impact Assessment has taken into consideration all traffic forecasts for the study area.
20. BIODIVERSITY AND ECOLOGY			
20.1	Coastwatch, WESSA Durban Branch and Birdlife Port Natal, non-governmental organisations formed by volunteers and operating with support of people interested and/or affected by issues relating to the area share interest in development and change of land use applications in the eThekwini area. The organisations serve to ensure that development in the eThekwini area is appropriate, sustainable and legally compliant. The following comments are submitted on behalf of these organisations. The Environmental Impact Report (EIR) supports the applications for Environmental Authorisation and a Waste Management Licence for the eThekwini Southern Waste Water	Coastwatch 26.05.2015 Comment on dEIAR	Comment is noted and recommended for motivation for a strategic project of the eThekwini Municipality.

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<p>Treatment Works (WWTW).</p> <p>eThekwini Water and Sanitation proposes upgrading the facility (in two phases) to remove solids, i.e. primary treatment, following the outcomes of the CSIR Report, 2011. This will reduce the organic load of the effluent discharged through eThekwini's southern outfall and, in addition, Phase 1 will increase storage capacity thus reducing the risk of overflows onto the Cuttings Beach.</p> <p>eThekwini aims for improvement in the quality of effluent to meet possible more stringent licensing requirements in the future.</p> <p>The above organisations view the proposed primary treatment as a positive step towards improving effluent quality however eThekwini Water and Sanitation (EWS) is strongly urged to strive for continual improvement in its treatment of sewage, in particular the separation of industrial and domestic sewage with separate treatment processes.</p>		
<p>20.2 Vectors:</p> <p>The processing, storage, transportation and disposal of sludge will attract flies and in this regard, a detailed mitigation plan is required to prevent impacts to the community.</p>	<p>eThekwini City Health / Environmental Health Services:</p> <p>02.06.2015</p>	<p>Mitigation for this is included in the EMPr.</p> <p>This impact is not considered significant enough to develop a stand-alone mitigation plan.</p>
21. HERITAGE		
<p>21.1</p>	None.	
22. OTHER		
<p>22.1</p> <p>The IWWMP Risk Assessment Table 5-1 provides the following mitigation:</p> <ul style="list-style-type: none"> • Effluent to Sea: High zinc concentration. Mitigation includes ongoing monitoring of heavy metals in sea outfall discharge; • Sludge: High zinc concentrations. Mitigation – Sludge classification should be carried out before disposal or utilization (also given in the EIR 9.3 Table 0-2). <p>We do not understand how either of these measures addresses</p>	<p>Coastwatch</p> <p>26.05.2015</p> <p>Comment on dEIAR</p>	<p>Noted.</p> <p>Mitigation of this level of trace metal is only applicable at point source, however, with reference to the Works, the impact belongs to the Works once received, and hence must be prevented from going out to sea, part of eradicating this is to undertake</p>

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<p>the elevated levels of zinc in the sewerage and do not consider 'ongoing monitoring' as mitigation.</p> <p>The IWWMP requires an Integrated Pollution Management Plan (Section 5.5) to mitigate risks associated with contamination of sea and land which could occur as a result of high concentrations of heavy metal discharged in the sea outfall or in sludge applied to land. It will allow for the adoption of point source pollution control measures and it is critical to address the issues which contribute to the impacts identified by CSIR. However, EWS seems to be operating below the standards which will be required as given in the Water Services Development Plan (Appendix 8) where Trade Effluent Controls are provided is "... some 51 companies have permits for the discharge of tankers and drums containing domestic and industrial effluent and these are subject to periodic inspection/sampling of the contents" (emphasis added) which is not aligned with the EIR Section 9.3 Table 0-2 Impact 11 which provides the mitigation that every tanker load will be sampled.</p> <p>Pollution from trade effluent needs to be addressed in the Integrated Pollution Management Plan.</p> <p>When will the Plan be developed and can implementation be stipulated through the Environmental Authorisation?</p>		<p>long term monitoring to determine persistence of this occurrence.</p> <p>The Integrated Pollution Management Plan is a recommendation going forward and should be considered.</p> <p>Inclusion of this in the Environmental Authorisation however, remains at the discretion of the competent authority.</p> <p>The plan has been developed as part of the Air Quality Assessment done. The EA can stipulate / request that it is abided by.</p>
<p>22.2</p> <p>It is said that eThekweni holds a permit which is to be amended and the Issues Trail (11.5) assures EDTEA Coastal and Biodiversity Management unit that the points which have been highlighted will be included in the amendment of the CWDP.</p> <p>Will a separate document for the application of amendment to the Coastal Waters Discharge Permit be circulated for public review and comment?</p>	<p>Coastwatch 26.05.2015 Comment on dEIAR</p>	<p>The drafted CWDP will be placed for comment.</p>
<p>22.3</p> <p>The requirements of this Department, as stated in its letter dated 11.07.2014 with regards to this project are still applicable as must be complied with.</p> <p>The responses provided and commitments made regarding this Department's afore-mentioned letter, as contained in the letter dates 22.04.2014 from Royal HaskoningDHV and outlines under Appendix B9 of the Report, are hereby acknowledged.</p>	<p>Mr Neo Leburu Department of Water Affairs 11.07.2014</p>	<p>Noted.</p> <p>Royal HaskoningDHV are in discussions with the DWS, Ms Colleen Moonsamy to address the specific requirements of the licencing of the SWWTW.</p>

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<p>It is understood that Department's Water Use Authorisation section has been contacted on 05 June 2015 to discuss water use and authorisations issues. The recommendations made by the Water Use Authorisation section are hereby noted.</p> <p>The report titled "<i>Geotechnical Investigation for the Proposed New Developments at the Southern Waste Water Treatment Works in Merewent, Durban,</i>" dated December 2014 (Appendix C9), is hereby noted.</p> <p>The conditions and responsibilities as highlighted in the Report "<i>Draft Environmental Management Programme (EMPr) for Environmental Impact Assessment and Waste Management Licence Application</i>" for the proposed project, are acknowledged. Compliance with the final approved EMPr must be audited regularly by the designated ECO.</p> <p>Notwithstanding the above, the responsibility rests with the Applicant to identify all sources or potential sources of pollution from his undertaking and to take appropriate measures to prevent any pollution of the environment. Failure to comply with the requirements of the National Water Act, 1998 could lead to legal action being instituted against the Applicant.</p> <p>This reply does not grant any exemption from the requirements of any applicable Act, Ordinance, Regulation or Bylaw.</p>		
<p>22.4 Durban Solid Waste: No requirements</p> <p>Framework Planning Branch / Strategic Spatial Planning Branch: No objections.</p> <p>Disaster Management: No Comment</p> <p>eThekwini Transport Authority (ETA): No comment</p> <p>Environmental Planning and Climate Protection Department: Following review of the report this department has no objections or comment on the project.</p> <p>City Health / Environmental Health Services: No objection to the project, however see sections above for comment.</p>	<p>DPE&MU EP&CPD & Environmental Health Department: 02.06.2015</p>	<p>Noted. It is requested that should any comment be provided to the final EIAR that it be copied to the EAP.</p>