ANNEX II

Ghallis Non-hazardous Waste Facility - (absent, thus, application not duly made.)

Section/page	Comments	Reply by WasteServ	Reply by MEPA
Application Part A	missing	Application form completed – Annex 1 to this document	Noted. Duly made.
1.1.1	Kindly explain acronyms eg GH so as to simplify matters for the public.	List of acronyms provided in Annex 2 to this document.	Noted
GH 14/1	1. Zwejra disposal area 3 and extension of Cell 1 to be shown on the map. 2. Emission sources and monitoring points are missing from this map in relation to Q1.1.1.	1. Drawing amended 2. Provided in Drawing RA 5. Further details about monitoring points will be submitted shortly.	1. Noted 2. When will they be submitted? Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location Landfill gas monitoring boreholes: 1. The number of points is accepted provided that the additional landfill gas monitoring borehole will be put in place, and the leachate monitoring points are used as well. 2. Air quality

			monitoring locations: i. Air quality monitoring locations should also include a point for Sensitive receptor point 4 from drawing GH 14/1, and another point to encompass sensitive receptor points 5,6,7 in drawing GH 14/1. These should also be part of the sensitive receptors in the diagram. Thus, kindly amend diagram.
GH 5/1	1. Since the area considered in EIA is the red boundary, but it seems that WasteServ has till the blue dotted line. What does this mean? Does it mean that they will have to apply again for a PA permit and an IPPC permit after 7 years? 2. What makes a cell hydraulically independent as requested by 1.1.2? Since in GH 5/ 3A it is showing 3 intercell bunds, does that mean that there are 5 cells? Are they hydraulically independent? So should we ask WasteServe to	1. The blue boundary is the 20 year plan which was originally proposed. A 7 year plan was later proposed and approved by MEPA. Yes, this implies that a fresh application for a development and an IPPC permit will need to be made if the 7 year scheme is to be extended. 2. There are 5 independent leachate collection systems within the landfill which makes 5 cells.	1. Noted 2. Are they hydraulically independent? Please provide cross sectional drawings of cells across intercell bunds (indicated in

	clearly write the cell nos?		drawing 5/3A) showing anticipated hydraulic levels and flows. Clearly indicate heights of bunds. Cross sectional drawings provided by GH 6/3 and GH 6/4. Hydraulic levels and flows provided in drawing GH 7/5. Height of bunds provided in drawing GH 5/1. There is no difference between the original GH 6/3 and GH 6/4 diagrams and the ones submitted with these comments. Still these diagrams do not answer the question. Kindly provide the cross sectional drawings of when the cell or cells are yet empty. To our understanding the landfill is going to consist of 5 cells – Phase 1A & B comprising of 2 cells,

			and phase 2, 3, & 4 of another 3 cells. Kindly confirm that this interpretation is correct and that the individual cells are hydraulically independent. Hydraulic levels and flows: Kindly provide such levels and flows within the cell or cells. The diagram indicated is indicating the groundwater flow. Height of bunds are not found in diagram GH 5/1. 3. How come the diagrams supplied for the PA application, indicate Cells 1 and 2 and there is no such indication in the diagrams supplied for the IPPC application. All drawings submitted

			as part of the IPPC application are the same as those submitted with the PA application. The diagram referred to is the one submitted by architect Joseph A. Pace, named Development and operation of the controlled landfill at Ghallis ta' gewwa and ancillary facitilies. The diagram shows Cells 1 and Cells 2, and distinguishing the intercell bunds, to which we were referring to in the previous question.
1.1.2 / GH 5/3A	Add scale rule to diagram	Diagram amended to include scale rule.	Kindly amend scale rule as per diagram GH 14/1. Amended drawing attached. The drawing attached is not different to the one submitted in your earlier comments. Thus, it is not answering the question.
1.1.4/ GH7/3	Add scale rule to diagram	Diagram amended to include scale rule.	Kindly amend scale rule as per diagram GH 14/1.

			Amended drawing attached. The drawing attached is not different to the one submitted in your earlier comments. Thus, it is not answering the question.
1.1.6 / GH 5/4d/ 5/4c	Kindly explain the height in the middle pl, where there is written phase 4? Pl include contour line elevations on all maps not just those indicated here.	At the point of 'Phase 4A' elevation is 18m above mean sea level. All contours are expressed as elevation above the mean sea level.	1. Noted
1.1.8/ RA5	1. Kindly include in diagram the aquifer classification, any source protection zones etc? 2. What is the difference between MBH and sampling ground water points. 3. Kindly provide a map of water catchments and run off routes for the proposed installation and its surrounding area. Sampling and analysis of soil along the major run off routes should be undertaken.	1. The aquifer is outside the groundwater protection zone. 2. MBH are the groundwater monitoring boreholes established in view of the former Maghtab waste deposit site. Some of these boreholes may coincide with sampling ground water points. 3. Proposed drainage ditch and soakaway indicated on Drawing GH 6/1. Comment regarding sampling and analysis of soil along the major run off route has been noted.	1. ok 2. ok 3. A map of water catchments has not been provided. Kindly provide. When will results for sampling and analysis of soil along the major run-off routes be available? Drawing GH RA 2 attached. The major run-off routes are still being identified. These will be indicated in the master plan to be submitted in mid-October 2006. Sampling of

			soil and analysis will be conducted after mid-October 2006. *Sampling of soil and analysis*: Were these actually conducted? If not kindly specify clearer timeframes. The *water catchments map* provided is at too low resolution (text cannot be seen) and needs a better key. *Major run-off routes*: The master plan is still not submitted.
1.1.10/ RA5	RA5 does not show a scaled cross-section for each groundwater body.	Presented in drawing RA 6.	Noted
1.1.11	No diagram was provided. Supply a hard copy of the diagram.	Such a diagram has not been produced. A description of these zones in the vicinity of the site is provided in Appendix 17 to the SMS Document.	1. The question is asking for a diagram. Please provide the diagram. Not duly made. Drawing GH 17/1 attached. Noted. Duly made.
1.1.13	RA6 not relevant to the question. Kindly update.	RA 5 & RA 6	1. Noted. Duly made
1.1.15	GH 5/3 A is not relevant to the question or could not be traced on document.	GH 5/3 A provides the extent of the site. Site security will be provided through a combination of measures as described in SMS Section 13.2. These measures are difficult to depict on a	Noted. Duly made

		drawing.	
1.1.18	*Leachate treatment* - This is being considered as a reserved matter which means that a specific development application and an IPPC application for a substantial change has to be submitted if leachate detected on the site is to be treated on the site?	Noted	ok
1.1.19	Diagram has to be submitted since monitoring of landfill gas still has to be carried out before the closure of the installation.	Diagram will be submitted with closure plan.	Noted
1.1.20	Same as 1.1.19	Diagram will be submitted with closure plan.	Noted
1.1.22	An actual drawing indicating the connections and the actual position of the flare is necessary	These details cannot be provided at this stage. Such details can only be provided once the flare is procured and the closure plan devised.	Please indicate anticipated location of flare. Drawing GH 5/1 attached. Location of flare could not be found. Kindly clarify.
1.1.23	Same for 1.1.22 since picture is not relevant to question.	These details cannot be provided at this stage. Such details can only be provided once the flare is procured and the closure plan devised.	Please indicate anticipated location of utilisation plant. Drawing GH 5/1 attached. Kindly confirm that the location is where the environmental management compound is marked.
1.1.24/25/26/27/	Diagram to be submitted with details	1.1.24 Perimeter landfill gas monitoring boreholes are still to be established.	1.1.24 When are they going to be established?

		1.1.25 Perimeter landfill gas monitoring points for aerial emissions still to be determined. 1.1.26 Drawing GH 6/1 indicates drainage ditch and soakaway 1.1.27 Soakaways on Drawing GH 6/1 will be used as surface water monitoring points.	Established Kindly confirm that it is just points 3 and 4. 1.1.25 When are they going to be established? Established Kindly confirm that these are BH1,2,3,4,5. Kindly provide indicative location for both questions. This is duly made. Drawing attached with these replies. Drawing reference: Monitoring Location 1.1.26 ok. Amend IPPC application Noted 1.1.26 ok. Amend IPPC application Noted
1.1.28	Define surface water as used in the text. There needs to be a coherent	Surface water is understood to be runoff water.	Noted

	understanding of the term 'surface water' throughout all the documentation. The Water Framework Directive (CD2000/60/EC) defines surface water as inland waters (except groundwater), transitional and coastal waters. How is such a term used in the test you submitted?		
1.1.30	Cross-section has to be submitted	Submitted as drawing C5	Ok. Duly made
1.1.31	GH 12/1 does not show the monitoring points	In conjunction with RA5	RA5 is not complete. It does not include air emission monitoring points. Please provide. The answer however, makes the question duly made. A separate drawing showing all monitoring points is attached with these replies. Drawing reference: Monitoring Location Noted
HRA (general comment)	Quote local legislation, and not UK legislation or just the Directive.	The legal instrument that adopted the EU Groundwater Directive into Maltese Legislation is "*The Regulations for the Protection of Groundwater against Pollution caused by Dangerous Substances*, 2002".	This should be quoted in the HRA. Noted
RA1	What is the source of the data for	As stated in Section 2.6.3 the	Noted

	groundwater contours in RA5? How will the landfill influence the hyrological and hydrogeological setting of the mean sea level aquifer?	potentiometric map of the Mean Sea Level Aquifer produced by BRGM (1991) and reproduced in Axiak and Sammut (2002)[1], has previously been used to assess groundwater level and flow conditions in the vicinity of the Maghtab Landfill site[2]. Given the proximity of the proposed Ghallis Landfill, this information has therefore been utilised to assess conditions below the proposed site. The landfill will not influence the hydrological and hydrogeological setting of the mean sea level aquifer, given the following: • All runoff from the landfill cap will be encouraged to infiltrate back into the limestone aquifer (see Section 2.4.2), thereby reflecting predevelopment conditions. The base of the landfill lies a minimum of 14m above the water table of the mean sea level aquifer (see Section 2.6.3).	
HRA Section 2.4.2 pg 10	The review of old data collected for projects/ applications related to Maghtab is not deemed appropriate	The review of all available data is essential in assisting the development of the conceptual hydrogeological	Agreed. However new data appropriate for the application in question

[1] Axiak V. and Sammut, A. 2002: *The Coast and Freshwater Resources.* In: *State of the Environment Report for Malta , 2002.* Ministry of Home Affairs and the Environment, August 2002

[2] Scott Wilson, March 2003: *Development of Rehabilitation Strategies Maghtab, Qortin and Wied Fulija Landfills.* Stage III Final Report completed for Ministry of Resources & Infrastructure.

	for the purpose of a proposed operation. If, as stated in section 2.4.2 of the HRA, run off to the west of the site is prevented by the Maghtab landfill, then the sediment results present for samples 1,2, 3 and possibly 4 as well as the seawater sample at Qalet Marku would be irrelevant (besides being old) for the present scope. Appropriate, recent data for seawater and sediments is to be collected for the purpose of assessing marine environmental quality in the vicinity of the proposed site, including samples from the western part of the coast.	model upon which the HRA is for the proposed landfill is based. Runoff to the <u>east</u> is prevented by the Maghtab landfill. It is not considered necessary to monitor seawater and sediments for assessing marine water quality in the vicinity of the proposed site, given that groundwater monitoring at the downstream boundary of the proposed landfill will be used to assess whether the landfill is impacting the groundwater, which ultimately drains into the sea. Surface water management measures including diversion of all surface water runoff from the landfill into a retention/infiltration pond will prevent runoff from the site reaching the coast. This surface water management scheme for the landfill site, coupled with the significant distance to the coast from the boundary of the proposed site (>200m), makes it unnecessary to monitor seawater and sediments along the coast to the north and west of the Ghallis landfill site.	should also be generated and assessed in connection with older, available, relevant data. As stated in our original response, in preparing the Environmental Impact Assessment (as defined in the terms of reference and as discussed at numerous meetings with MEPA) in order to establish the environmental setting of the site, a wide range of information is collected and assessed and the Maghtab studies provided some usable data for the EIA. This information is useful in helping to develop the hydrogeological model for the site. The purpose of the IPPC permit is to regulate the operation of the proposed facility. It is not necessary to reassess information from the Maghtab studies as this will not be the way in which the performance of the landfill lining systems will be monitored. We accept that

			new ground water samples direct from the Ghallis area will be required for the purpose of monitoring (and hence regulation under the IPPC). WasteServ is currently installing new boreholes to facilitate this sampling and testing. The collection of run-off water will only be in place once the landfill is capped. Therefore kindly submit a monitoring program for the coastal environment, with special reference (but not necessarily limited) to the area west of the landfill, to cover the infilling period and up to one year after capping. Noted and agreed. If, in principle, it is not considered necessary to monitor coastal waters, then the coastal water data collected for the scope of the Maghtab project would

			simply not have been included. The very fact that this data is mentioned implies that there is scope for assessment of coastal waters. If *a priori* it is not considered necessary to carry out monitoring of coastal waters, what is the justification for Wasteserv's inclusion of the Maghtab data in the first instance? We disagree with the statement and refer you to our comment above. The data were included to provide background information of the general setting of the area within which the landfill is located Will ground water monitoring at the downstream boundary of the proposed landfill take place during the operation of the proposed landfill? Yes. As stated above WasteServ is currently installing new groundwater and landfill gas monitoring

			boreholes to facilitate direct site monitoring. The location of the boreholes being installed has been submitted to MEPA and include both upstream and downstream groundwater locations. Drawing is attached with these replies - GW Borehole Location Plan. Noted. The surface water management mentioned will only be in place once the proposed landfill is capped. How will surface water be managed during the operation of the proposed landfill, in order to prevent it from reaching the sea. Surface water management will take place during the constructional, operational and post closure phases of the landfills life. The key management requirements are detailed in Section 7.14 to 7.21 of the

			Environmental Impact assessment. Furthermore, a master plan will be submitted by mid-October 2006. Kindly submit surface water management plan.
HRA Section 2.6.4 pg 27	The statement on page 27 of the HRA 'the [sediment] sample was collected during the winter months when there is less anthropogenic influence on the marine environment' necessitates further explanation in relation sediments as a monitoring medium for water quality and in relation to potential pollution from the landfill.	For the reasons stated above, it is considered unnecessary to use the marine environment as a monitoring medium for water quality and in relation to potential pollution from the Ghallis landfill.	Please refer to above reply. As an aside, Wasteserv's reply still does not explain the quoted statement. We again refer you to our reply above. With regard to anthropogenic influence on marine water quality, this will reflect greater dilution of any potential land derived contaminants by greater runoff, due to higher winter rainfall compared to the rest of the year. The collection of run-off water will only be in place once the landfill is capped. Therefore kindly submit a monitoring program for the coastal environment, with special reference (but not necessarily limited) to the area west of the landfill, to

			cover the infilling period and up to one year after capping.
HRA Section 3.1 pg30	Section 3.1 states: 'As set out within Section 2, the proposed Ghallis landfill site represents a potential hazard to groundwater and marine water resources. Consequently, this development has to comply with the requirements of the EC Groundwater Directive, 1980, and additional risk assessment work is required. In the UK, the EC Groundwater Directive has been implemented by the Groundwater Regulations, 1998.' Have any 'equivalent' marine protection legislation been identified as well?	Given the site setting of the Ghallis Landfill site, at least 200m inland from the coast, the relevant legislation is the Groundwater Directive. This has been adopted into Maltese Legislation as "*The Regulations for the Protection of Groundwater against Pollution caused by Dangerous Substances*, 2002". No 'equivalent' marine protection legislation has been identified, which is considered to be relevant to the Ghallis Landfill site in relation to the Hydrogeological Risk Assessment.	Please refer to above reply. The information being given is contradictory. Does the site represent as potential hazard to marine water resources or not? The original application states that the site does represent a potential hazard to marine water resources and then proceeds to totally disregard this very same aspect due to the site being at 'least 200m inland'. Do these 200m mean that there is effectively no potential hazard to marine water resources? All the statement means is that given the development is a non hazardous waste landfill and will produce a leachate, this means the development is a potential hazardous to ground and marine water and that hazard has to be assessed. This is a statement of fact

			for any landfill development This is what the EIA and risk assessment does, it assesses that hazard and where necessary introduces mitigation measures (i.e. the lining systems and operation controls) to mitigate that hazard to acceptable risk levels. Given the proposed groundwater monitoring and surface water management measures at the landfill site, immediately downstream of the landfill and c.200m upstream of the coast, these mitigation measures will reduce the risks to the point that the marine environment will not require additional monitoring. The collection of run-off water will only be in place once the landfill is capped. Therefore kindly submit a monitoring program for the coastal environment, with special reference (but not necessarily limited) to the area west of the landfill, to

			cover the infilling period and up to one year after capping.
HRA Section 3 pg 33	What is the source of the infiltration rates found in Table 6?	Rainfall data is from the National Statistics Office, Malta and from the Meterological Office, Luqa. The 50mm infiltration rate is based on the LandSim Model default value for infiltration through an engineered landfill cap, as proposed for the Ghallis Landfill site. The infiltration during the long term post closure scenario is based on average annual rainfall, as explained within Section 2.6.1 of the HRA.	Noted
HRA Section 3.6.4 pg 40	1. Is the loading rate protocol actually going to be used? Kindly explain and submit 2. Kindly specify which is the extraction wells in each cell which will be used for monitoring leachate levels.	Due to the difficulties in effectively applying a loading rate protocol, it is considered that the approach to be adopted is the monitoring of leachate quality to ensure that it is maintained within the distribution used in the LandSim Model built for this Hydrogeological Risk Assessment. Should the site leachate quality fall outside this distribution then this would trigger the necessary actions to reassess the implications of the new leachate quality on the risks to the groundwater. Detailed actions are identified in Annex	1. Noted. Where is the distribution mentioned in your reply found in the HRA submitted with the application? The leachate quality distribution is presented within the model parameterisation in Appendix 1 of the HRA.

		3. The leachate extraction wells and leachate monitoring points are shown on drawing 5/4F presented with the application.	Noted 2. What are the current baseline conditions, based on the present hydrogeological risk assessment? The baseline conditions are clearly identified within the Environmental Statement and HRA. Noted 3. Noted
HRA Section 3.6.5 pg 41	How is groundwater management going to be carried out? Please supply groundwater management plan.	No groundwater will be encountered during excavation and landfill construction, given that the base of the site will remain above the water table. A groundwater management plan is therefore not required.	Noted
HRA Section 3.6.6 pg 41	Why no leak detection system is needed? Are you going to apply an alternative solution?	There is no requirement under the Landfill Directive/Regulations for a leak detection system for the non hazardous waste landfill.	Noted. Are you going to apply an alternative solution? No. Groundwater monitoring will be conducted. Noted.
HRA Section 4.1 pg	Section 4.1 states that: 'Environmental	As stated above in an earlier response,	Please refer to earlier reply

42	monitoring of leachate, groundwater and surface water is a crucial element of the risk assessment...' and 'Given that there are no permanent surface water features in the immediate vicinity of the site, it will not be possible to include surface water within the risk based monitoring scheme.' Coastal waters are to be considered as permanent surface water features. The potential impact of run off reaching coastal waters has not been assessed. While (in section 2.4.2) the HRA states that run off to the west of the site is prevented by the Maghtab landfill, the impacts of run off to the east of the site (Salina Bay) are not adequately assessed.	it is not considered necessary to monitor seawater and sediments for assessing marine water quality in the vicinity of the proposed site, given that groundwater monitoring at the downstream boundary of the proposed landfill will be used to assess whether the landfill is impacting the groundwater, which ultimately drains into the sea. Surface water management measures including diversion of all surface water runoff from the landfill into a retention/infiltration pond will prevent runoff from the site reaching the coast. This surface water management, coupled with the significant distance to the coast from the boundary of the proposed site (>200m) makes it unnecessary to monitor seawater and sediments along the coast to the north and west of the proposed site.	Earlier reply also refers. Noted.
HRA Section 4.2 pg 43	This is misleading for the reader since a proposal of leachate and groundwater monitoring is given in SMS appendix 5. In any case, the development permit has been issued. Please re-word and supply.	The HRA has been prepared by SLR Consulting on behalf of WasteServ. This is the Consultant's opinion. WasteServ submitted a leachate and groundwater monitoring plan since it is acknowledged that this is a requirement.	Kindly reword HRA, for public consultation. Noted
SMS appendix 5	1. How were the trigger and control levels derived? 2. Clarify which are the 6 boreholes that are going to be	1. Annex 4 to this document. 2. The boreholes which will be sampled still need to be determined. Apart from existing	1. Noted 2. Kindly establish exact timeframe to be submitted

	sampled since the diagram referenced has more than 6 boreholes.	boreholes, additional boreholes are going to be constructed. Full details will be submitted shortly.	Drawings showing all monitoring points attached with these replies. Drawing references: GW Borehole Location Plan / Monitoring Location Noted
Q1.2.1(v)	In complete reference in box. What about SMS appendix 3 and 4?	Error in reference. SMS Appendices 3 and 4 should be added.	OK. Please amend IPPC application Noted
SMS appendix 3	Kindly clarify how samples are going to be collected from the leachate monitoring points.	A bailer will be lowered into the leachate monitoring point and a sample collected.	Noted. Please amend Appendix Noted
Q 1.2.3 HRA Section 2.1 pg 3	Is the Grid referencing as given here correct? Its not as per standard method of nothings and eastings	Drawing RA 1 provides the exact location. Since the site is spread over a large area, grid reference is difficult to provide.	Noted
HRA Section 2.3 pg 6	Kindly give standards to which HDPE liner is manufactured.	The material requirements for the HDPE geomembrane are detailed further in a Construction Quality Assurance Plan. This is provided with this document.	Noted
HRA Section 2.4.2 pg 10	Kindly clearly define 'surface water' and 'surface water features' and 'surface water abstraction'.	'Surface water' is defined as 'water present on the ground surface of Malta' (i.e. in the context of this Hydrogeological Risk Assessment it does not refer to marine or coastal waters).	Noted

		'Surface water features' are defined as 'streams, springs, rivers, lakes and other surface water bodies (man made or natural) on the ground surface of Malta, all of which contain surface water'. (i.e. in the context of this Hydrogeological Risk Assessment it does not refer to marine or coastal waters). 'Surface water abstractions' are defined as 'the taking of water from surface water on the ground surface of Malta', and so does not include sea or marine abstractions.	
Q 1.2.4	There is nothing on topography and climate in the section referred to.	HRA Section 2.2 pages 4-5	Kindly amend reference in application. Noted Still there is nothing on climate. HRA Section 2.4.1 pages 7-9 Kindly include reference in application
HRA Section 3.4.1 pg 35	Kindly specify which Environment Agency, when you refer to the LandSim software.	UK Environment Agency's LandSim v2.5.16 software	Noted
Q. 1.2.4	Pathways to receptors: The reference provided does not clearly show the	The receptor is the groundwater below the landfill	If the receptor is the groundwater below the

	pathways to receptors. Kindly clarify		landfill. Kindly explain how the model is taking into consideration the pathways to the receptors. Kindly also explain which pathways are being considered. NOT Duly made. Table 5 page 29 HRA gives details of all the potential primary and secondary pathways to the groundwater below. The table also indicates that the compliance point for List I and List II substances is the groundwater beneath the mean sea level aquifer of the lower coralline limestone at the northern (down gradient) boundary. The assessment scenario is described in section 3.2 of the HRA page 31. Noted. Please amend reference in application.
HRA Section 3.6.2 pg 39	1. Who is to certify/ has certified the lining CQA? 2. The description is not as detailed as shown in diagram	SLR has been appointed by WasteServ to provide construction quality assurance services on the lining system in accordance with the CQA Plan	1. Noted 2. Still not answered

	5/3A. Kindly describe in full.	described above. SLR will be providing a construction quality assurance report following completion of the works.	EIS section 5.4 pages 35 – 37. Noted
HRA Section 3.6.3 pg 39	1. To which gradient will the carrier pipework for the leachate be laid? 2. Which is the lowest point for the network?	The base gradients for each cell and the extraction points are shown on Drawing 5/4F presented with the application.	1. Noted 2. Not yet answered 15 metres Noted
Q1.2.6	1. Likely/plausible waste case impacts on existing and potential receptors: Kindly specify which is the worst case scenario, and its impacts, since it is not clear in Table 6. 2. Sensitivity analysis: Kindly indicate the reasons why no sensitivity analysis was conducted	1. The worst case assumes that all rainfall is able to enter the waste mass during the operational phase of the landfill. This will have no major impact as long as leachate head is maintained between 0.0 and 1.0 metres above the basal liner. 2. Error: Sensitivity analysis was conducted - HRA Section 3.3.1	1. Noted 2. noted
Q1.2.7	1. electronic copies of all models + multiple model runs – did not find the hard copies in Appendices 2 & 3. Please supply. 2. identification of receptors – which are the receptors used? 3. schematic diagram – kindly explain how RA6 relates to the request. 4. justification for field	1. Error, documents were not labelled as Appendices 3&4. These documents are found in the HRA after page 45 and before the drawings. 2. HRA Table 5 page 29 3. Drawing RA 6 together with Table 6 on page 29 provide details of the assessment scenario along with the conceptualisation of how	1. Noted. Please amend application. Noted 2. Noted. Please amend application. Noted 3. Table 6 is on pg 33.

	measurement – no such justification was found	different aspects of the technical precautions will perform during the lifecycle of the landfill. An indication of how the different technical precautions are modelled is also provided. 4. HRA section 3.4 pages 35-36	Kindly clarify that it is the one you intended to quote. (N.B I still do not think that this one answers the question.) Table 6 is actually on page 33. Drawing RA6 provides the conceptual model for the site. Noted 4. The justification provided is more related to the model defaults rather than the field measurements. Please supply justification for field measurement. Section 3.4.2 page 36 Model Parameterisation Noted. Please amend application. 5. Please clarify 2nd paragraph in 3.4.1.

			This paragraph describes one of the situations considered as a worst case scenario during the assessment. Unless the leachate head is kept within 1 metre of the basal liner, there is potential for migration of leachate. Noted.
Q1.2.8	Why is the sampling procedure (in sms appendix 3 & 4) and the equipment (in sms appendex 4) not applicable? Kindly include appendix 4 in reference to this question.	There is no official standard for the sampling of leachate. The sampling equipment in this case is bottles. Request to add Appendix 4 has been noted.	
Q1.2.9	1.Methods used to derive control and trigger levels – not found in reference given 2. Locations for compliance monitoring – not found in reference given	1. Annex 4 to this document. 2. These will be provided shortly.	1. Noted. Duly made 2. Kindly establish timeframe when these are going to be provided. Drawing attached with these replies. Drawing reference: Monitoring Location. Locations for compliance monitoring are leachate monitoring locations, perimeter

			landfill gas/groundwater monitoring boreholes, perimeter monitoring points (points 1, 3 & 4) and off-site monitoring points (points 2, 5, 6 & 7). Noted
SMS Appendix 4	1. Appendix 4 of the SMS: why is it that while the HRA states that there are no permanent surface water features in the surrounding area, the SMS proposes a monitoring program for 'surface waters'? 2. In the proposed monitoring program. Why are 'sampling procedure' and 'equipment' not applicable? 3. Methodology for sampling and analysis should always refer to valid ISO/CEN standards in operation, rather than analytical methods. This table needs to be revised. 4. Why is the Cu detection limit in leachates and surface waters different?	1. The monitoring programme is for run off water which is termed as 'surface water'. 2. There is no official standard for the sampling of leachate. The sampling equipment in this case is bottles. 3. ISO/CEN standards for sampling are not always available. The same applies for analysis. However, the comment has been noted. 4. The detection limit for Cu should be 0.3 ug/l in both cases.	1. Noted. 2. The question relates to surface waters (run off) not to leachate. Kindly reply. There is no official standard for the sampling of surface water run off. The sampling equipment in this case is bottles. Noted 3. Noted. However where these are available, the table should be revised accordingly. Noted 5. Noted. Kindly amend application.

			Noted
HRA (general comments)	The results of the Hydrogeological Risk Assessment do not exclude that the "proposed development poses a potential risk to surface and groundwater and thus fall within the scope of the Groundwater Directive." In this context therefore a more elaborate monitoring programme is required in order to enable immediate corrective measures if something goes wrong, particularly in the lining system. Furthermore, the contingency action plan on page 56 of the Site Management System report is not sufficiently exhaustive on this issue, thus calling for some clarification. Also, in the aforementioned report, the consultants have stated that the monitoring programme will be subject to regular review throughout the operational and aftercare period. It is suggested that this programme should be clearly defined a priori and furthermore, should be aimed at detecting any unexpected failure of the liner which may threaten the status of groundwater.	Noted.	1. The more elaborate monitoring program is still not submitted. Kindly submit. Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location / GW Monitoring Borehole Locations. 2. The clarified contingency plan on page 56 is not yet submitted. Kindly submit. The contingency actions are detailed on Table 10.2 on page 57 of the SMS Document. This is further supplemented by information in Section 22.5 of the SMS Document page 125 – 127. Clarifications are still being sought by MEPA.
	Stability Risk Assessment		

Q1.2.11	1. SRA pg 9, 1st par last sentence – the sentence is not completed! Kindly clarify 2. Has the electromagnetic geophysical survey actually taken place?	1. The last (incomplete) sentence should be deleted. 2. Inspection for solution features in the formation levels of the limestone has not yet been undertaken.	1. Noted 2. When is it going to be carried out? For the first phase, this was conducted in August 2006. MEPA representatives were present for the inspection. Noted
Q1.2.12, 1.2.13, 1.2.14	Not answered	Answered – Cohesive soils slope (just before 1.2.15). The term 'cohesive soil' was selected since there was only a selection of 3 types of sub-grade. The sub-grade consists of engineered limestone fill.	Noted. Duly made.
Q1.2.15	Is the cut of the slope likely to become unstable ? - Not answered	Confined conditions: No – SRA SECTION 2.2 Pg 10	1. Noted 2. In addition, Table SRA 2 states that the unconfined limestone filled sides require further studies. Kindly clarify. The unconfined limestone fill side slopes are considered to require further analysis as this is the worst case condition in terms of side-slope sub-grade stability. The analysis is provided in Section 2.2.3

			of the SRA. The assessment is in Section 2.2.4. Noted
Appendix SRA 1,2,3,4	All are missing	Annex 5 to this document	Noted. Duly made.
SRA Table SRA3 - Q1.2.16	What is the relationship between the stability of the waste mass and the stability and integrity of landfill liner, when in Q.1.2.16 is asking about the relationship of the sub-grade, (which previously was described as being cohesive soil) to the liner?	We do not understand the question clearly. The issue of the potential influence of the basal lining system on waste mass stability is described in Table SRA3. In simple terms, if there were no temporary waste mass slope present on top of the basal lining system, then there would be no potential for instability. The sub-grade consists of engineered limestone fill.	Thus, since there is a temporary waste mass slope, then there is the potential of instability in the sub-grade and so the question on application should be marked as YES. Thus kindly amend application, and clearly explain the relationship requested in the question, i.e. relationship between sub-grade and the liner. As stated, the basal sub-grade consists of engineered limestone fill. This is a relatively strong material and provides a sound foundation to any temporary waste slope. SLR has undertaken stability analyses for the scenario where the slip surface runs along the basal lining system which represents the

			lowest shear strength zone below the temporary waste slope. If the factor of safety for this scenario is acceptable, there is no need to check what the factor of safety would be for a more stable scenario (i.e. there is no point trying to force a slip surface through the basal sub-grade – it has a high shear strength, much higher that the basal lining system interface. The relationship between the sub-grade and the liner is that the sub-grade provided the foundation to the lining system. Noted
SRA pg 2 Section 1.2.1	What does the '?' mean in the sentence before the last?	The question marks are erroneous and can be removed.	Noted
Q1.2.16	1. If no electromagnetic geophysical survey is going to take place then the answer to the question on cavities should be YES, and thus the design parameters and more details should be given.	SRA Table 1 page 10: The presence of karstic solution features within both the GLF and the CLF means that there is potential for cavities in the sub-grade. The opening of a void may impact on the stability on the landfill lining systems and as such must be considered. An electromagnetic geophysical survey will be necessary to	Kindly confirm that the electromagnet geophysical survey is going to take place. Kindly give us the exact date when this is going to be carried out so that MEPA's inspectors may be present for such a survey.

		detect the presence of underlying voids and karstic solution features. Remediation of any voids detected will be required and may involve cutting back and filling with crushed limestone general fill or grouting. Since the electromagnetic survey and subsequent remedial works will eliminate the presence of voids prior to lining system placement, this aspect is therefore not considered to require further assessment.	The inspection in connection with the construction of the first phase was conducted in August 2006. MEPA representatives were present for this survey. Noted
Q1.2.18	Indicate if the mineral only barriers are going to be used. – not answered	Mineral only barriers are not going to be used. As a result a reply to question 1.2.18 is not required.	Noted. Duly made.
SRA Section 2.4.4, pg 15	What were the results of the analysis for the short term unconfined stability when adopting conservative interface shear strength material parameters?	The results are presented on Tables SRA 2-1 and SRA 2-2. The reader is directed to these tables in the preceding section of the report (2.4.3 Analyses). Section 2.4.4 contains summary statements that confirm that all results fell within the adopted factor of safety and that no tensions are induced into the geosynthetics.	Noted
Q 1.2.19 SRA Table SRA 4	Unconfined – integrity – kindly clarify, because integrity was not found in the reference, i.e. soil protector stability assessment.	The first sentence of the third paragraph in Section 2.4.3 should read 'The analysis of unconfined protector soil stability *and integrity* has been undertaken using the method of analysis proposed by Jones and Dixon[4]'. Table SRA 2-1 presents the results of the Jones and Dixon analysis and includes the assessment of stability	Noted. Kindly clearly amend final document which will be issued for public consultation. Noted

		as well as integrity (integrity relates to geosynthetics tensions).	
SRA 2.5.4 pg 24	Kindly confirm that the yielding anchor trench is designed to give at least 1m of additional geosynthetics.	We can confirm that there will be a minimum of 1m of geosynthetics available within the anchor.	Noted
Q1.2.20.i	Reference is not answering the question	SRA Section 2.5 / 2.5.3	Noted. Kindly clearly amend final document which will be issued for public consultation. Noted
Q1.2.20ii, iii, iv	Provide justification for your answers	SRA Section 2.5 / 2.5.3	Noted. Kindly clearly amend final document which will be issued for public consultation. Noted
SRA Section 2.5.1	1. Kindly confirm that telescopic leachate risers and target pads are going to be employed, and provide drawings of target pads. 2. Kindly confirm that gas extraction mains and condensate sumps will be installed in the gas/leachate extraction system. If they are not going to be installed kindly amend answer to Q1.2.20.v	Details of the leachate risers are shown on Drawing 5/4F. They are further detailed in a Construction Quality Assurance Plan. This plan has been submitted with the present document. Full details of the gas extraction system are not yet available as this system will only be fully designed on completion of asset infilling, but in principal condensate chambers will be installed.	Noted Noted.
SRA Table SRA 9	Kindly explain the phrase ‘ no external factors will be present to cause anything…..’	There will be no additional loading placed above the capping system that would give rise to deformations other	So what about the potential affects of the construction plant activity on the cap.

		than those normally associated with the settlement of waste. At some sites, the capping system may be surcharged by placing soils or other structures on top of the capped areas. This additional loading would give rise to additional deformations and settlements over and above those normally associated with waste settlement. This is not the case for this site.	Kindly indicate where these were considered in the SRA. This is detailed in Section 2.6.3 and Tables 4-2 and 4-3 which adopts the method proposes by Kerkes (see reference ion SRA). Noted Define 'site' in your reply, when stating 'at same sites'. Does it mean at some parts in Ghallis? At some landfill operations for which we have undertaken assessments (i.e. **not** Ghallis), there is the scenario that the capping might be loaded by additional soils or structures. This is not the case anywhere for the Ghallis site. Noted
Q1.2.23 i, ii	Kindly indicate more specifically where there is the answer to these questions in the reference provided.	i. Section 2.6.4 ii. Section 2.6.4	Not clear. Please explain.
Q1.2.23.iii	Kindly confirm that the final waste	Confirmed.	Noted

	surface is going to be graded and inspected prior to placement of the regulation layer. If not, then the answer to this question has to be amended.		
SRA Section 2.6.4	Which are Option 1 and Option 2?	These options are clearly discussed on Page 6	Noted
SRA pg 12 para. 2	Please confirm that the simplified safety factors of 1.38 (for 3m slope) and 2.6 (9m slope) are based on the assumption of 11kN/m3? If so, what is safety factor if the unit weight is 13kN/m3, which can be reached in the long term?	These analyses and factors of safety relate to the unconfined side slope sub-grade and not to the waste. The discussion on waste shear strength in the last paragraph in Section 2.2.2 is erroneous and would be more appropriate within Section 2.5.2. In general, limit equilibrium stability analyses are not very sensitive to changes in the unit weight of the materials within the slope cross section. If the unit weight is increased, then the driving forces for a slope movement increase. However, the *resisting* forces also increase as a result of the greater weight acting along the base of the critical slip surface - this additional weight increases the shearing resistance of the sliding surface. To illustrate this low sensitivity, the scenarios with the lowest factors of safety (Cases 6 and 8) have been re-run using a unit weight of 13kN/m^3. Case 6 reports a new factor of safety of	Noted. Please remove the last paragraph in Section 2.2.2 and place it in Section 2.5.2, in the final document which will be used for public consultation. Noted

		1.138 (previously 1.146, a reduction of 0.008) and Case 8 reports a factor of safety of 1.137 (previously 1.138, a reduction of 0.001). The output plots for these re-runs are attached as Figures S4-SRA1 and SRA2.	
	Appendices SRA1, SRA2, SRA 3 and SRA 4 are missing.	Annex 5	Noted
SRA pg 17 para.2.5.2	Why is a factor of safety of 1 considered appropriate? i.e. actual load applied = load likely to cause failure?	This is referred to as limit state analysis. The shear strength of a material or interface cannot fall below the residual value (this is the limiting state of shear strength). In geotechnical engineering, a factor of safety of 1 is normally applied to limit state analyses. Discussions on limit state theory can be found in the Environment Agency R&D Technical Report P1-385/ TR1 and TR2, 'Stability of Landfill Lining Systems', February 2003 and in EN1997 Eurocode 7: Geotechnical design.	Noted.
Q1.2.23.iv	Kindly confirm that for construction to take place on the capping, the final capping system will be placed on slopes not in excess of 15 degrees inclination if option 1 is chosen, or not in excess of 20 degrees inclination if option2 is chosen. If not, then the answer to this question has to be amended. Is construction plant used on the cap taken into consideration in these assessments?	Confirmed. Yes Noted	Noted If yes, can you kindly indicate to us the location in the application, where the potential effects of the construction phase has been

	The final restoration however shall be the subject of a separate full development planning application.		taken into consideration? Table SRA 9 Table SRA 9 states that it needs to be considered, but it does not consider it there. However, your answer given above, to queries raised on same table, i.e SRA 9, answers the question.
	Landfill Gas Generation Risk Assessment		
Q1.2.24	1. Page for reference provided seems to be incorrect. Kindly clarify. 2. Graph in the reference provided is the idealised representation of the landfill gas generated. The question is asking for a forecast for your installation. May be it was meant Appendix 14/1 pg 264?	1. EIS Section 14.2.2 Page 229. 2. Yes	1. Noted 2. Noted. Kindly amend final document for both occasions which will be used for public consultation. Noted
Q1.2.26	1. EIS Section 14.8.1 is on page 251, not as indicated in reference. This is entitled – Model Description –GasSim. Kindly provide correct references to all subquestions in this question. 2. No derivation for landfill gas	1. Noted. 2. Appendix 6 contains a control and trigger level for methane.	1. Please submit amended final document which will be used for public consultation. Noted

	control and trigger levels was found in SMS appendix 6		2. Noted.
SMS Appendix 6	1. How were the trigger levels and control levels derived? 2. Kindly explain why there are no trigger and control levels for dioxins and furans, PAHs and heavy metals. 3. Clearly indicate the monitoring locations for landfill gas in ambient air, and for the monitoring of other contaminants in ambient air.	1. These are the trigger and control levels for methane generally used in the sector. 2. No trigger levels for these contaminants have been derived. The presence of these contaminants is attributed to the former Maghtab waste deposit site. Rather that establishing trigger levels, the Operator intends to reduce or rather eliminate the presence of these contaminants through the rehabilitation of the former Maghtab site. 3. These will be submitted shortly.	1. Noted 2. Dioxins and furans are produced from landfills in general. Kindly derive trigger and control levels for dioxins and furans. These will be submitted in due course since we are still trying to establish a trend following the commencement of rehabilitation works at Maghtab. Noted 3. Kindly submit exact timeframe of when the monitoring locations requested are going to be submitted. IPPC application cannot be processed if such data will not be submitted.

			Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location (air quality monitoring locations) Noted. Please confirm that monitoring of landfill gas and other contaminants will be taken from points 0-7 as shown in diagram – 'monitoring location'. Kindly also note, our previous comment to add another site to include the Qawra beach front, and also another point to encompass sensitive receptor points 5,6,7 in drawing GH 14/1. These should also be part of the sensitive receptors in the diagram. Thus, kindly amend diagram.
Q1.2.27	1. EIS Section 14.8.5 is on page 256, not as indicated in reference. 2. Kindly indicate clearly where Section 14.8.5 is answering	1. Erroneous reference. 2. 1.2.27 ii – Table 14/16; 1.2.27 iii – section 14.9.3 paragraph 4	1. Noted. Kindly amend final document to be used for public consultation.

	question 1.2.27.ii, and 1.2.27.iii		Noted 2. Noted. Kindly amend final document to be used for public consultation. Noted
EIS Section 14.6.1 pg 246	1. What are the good site management practices mentioned during construction?	As soon as possible materials would be graded, packed and stabilised or provided with an outer layer of larger stone to prevent dust release. If appropriate, areas would be encouraged to vegetate. It would not normally be practicable to provide water for dust suppression. Further details are provided in section 14.9 Mitigation Measures.	Noted.
EIS Section 14.9.3 pg 260	1.When is the flare going to be purchased and installed? 2. TORs of flare have to be approved by MEPA before being published.	1. Fourth quarter 2006. 2. Noted	1.Noted 2. If flare is going to be purchased in fourth quarter 2006, have TORs already been drafted? If no, when are they going to be drafted? The flare is going to be procured as part of the Aerial Emissions Project concerned with the rehabilitation of

			Maghtab. The flare will be installed in accordance to the satisfaction of WasteServ and the Supervising Engineer. Further details will be submitted as soon as they are available. Noted. Flare is still a reserved matter.
EIS Table 14/6 + Appendix 14/2	1. Table 14/6 pg 242, heading is wrong. 2. Appendix 14/4 could not be found.	1. Title of table should read: Results for monitoring stations. 2. Should read 14/2.	1. Noted. Kindly amend final document to be used for public consultation. Noted 2. Noted.
	Risk Assessment for Nuisance and Health Issues		
Noise			
SMS 19.2 pg 111	1. Kindly provide the noise management plan mentioned. The noise emission/monitoring needs to be done under a recognised standard methodology such as BS 4142. 2. Audible bird scaring equipment will not be allowed.	1. Noise management plan is provided in Section 19.3. Action Plan is provided in Section 19.5. 2. Noted	1. Kindly amend Section 19.4.3 by including reference to BS 4142. Noted
SMS 19.3.12 pg 113	1. Through experience from Ta' Zwejra you should know by	1. The statement in section 19.3.12 is a general statement.	1. Noted. Kindly amend final

	now, if noise levels are unacceptable in the vicinity of receptors! Kindly clarify. 2. To build a sound barrier a development permit is needed.	In fact our experience at Ta' Zwejra demonstrates that noise levels are acceptable. 2. Noted	document so as to be used for public consultation. Noted
Odour			
SMS15.2 pg 92	Kindly provide the odour management plan mentioned.	Odour management plan is provided in Section 15.3. Action Plan is provided in Section 15.5.	Noted.
Litter			
SMS 17.2 pg 101	Kindly provide the litter management plan mentioned.	Litter management plan is provided in Section 17.3. Action Plan is provided in Section 17.5.	Noted
Mud			
SMS 16.2 pg 98	Kindly provide the dirt and mud management plan mentioned.	Dirt and mud management plan is provided in Section 16.3. Action Plan is provided in Section 16.5.	Noted
Vermin, birds and insects			
SMS 18.2	Kindly provide the bird, vermin, and insect management plan mentioned.	Bird, vermin and insect management plan is provided in Section 18.3. Action Plan is provided in Section 18.5.	Noted.
Q1.2.31	Kindly arrange format of question	It is very problematic to arrange the format of the question – the template is not very well formatted!!	Noted. Template is resent for your perusal, so as to submit it in a better format for public consultation. Template not found.

Q2.1.2	Complete table	The table was completed in the original application. The problem is with the format of the application. The answers are on the top of page 40: Pre-operational / Non-hazardous	Please note above comment. Duly made.
	Waste type		
Q2.2.7 SMS pg 14	1. How are you going to enforce that the waste holder had undergone basic characterisation testing as listed in section 3.2.1, pg 14? 2. Who will be responsible for performing the basic characterisation testing?	1. Basic characterisation will be requested for wastes other than household waste. The waste producer will be requested to provide all the relevant information. This procedure is already implemented at Ta' Zwejra. 2. The producer will be responsible for basic characterisation testing.	1. Noted. Kindly give more details on the relevant information requested. Details requested include details of the process generating the waste, details of the raw materials used in the process and chemical analysis and/or leachability tests of the waste requiring disposal. Further details are found in Section 3.2.1 of the SMS Document. Noted 2. Noted.
SMS pg 17	Change Waste Management permit to IPPC permit.	Noted	1. OK
SMS pg 21	'Difficult waste' is a reserved matter	Noted	OK

	and is still being studied.		
	Landfill containment engineering		
Q2.3.3	1. No reference to the subgrade has been found in the reference given 2. A full description of the equation should be given.	1. Erroneous reference. Should read SRA Section 1.2.3. 2. It is not understood which equation is to be provided.	1. Noted 2. The equation given in Q 2.3.3 under Strength. UCS means 'unconfined compression strength'. The minimum strength of the basal sub-grade is 6MPa; the maximum strength of the sub-grade is 24 MPa. Noted
Q2.3.8	Where is the construction specification document?	Construction specification document submitted with this document.	Kindly clarify if the document being referred to is the Construction Quality Assurance Plan. If that is the case, kindly amend final application to be used for public consultation. Confirmed and noted
Q2.3.9	Why is the leachate collection layer not applicable since it was stated that an artificial sealing liner is going to be used? Please describe, giving full details as requested.	Erroneous reply. The leachate collection layer will consist of 500mm thick, clean aggregate. Minimum hydaulic conductivity = 1 x 10^{-3} m/s.	Noted. What are the: 1. basal gradients 2% 2. MAX. hydraulic conductivity

			There is a requirement only for minimum hydraulic permeability Noted 3. minimum strength (kN/m^2) There is no requirement for strength Noted 4. Chemical compatibility. Chemically resistant Noted
Q2.3.11	Why is it that the type and design of foundation and the minimum pipework strength not applicable? Please describe giving full details.	These details are available in Section 7.4 of Appendix A of the CQA Plan submitted with this document.	Noted. Kindly amend final application to be used for public consultation. Noted
Q2.3.12	Kindly indicate specific reference to the geocomposite drainage layer in HRA	Section 3.6.1 page 39	Is it 3.6.1 or 3.6.3 page 39? 3.6.3 Noted
SMS Section 5.2.7	What type of training is envisaged for the responsible member of staff for the	Training on landfill operation as part of a twinning project with Germany.	Noted.

	inspection of final layer of waste?		
Q 2.3.18,	*Water balance calculations* – Wrong reference in IPPC application. SMS Section 6.3 may be?	Correct	Noted. Kindly amend final application for public consultation. Noted
SMS Section 6.3 pg 38	1. Kindly indicate the page and section in the HRA where reference is made to the water balance calculations.	HRA after page 45 – Model Parameterisation for the Ghallis Non-hazardous landfill	Kindly refer to this part of the HRA in the SMS section 6.3, for ease of reference for the public, during public consultation. Noted
Q2.3.18	1. *Details of system monitoring* – More detail is required. Reference given does not provide the necessary detail. Is telemetry going to be used? What will be transmitted and where? 2. *Details of control strategies* – Reference is just indicating leachate recirculation. Kindly indicate how operations are going to be phased, as a control measure. 3. *operation, appropriate inspection and maintenance procedures* – kindly indicate where in the reference provided there are the procedures requested.	1. There is no immediate intention to use telemetry. 2. Section 4.4 3. Error in reference – Section 6.5 4. The reference provided does refer to dissolved gas content. Control on dissolved gas content in leachate will be put in place should on-site leachate treatment be conducted.	1. Noted 2. Noted 3. Noted. Kindly amend final application which will be used for public consultation. Noted 4. Noted. Duly made.

	4. *Dissolved gas content control* – no reference to the dissolved gas content control is made in the reference provided. Please submit.		
Q 2.3.28	In the eventuality that leachate is produced at such high amounts as to be needed to be taken off-site, prior authorisation from MEPA is needed. Thus this will stay as a reserved matter, and will not be included in the IPPC permit.	Noted	Ok
Q 2.3.32	1. Kindly indicate where MP1 is. 2. 0.5m above liner as a control level, will be exactly, the edge of the leachate drainage blanket, according to drawing No. 5/3A. Kindly clarify. 3. It seems that either the compliance point or the compliance limit or control level is wrong. Please check.	1. Location of all leachate monitoring points are provided in Drawing 5/3A – marked as LMP. 2. The 0.5 metres is calculated from the edge of the drainage blanket. 3. Compliance point should be 1.0 metres from the edge of the drainage blanket.	1. But where is MP1 in Drawing 5/3A. Reference in application is not conforming with drawing mentioned. Kindly clarify either the application or the Drawing. MP1 is an erroneous reference. Leachate monitoring points are indicated as LMP. Kindly amend application, i.e change MP1 to LMP. 2. Noted. Please clarify application which will be used for public

			consultation. Noted 3. Noted. Please clarify application which will be used for public consultation. Noted
Q 2.3.33, SMS Appendix 3	1. How can Cu and Ammoniacal Nitrogen be detected if they are the same or below the detection limits? 2. Kindly provide the level of accuracy.	1. Error in detection limit, should be 0.3ug/l. 2. Level of accuracy will be provided by the laboratory conducting the analysis.	1. Is it 0.3ug/l for both Cu and Ammoniacal Nitrogen? If yes kindly amend Appendix 3 in final document to be used for public consultation. Confirmed and noted
Q 2.3.34 SMS Section 8.3 pg 47	1. Kindly provide a detailed design of the surface water management system. 2. Has the detailed topographical survey mentioned been carried out?	1. This will be provided in due course. Designs for a surface water master plan are being prepared. 2. CQA Plan submitted with this document. Furthermore a detailed surface water master plan is being prepared.	1. What are the exact timeframes when these are going to be submitted? Mid-October 2006 MEPA still did not receive the surface water master plan. Kindly submit. 2. Topographical survey mentioned was not

			found in the CQA Plan. The topographical survey was conducted in August 2006. MEPA representatives were present. Noted 3. When is the exact timeframe that the detailed surface water master plan is going to be submitted? Mid-October 2006 MEPA still did not receive the surface water master plan. Kindly submit.
Q 2.3.34 SMS Section 8.2 pg 47	1. Kindly provide the emergency flood plan mentioned as 'already developed' in this section. 2. Kindly indicate where are the water balance calculations in the HRA.	1. SMS Document Section 22.2 2. HRA after page 45 – Model Parameterisation for the Ghallis Non-hazardous landfill	Noted. Specify the exact location in the HRA in Section 8.2 pg 47, in the final document for public consultation. Noted

Q2.3.34 SMS Section 8.5.1 pg 48	The drainage system shown in Drawing No. GH 5/3A is the leachate drainage system. Kindly indicate where to find the engineered details for the surface water drainage system, as requested.	This will be provided in due course. Designs for a surface water master plan are being prepared.	1. Kindly remove the current reference to the drawing in SMS section 8.5.1 because this is misleading for the public. Noted 2. Kindly specify the exact timeframe when the engineered details for the surface water drainage system, are going to be submitted. Please make sure that the surface water master plan includes the details requested in this section. Mid-October 2006 MEPA still did not receive the engineered details for the surface water drainage system.
Q.2.3.34	*Details of control measures* – kindly indicate how operations are going to be phased as a control measure. *Operation, appropriate inspection and maintenance procedures* – the only form of procedures mentioned in the reference provided are related to	SMS Document Section 8.5.12	Noted for inspection and maintenance procedures. Details of control measures are still not answered. Kindly provide an answer.

	monitoring procedures. Kindly provide the inspection and maintenance procedures, as requested.		SMS Document Section 6.6 Noted
SMS Section 8.5.7 pg 49	Provide a diagram indicating the engineered drainage system for surface water management, including the water sumps and segregation bunds, as well as the perimeter ditches and drains and the contour drains, as well as the retention/infiltration ponds.	This will be provided in due course. Designs for a surface water master plan are being prepared.	Kindly specify the exact timeframe when the engineered details for the surface water drainage system, are going to be submitted. Please make sure that the surface water master plan includes the details requested in this section. Mid-October 2006 MEPA still did not receive the engineered details for the surface water drainage system.
SMS Section 8.5.10 pg 49	1. surface water from access roads, car parking, will be discharged via interceptor to surface water drainage system. Where will the surface water drainage system lead? 2. surface water in contact with waste will be treated as leachate. How will it be collected? Will it be taken offsite? N.B. Prior approval and permitting	1. This will be provided in due course. Designs for a surface water master plan are being prepared. 2. This will be provided in due course. Designs for a surface water master plan are being prepared. Noted	Kindly specify the exact timeframe when the engineered details for the surface water drainage system, are going to be submitted. Please make sure that the surface water master plan includes the details requested in this section.

	from MEPA is needed in order to discharge surface waters in the coastal waters, referring to Q2.3.36.		Mid-October 2006 MEPA still did not receive the engineered details for the surface water drainage system.
Q 2.3.37	Wrong page number in reference given.	Should be page 51 & SMS Appendix 4.	Noted. Kindly amend final application that will be used for public consultation. Noted
SMS Section 9.2 pg 51	Surface Water monitoring is found in Appendix 4 not 3, as indicated.	Noted	Ok
Appendix 4	1. Kindly provide a drawing indicating the location of the sampling points. 2. No detection limit was provided for Ammoniacal nitrogen 3. Kindly provide the level of accuracy, and the surface water flows to be measured	1. These details will be provided in due course. Designs for a surface water master plan and therefore monitoring points are being prepared. 2. 1.0mg/l 3. It is not clear what this request refers to.	1. Kindly specify the exact timeframe when the engineered details for the surface water drainage system, are going to be submitted. Please make sure that the surface water master plan includes the details requested in this section Mid-October 2006 2. Kindly note that in a previous answer the

			0.3ug/l. detection limit was mentioned. Kindly clarify both answers, in this paper. 0.3ug/l is the correct detection limit. Noted 3. Please look at answer below.
Q 2.3.39	Kindly answer this question	All answers are provided in SMS Appendix 4.	1. Name of monitoring point is not provided since in the previous answer you are stating that the drawing will be provided in due course. Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location The drawing referred to is not showing surface water monitoring points. Kindly submit surface water

			monitoring points. 2. Accuracy requested is not found in Appendix 4 Accuracy of method will be provided with monitoring results. Noted 3. Relevant section and page number of HRA is not found in Appendix 4. Not duly made HRA Section 4.0 page 42 - 43 Noted
Q 2.3.40 SMS Section 10.2 pg 55	Kindly submit the actual borehole logs.	To be submitted shortly since these still need to be established.	Kindly specify the exact timeframe that these are going to be submitted. Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location / GW Monitoring

			Borehole Locations. Actual logs can be provided once the boreholes are constructed. This process is on going. Noted.
SMS Section 10.3 pg 55	In the paragraph before the last there is written the following: 'Sampling frequencies and determinands will be modified and adjusted as appropriate, with additional determinands being considered to reflect the deposit of certain waste streams at the site.' Kindly clarify, since the waste streams are going to be specified in the IPPC permit.	The sentence 'Sampling frequencies and determinands will be modified and adjusted as appropriate, with additional determinands being considered to reflect the deposit of certain waste streams at the site.' Should be deleted.	Noted. Kindly amend SMS in final application that will be used for public consultation. Noted
SMS Appendix 5 Q. 2.3.42	1. The difference between the trigger and control levels in ammoniacal nitrogen and lead is minimal. This is not statistically different. Kindly explain. 2. the limit of detection for Cd, Cr, Ni, Pb, is greater than the trigger and control levels. Thus kindly explain how these metals are going to be detected. 3. The accuracy level is not provided. Kindly provide.	1. This is as a result of the procedure use to derive control and trigger levels. This procedure was accepted in the past. Kindly refer to Annex 3 to this document. 2. The laboratory will be asked to review the limit of detection for Cd. Kindly note that for Cr, Ni and Pb the limit of detection is in ug/l. The control and trigger levels are in mg/l!! 3. Level of accuracy will be provided by the laboratory	The control levels suggested are not in accordance with the methodology suggested by yourselves in Annex 3. For some of them the control levels are within the experimental statistical errors. Kindly revise or suggest better methods. The control levels cannot be revised since

	4. Both No and Yes are marked. Kindly clarify. 5. *Borehole logs* – reference is incorrect, because no borehole logs are found in the reference given.	conducting the analysis.] 4. Only 'Yes' should be marked. 5. Borehole logs will be provided shortly since they still need to be established.	this would alter the whole concept of the HRA. Clarifications are still being sought by MEPA. 2. Noted. Kindly provide reviewed limit of detection by laboratory. The reviewed limits have note been provided by the laboratory as yet. Noted 3. Noted 4. Noted. Kindly amend final application which will be used for public consultation. Noted 5. Kindly state the exact timeframe when these will be submitted. Drawing showing all monitoring points attached

			with these replies. Drawing reference: Monitoring Location / GW Monitoring Borehole Locations. Actual logs can be provided once the boreholes are constructed. This process is on going. Noted
Q 2.3.44	1. Landfill gas- wrong paging in the reference. Should be pg 248.	Noted	Kindly amend final application to be used for public consultation. Noted
Q 2.3.45	1.*Landfill gas flaring* – Wrong paging in the reference. Should be pg 260 2. *Landfill gas utilisation* – did not find reference of such in the reference provided. Page number should be 260.	Noted	Kindly amend final application to be used for public consultation. Noted
SMS Section 11.7.2	Kindly supply the CQA plan mentioned.	Submitted with this document	Noted
SMS Section 11.7.11	Gas Flare is not going to be permitted under this IPPC permit. This will be a reserved matter. Thus, a new IPPC application for a substantial change will have to be submitted.	Noted	OK
Q 2.3.46	*Phased development plans*: Where in EIS Section 14 are the plans found? *Collection efficiency* : Where in the	Noted	Why was your answer listed as Noted? This answers neither of the three

	EIS Section 14 are the calculations and assumptions, throughout life of installation found? *System capacity*: Any plans for the utilisation plant?		questions asked. Kindly answer. Phased development plans – SMS Document Section 11.7.7 Collection efficiency – SMS Document Section 11.5 System capacity - Section SMS Document Section 11.6 Noted. Kindly amend application accordingly
SMS Section 11.7.10 pg 63	Table 11.1: The first two technologies are going to be found in flare. What about the rest?	Also in the flare	Noted. Kindly amend Table 11.1 to indicate your reply, on the final version of the SMS which will be viewed by the public. Noted
SMS Section 11.7.7 pg 62	*Connection pipework configuration*: 1. When is the actual construction of such going to commence? 2. Provide us with a detailed plan of the pipework, including the location of the wells, as well as showing the	1. The actual construction will commence at closure stage. 2. These details will be provided with closure plan. 3. SMS Section 11.7.9 page 64	1. Noted. 2. Noted 3. Noted

	control systems in place. 3. How will condensate be managed?		
Q 2.3.46	*Flare, Utilisation plant, Temporary and emergency provisions*: These will all stay as a reserved matter since not enough details are available at this stage. This means that a specific development application and an IPPC application for a substantial change have to be submitted. Also, the IPPC Committee has to be involved in the issuance of the specifications of such tender. *CQA:* This was not submitted. Kindly provide CQA as per request.	Noted CQA Plan submitted with this document.	When is the envisaged timeframe when specifications for such tender will be issued? The flare is going to be procured as part of the Aerial Emissions Project concerned with the rehabilitation of Maghtab. The flare will be installed in accordance to the satisfaction of WasteServ and the Supervising Engineer. Further details will be submitted as soon as they are available. Noted. Flare is still a reserved matter. noted
Q 2.3.46	*Operational techniques*: Provide ALL the procedures and measures as well as management plans requested in this section. *Maintenance*: Routine inspection program not found in the reference given.	All information related to the operation and maintenance of the gas flare will be provided in due course.	Earlier on it was stated that the flare will be purchased in fourth quarter 2006. Thus a clear idea of the operation and maintenance of the gas flare, should be available by now. So when is the exact timeframe when such information is going to be

			submitted? The flare is going to be procured as part of the Aerial Emissions Project concerned with the rehabilitation of Maghtab. The flare will be installed in accordance to the satisfaction of WasteServ and the Supervising Engineer. Further details will be submitted as soon as they are available. Noted. Flare is still a reserved matter.
	Landfill Gas flaring and monitoring		
Q 2.3.48	*Design and construction of gas monitoring installations*: Provide location of monitoring installation of all in-waste monitoring points and perimeters boreholes. *CQA*: None of what was listed was found in reference given	All information related to the operation and maintenance of the gas flare will be provided in due course. CQA Plan submitted with this document.	Operation and maintenance of gas flare has nothing to do with the in-waste gas monitoring points and perimeter boreholes. The flare is going to be procured as part of the Aerial Emissions Project concerned with the rehabilitation of Maghtab. The flare will be installed in accordance to the satisfaction of WasteServ

			and the Supervising Engineer. Further details will be submitted as soon as they are available. Noted. Flare is still a reserved matter. Gas monitoring could not be found in the CQA plan submitted. Kindly clarify.
SMS Table 12.1 pg 73	What are the standard sampling and analytical methods for the Landfill Gas Trace compounds? (i.e. ISO or CEN standards). At which laboratory will they be carried out?	We are not informed of standard sampling and analytical methods. Laboratory still to be determined.	Such data should be submitted before the actual commencement of the landfill gas trace monitoring, sine it has to be an accredited laboratory. This monitoring is related to the operation of the flare. The flare is going to be procured as part of the Aerial Emissions Project concerned with the rehabilitation of Maghtab. Further operational and monitoring details will be submitted as soon as they are available. Noted. See comment on flare.
SMS Table 12.4	Have the studies mentioned in the	How can such studies be conducted	Noted

	table been carried out?	before the landfill is brought into operation and gases start being generated?	
SMS Section 12.4.2 pg 77	1. Kindly provide the background levels of the parameters that are going to be monitored during full operation 2. Provide the control and trigger levels asked for in Q 2.3.48 (compliance limits and action plan) 3. What are the emergency procedures mentioned on pg 77?	1. These will be provided when the flare is procured. 2. SMS Document Appendix 6; action plan is in section 12.4.2 3. Emergency procedures indicated in Section 22.0 of SMS Document	1. Background refers to the existing levels before the installation and operation of the flare. This data will be provided as soon as the parameters that will be monitored have been agreed with the contractor that will be responsible for the operation of the flare. The parameters have to be agreed with the contractor in conjunction with MEPA and may need to be changed over time. 2. Noted. Ask LV-control and trigger levels given were just for methane. 3. Section 22, does not provide an emergency plan for Landfill Gas Management

			System. Kindly provide more detail. SMS Document Section 22.4.1 & Section 11.4 Noted. Kindly amend application, if necessary.
SMS Section 12.6.2 pg 80	Kindly include reporting in the event of a trigger exceedance in the reporting to MEPA.	Noted	Kindly amend SMS final document which will be used for public consultation. Noted
SMS Section 12.2.2 pg 71	*Perimeter Boreholes*: Kindly provide the external landfill gas monitoring locations	These will be provided shortly since these still nee to be established.	When is the exact timeframe that these are going to be submitted? Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location Noted
Appendix 6	1.Why is it that monitoring of other contaminants in ambient air is just going to be carried out in just one location? 2. Kindly provide locations for sampling for: i). in-waste landfill gas from	1. The 'other contaminants' will be monitoring in just one location as a result of the high expense of both the sampling equipment as well as the analysis. Furthermore, the monitoring for dioxins, heavy	1. Monitoring will have to be carried out at all points to be identified. More detail will be found in the IPPC permit. 2. Kindly provide the

	the gas extraction wells ii) landfill gas from the landfill gas flares, and gas engines (take into consideration as well Q 3.1.3 – 3.1.18) iii) perimeter landfill gas monitoring – sub surface emissions iv) landfill gas monitoring – surface emissions v) perimeter landfill gas monitoring –aerial emissions vi) receptor monitoring –aerial emissions vii) monitoring for particulate matter (Q 2.3.72) Provide as well, the sampling procedures for each location, as well as the determinants that are going to be analysed for, together with their detection limits, control levels and trigger levels, as well as the accuracy. Thus amend the IPPC application form whenever Appendix 6 is being referred to, as necessary.	metals and PAHs is not a requirement of the Waste Management (Landfill) Regulations. The Operator will be monitoring for these contaminants in view of the former Maghtab waste deposit site. 2. i) These will be provided shortly since these still need to be established. ii) These will be provided when the glas flare is procured. iii) These will be provided shortly since these still need to be established. iv) These will be provided shortly since these still need to be established. v) These will be provided shortly since these still need to be established. vi) These will be provided shortly since these still need to be established. vii) These will be provided shortly since these still need to be established. Noted	exact timeframe when all this information is going to be submitted. Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location The monitoring needed is the following. Kindly write next to them, the monitoring locations that are going to be used for each type of monitoring: 1. Perimeter landfill gas monitoring (sub-surface) – 2. landfill gas monitoring (surface emission) – 3. aerial emissions-(receptor monitoring) – 4. aerial emissions – (perimeter) – 5. inwaste from gas extraction well – 6. Particulate matter –

			7. other contaminants -
SMS Section 12.1 pg 71	Provide the gas monitoring plan mentioned in this section, and including all the parameters listed.	Appendix 6 SMS Document	Appendix 6 SMS Document is not acceptable, because all the information requested above is missing! Kindly amend Appendix 6 as requested. Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location Same as above
Q 2.3.49	What is the sampling method to be used to monitor the gas from the extraction system? Kindly specify in the monitoring program for in-waste landfill gas.	The sampling methods will be provided when the flare is procured. The monitoring programme for in-waste landfill gas is the same as indicated in Appendix 6. The locations for such monitoring will be provided at a later date.	1. Noted 2. With regards to the monitoring program for in-waste landfill gas Appendix 6 needs to be clarified, in terms of earlier comments made. Kindly amend. Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location. The locations for in-waste landfill gas are the same as the leachate collection/monitoring locations.

			Noted. What is the distance between the leachate monitoring points since close spacing of 20m will tend to reduce the suction on the surrounding fill?
Q 2.3.51	Even though we stated that flare is going to be a reserved matter, yet can you kindly submit a detailed monitoring program and methodology for the determinants mentioned in SMS Section 12.3.4 pg 74	Section 12.3.4 states that monitoring for gas flare emissions monitoring will be carried out at least once yearly. The methodology is given in Table 12.3.	Kindly include Table 12.3 in the reference to the question, in the final application for the review of the public. Noted
Q 2.3.57, Q 2.3.58	These are not answered. Kindly answer in full.	SMS Appendix 6 gives all the available information. The locations for perimeter aerial emission monitoring will be provided shortly since all monitoring locations still need to be established.	Appendix 6 SMS Document is not acceptable, because all the information requested above is missing! Not duly made. Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location The drawing is showing the points however, it is not answering Q 2.3.57 and Q 2.3.58, which is asking for control levels, trigger levels, detection limits and frequency of

			monitoring, etc. Kindly also note, our previous comment to add another site to include the Qawra beach front, and also another point to encompass sensitive receptor points 5,6,7 in drawing GH 14/1. Not duly made.
Q 2.3.59/ 61/62	Since the site has a history of complaints, kindly provide the sampling points, and sampling methodology, together with the list of determinants, that are going to be monitored for in off-site receptor areas.	The determinants will be the same as those indicated in SMS Appendix 6. The locations still need to be determined.	When is the exact timeframes that such locations will be provided? Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location Kindly clarify if all the determinants found in Appendix 6 are going to be monitored from locations 0-7. Kindly also note, our previous comment to add another site to include the Qawra beach front, and also another point to encompass sensitive receptor points 5,6,7 in

			drawing GH 14/1. These should also be part of the sensitive receptors in the diagram. Thus, kindly amend diagram.
Q 2.3.63	What was given in SMS Section 12.4.2 pg 76, was just an outline, based on the question. Kindly provide a detailed Landfill gas monitoring action plan, stating clear actions to be taken, as well as procedures and protocols to manage, together with names of responsible people in case of an emergency, as requested in the question.	The only information available to date is that detailed in SMS Section 12.4.2.	Noted
	Installation infrastructure, bunds, and management plans		
Q 2.3.65	Kindly explain where secondary containment and continuous leakage detection is going to be used.	Secondary containment and continuous leakage detection will be used in cases where for example large quantities of fuel need to be stored.	Noted
Q 2.3.66	Kindly clarify what exactly the inspection and maintenance program will include.	The inspection and maintenance programme will include pressure tests, leak tests, material thickness checks or CCTV to ensure the integrity of all sub-surface structures.	This reply does not add any information to the question. Please expand. This is the information that can be provided to date. Maintenance contracts still need to be defined. Noted

Q 2.3.67	Kindly submit the methodologies and eventually the certified CQA mentioned in the reference given for this question.	Methodologies are part of the CQA Plan submitted with this document.	This could not be traced in CQA. Please specify further. The document that was submitted was the CQA Plan. Further details will be provided in the in the certified CQA Report. Noted
Q2.3.71	1. The terminology 'dust' is insufficient. Monitoring has to include PM_{10} and $PM_{2.5}$ not just 'dust'. 2. What type of quantitative monitoring will be employed? 3. Which are the sensitive receptors identified for particulate matter?	1. Noted 2. Measurement of total suspended particles. 3. Receptors identified in Drawing GH 12/1	1. Specify monitoring of PM_{10} and $PM_{2.5}$ in final version of application which will be reviewed by public. Noted 2. Specify this in the final version of the application which will be reviewed by the public. Noted 3. Drawing GH 12/1 is showing the noise monitoring locations. It is Drawing GH 14/1 which shows a list of sensitive receptors. So

			is it all the receptors found in Drawing GH 14/1? No. Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location. Sensitive receptors are points 2, 5, 6 & 7. Kindly amend application. Kindly also note, our previous comment to add another site to include the Qawra beach front, and also another point to encompass sensitive receptor points 5,6,7 in drawing GH 14/1. These should also be part of the sensitive receptors in the diagram. Thus, kindly amend diagram.
Q 2.3.72	Kindly provide an answer to the question	Particulate matter monitoring points still need to the determined.	When is it the exact timeframe when you are going to submit this

			information? This is still not duly made. Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location. Particulate monitoring will be conducted at perimeter monitoring points (1, 3 & 4) and off-site monitoring points (2, 5, 6 & 7) Kindly also note, our previous comment to add another site to include the Qawra beach front, and also another point to encompass sensitive receptor points 5,6,7 in drawing GH 14/1. This would mean that particulate matter will be monitored from these sites as well. These should also be part of the sensitive receptors in the diagram. Thus, kindly amend diagram.

Q 2.3.73/ SMS Section 15.3.15	The criteria for using an emergency tipping area are not well defined as requested in the question.	Criteria: 1. Height of landfilling area 2. proximity to sensitive receptors 3. prevailing weather conditions	Noted. Kindly amend final version of the SMS, to be viewed by the public. Noted
Appendix 7	1.Specify in which section of the SMS are the details found. 2. Identify the locations for the odour monitoring points, taking into consideration monitoring of sensitive receptors. 3. In which lab will the dynamic olfactometry be carried out?	1. Section 15.4 2. The monitoring locations will be the same as those for noise monitoring (Drawing GH 12/1) but may also be variable. 3. To date dynamic olfactometry analysis were conducted at Silsoe Research Institute, UK.	1. Noted. Please amend Appendix 7 to include the Section mentioned. Noted 2. Noted 3. Noted
Q 2.3.75	Not answered	The monitoring locations will be the same as those for noise monitoring (Drawing GH 12/1) but may also be variable. Units: ouEm^{-3}; accuracy not available. No control level determined.	Noted
SMS Section 16 pg 99	Kindly indicate the sensitive receptors identified in the risk assessment, which are mentioned in section 16.4.1	e.g. Maghtab village, Coastline Hotel, etc. Sensitive receptors are indicated in Drawing GH 12/1.	Drawing GH 12/1 is showing the noise monitoring locations. It is Drawing GH 14/1 which shows a list of sensitive receptors. So is it all the receptors found in Drawing GH 14/1? No. Drawing showing all monitoring points attached with these replies. Drawing reference: Monitoring Location. Sensitive receptors are points 2, 5, 6

			& 7. Kindly also note, our previous comment to add another site to include the Qawra beach front, and also another point to encompass sensitive receptor points 5,6,7 in drawing GH 14/1. These should also be part of the sensitive receptors in the diagram. Thus, kindly amend diagram.
Q 2.3.82	Will u apply insecticides outside the installation boundaries as well?	No	Noted
Q 2.3.84	1. Kindly provide the noise management plan mentioned in SMS Section 19.2 2. Reference given is not correct. May be Section 19.5?	1. The noise management plan is in Section 19.3: Operational Techniques. 2. Yes.	1. noted 2. Noted. Kindly amend final application for review by the public. Noted
Q2.3.86	1.Where are the noise monitoring locations? 2. Which are the sensitive receptors?	1. Drawing GH 12/1 2. Locations marked in blue.	1. Noted 2. Noted
Q2.3.88	Not answered	Determinand: Noise Frequency: Weekly Units: dB LAeq, 1 hour Control level: 55dB LAeq, 1 hour	Noted. Kindly amend final version of the IPPC application, to be use for public consultation. This answer makes the question

			duly made. Noted
	Energy		
Q2.4.2/3	Not answered	2.4.2 2.4.3 No energy efficiency measures to date	2.4.2 still not answered. Still not duly made. Thermal oxidizer: 350 kW Other energy requirements: 200 kW All from public supply. Noted. Duly made. Noted. Kindly amend IPPC application. Noted
SMS Section 21.0 pg 118	What kind of plant is expected to be installed at the site (apart from the handling and compaction plant, described pg 33, 5.2.8) and what are the expected energy requirements? - the answer should differentiate between future plant (e.g. CHP related to conversion of landfill gas to electricity) and that which is required for the running of the facility from start-up (including fuel for vehicles, lighting needs, plant and equipment etc.)	Thermal oxidizer: 350 kW Other energy requirements: 200 kW Fuel requirements: 500 litres	Noted. Fuel requirements 500litres/what? Diesel Noted. Please amend application. For what is the Thermal oxidizer used? Thermal oxidizer is another

			name for flare. Noted. Are these for future or immediate use? Immediate Noted.
	Accident management plan		
Q 2.4.4	Question on landslides not all answered	Likelihood of occurrence: Low Consequences of occurrence: Instability of waste mass Actions taken or proposed to minimise the chances of it happening: SMS Document page 126 Actions planned if the event does occur: SMS Document page 126	Noted. Kindly amend IPPC application Noted
	Kindly submit the 'WasteServ Site Rules' that are mentioned several times in the Health and Safety Risk Assessments supplied.	Annex 6	Noted
	Meteorological Monitoring plan		
Q 2.4.6	Evaporation not found in SMS Section 23.4	Noted. Parameter will be monitored.	Kindly amend SMS to include this. Noted
Q 2.4.7	What are the anticipated averaging periods for rainfall and wind direction, and how do they relate to the determinands being monitored?	Still to be determined.	When is the exact date when these are going to be submitted?

			No exact date yet. Will be determined when the equipment is procured. Noted.
Q 2.4.8	Not answered	The location is still to be determined. This information will be submitted in due course.	When is the exact date when these are going to be submitted? The location/s has to be determined in conjunction with the sampling points. Location indicated on drawing: Monitoring Location Confirm that meteorological data will be collected continuously.
SMS Section 23.2	Where is the meteorological station going to be located?	Location still to be determined. This information will be submitted in due course.	When is the exact date when these are going to be submitted? Kindly note comment above. Location indicated on drawing: Monitoring Location Same as above
Q 2.4.10	1. Could not find the procedures in the reference mentioned 2. Monitoring is to be carried out at least on a 6 monthly basis.	1. Section 24.0 contains all the information available. 2. Noted	1.Noted 2. kindly amend Section 24.2 in SMS. Noted
	Closure, Restoration, aftercare and		

	completion		
Q 2.5.1	The restoration plan has to be submitted for a development permit, as soon as IPPC permit is issued.	Noted	OK
Q 2.5.2	Not answered		Still not answered. It is still not duly made. Vertical measurements in mm: 50 mm Horizontal measurements in mm: 20 mm Noted. Kindly amend application. Duly made
Q 2.5.3	Every six months from when?	From definite closure of the site	Noted. Please specify in application OK
Q 2.5.4	How are you going to ensure that the final pre-settlement waste levels are not going to be exceeded?	SMS Section 25.1.5	Noted. Kindly amend IPPC application Noted
Q 2.5.4 / 5	Not answered	3.5.4 i – Yes, SMS Section 25.1.5 page 135 2.5.4 ii – Yes, SMS Section 25.2 page 135 2.5.4. iii – Yes, SMS Section 25.1.8 page 135 2.5.4 iv – Yes, SMS Section 25.2 page 135 2.5.5 v - Yes, SMS Section 25.1.8 page 135 2.5.4 vi - Yes, SMS Section	Noted. Kindly amend IPPC application. This makes the question duly made. Noted

		25.1.8 page 135 2.5.4 vii - Yes, SMS Section 25.3.1 page 136 2.5.4 viii - Yes, SMS Section 25.3.4 page 136 2.5.4 ix - Yes, SMS Section 25.4 page 136 2.5.4 x – Yes, SMS Section 25.1.3 page 134 2.5.5 Yes, SMS Section 25.1.1 page 134	
	Emission benchmarks		
Q 3.1.1	Kindly confirm that there will be no connection to the sewer and kindly answer question.	There will be no emissions into the sewer. All replies should be NA.	Noted. Kindly amend IPPC application form. Noted
Q 3.1.2	Define surface water in this case and answer.	Same as reply to request icw Q 1.1.28	Noted. Duly made.
Q 3.1.3 – 3.1.18	Not answered, not even in Appendix 6.	The answer is in Appendix 9: Any gas engine installed will be selected so as to be compliant with all relevant legislative requirements.	Noted. Kindly amend IPPC application. Duly made. Noted
	Non-technical summary and management systems		
Q 4.1.2	No EMS in place Q 4.1.2 – 4.1.21 not answered. Kindly submit.	4.1.2 No (Ref: SMS Appendix 11) 4.1.3 Yes (Ref: SMS Sections 6, 7, 8, 9, 10, 11 & 12) 4.1.4 Yes (SMS Section 13.0) 4.1.5 Yes (Ref: SMS Sections 6, 7, 8, 9, 10, 11 & 12) 4.1.6 Yes (Ref: SMS Section 13.0)	Noted. Kindly amend IPPC application. Duly made. Noted

		4.1.7 No (Ref: SMS Appendix 11) 4.1.8 No (Ref: SMS Appendix 11) 4.1.9 No (Ref: SMS Appendix 11) 4.1.10 No (Ref: SMS Appendix 11) 4.1.11 No (Ref: SMS Appendix 11) 4.1.12 No (Ref: SMS Appendix 11) 4.1.13 Yes (Ref: SMS Section 22.0) 4.1.14 Yes (Ref: SMS Section 22.0) 4.1.15 No (Ref: SMS Appendix 11) 4.1.16 No (Ref: SMS Appendix 11) 4.1.17 Yes (Ref: SMS Section 22.0) 4.1.18 No (Ref: SMS Appendix 11) 4.1.19 No (Ref: SMS Appendix 11) 4.1.20 No (Ref: SMS Appendix 11) 4.1.21 No (Ref: SMS Appendix 11)	
Q 4.4.1	Kindly explain what does the Ta' Zwejra Waste Management Complex consist of	Statement should have read Maghtab Waste Management Complex which consists of the former Maghtab waste	Noted. Please amend IPPC application.

		deposit site and the Ta' Zwejra Non-Hazardous Waste Management Facility.	Noted
Q 4.4.2	Kindly confirm if just one file will incorporate all 3 sites mentioned in Q 4.4.1. If not specify file numbers.	GH 00004/02 refers to the development application for the Ghallis waste management facilities including Ghallis non-hazardous waste landfill facility, Ghallis hazardous waste landfill facility and hazardous waste storage and treatment facility. This application has now been approved – PA 04834/04.	In application it is written as GF and not GH. So kindly amend IPPC application. Noted