Annex I: Comments regarding the IPPC application

General queries

The following are required to be provided:

1. Operational hours of the plant, including times of receipt of different waste streams and operation of individual machinery;

MBT Machine Operating Hours (from EIS)

	Machine operational hours Mon - Sat	Machine operational hours Sunday	Operational hours / day
Dry and wet pre-treatment domestic waste	06:00-18:00 (potential extension to 20:00)		12h (potential extension to 14h)
Mechanical pre-treatment bulky waste	08:00-16:00 (potential extension to 18:00)		8h (potential extension to 10h)
Biological treatment	00:00-24:00	00:00-24:00	24h

BP Machine Operating Hours (from EIS)

	Machine operational hours Mon - Sat	Machine operational hours Sunday	Operational hours / day
Reception, feeding	07:00-18:00		11h
Biological treatment	00:00-24:00	00:00-24:00	24h

Waste Acceptance Hours

	Waste Acceptance Hours (Monday – Saturday)	Waste Acceptance Hours (Sunday)
Municipal solid waste	**06:00 – 18:00**	**Not applicable**
Bulky waste	**06:00 – 18:00**	**Not applicable**
Manure Waste	**06:00 – 18:00**	**Not applicable**

2. The proposed variations to PA 1294/12 are to be reflected in changes in the IP application and relevant attachments. Any consequential changes to the process are also to be indicated;

   The Changes that took place (and were approved by MEPA Board on 19 June 2014) were related to changes in layout and levels. Drawings have been updated accordingly.

3. Plans are to be updated to indicate location of different processes which shall occur in the different areas of each shed/ building;

   See drawings in Annex 4:

   - ***VBL-AD-CIV-ARC-DWG-0008 - AD Layout for IPPC***
   - ***VBL-MT-CIV-ARC-DWG-0006 - MTP Layout***
   -

4. A justification as to why the plant designed to handle 100,000 tonnes of MSW will be treating 66,000 tonnes per annum;

The plant will be treating 66,000 tonnes of MSW as this was the estimated figure of MSW which is expected to be treated in the MTPand which was used for the procurement of the plant. In fact, the design throughput capacity of the plant is as follows:

- ***66,000 tonnes p.a. plus 15% extra capacity of municipal waste (i.e. 76 kt/a); and***
- ***47,000 tonnes per annum of bulky waste.***

The MT facility shall be designed to achieve the design throughput of 66,000 tonnes per annum of domestic waste in 48 machine running hours per week based on one shift per day and six days /week. The plant availability shall be > 85%. Based on the proposed shift pattern the assumption is made that any maintenance, cleaning and extension of operation due to down time will be done outside the above mentioned machine running time of 8 hours/day. The 15% extra capacity shall also be treated by an extension of operation hours.

5. Detailed information on the bulky waste fractions to be accepted as page 18 of Annex 3 provides that bulky waste will be shredded. ***Detailed information relative to the composition of bulky waste in not available. WasteServ had undertaken an inspection of bulky waste in September 2010, the results of which are provided in the table below. Results indicate a substantial amount of construction material in the waste.***

Fraction	***Bulky waste composition acc. to spot test, Sept 2010***
Paper and Paperboard	***9.1%***
Board, cartons	***9.1%***
Textiles	***3.5%***
Plastic films	***7.0%***
Plastics	***2.8%***
Ferrous materials	***11.9%***
Construction material	***49.6%***
Wood	***7.0%***
SUM	***100.00%***

The bulky waste composition was modified for the purpose of design and dimensioning the MT plant considering the influence of separate collection / delivery of C&D waste. This resulted in the percentages shown in table below which is the information used for the Contractors dimensioning of the plant.

Fraction	*Min.*	*Max.*	*Average*
Paper and Cardboard	***25 %***	***40 %***	***34 %***
Textiles	***4 %***	***7 %***	***6 %***
Plastics	***15 %***	***25 %***	***18 %***
Ferrous metal	***5 %***	***23 %***	***22 %***
Construction material	***5 %***	***20 %***	***7 %***
Wood	***5 %***	***15 %***	***13 %***
SUM			***100 %***

6. Reference to the percentages used in the determining the weight of the output fractions laid down in tables 8, 9A, 9B and 10 (pages 77-79) of Annex 3 should be made.

Tables 8, 9A, 9B and 10 in Annex 3 'Supporting information' were updated.

7. Following further review of the IPPC application with the aim of drafting end-of-waste criteria for digestate/compost from the biological treatment of animal manure and organic waste from mixed MSW, MEPA has noted an issues regarding the treatment of animal manure which is classified as Cat 2 material under the ABPR (Regulation 1069/2009). Regulation 142/2011 stipulates the treatment requirements for Cat 2 material destined for biogas plants. Section 1(1) of Chapter 1 of Annex V of Regulation 142/2011 provides that:

   "A biogas plant must be equipped with a pasteurisation/hygienisation unit, which cannot be by-passed for the animal by-products or derived products introduced with a maximum particle size of 12 mm before entering the unit, with:
   (a) installations for monitoring that the temperature of 70 °C is reached during the time of one hour;
   (b) recording devices to record continuously the results of the monitoring measurements referred to in point (a); and
   (c) an adequate system to prevent insufficient heating."

   Having said so, however the pasteurisation/hygienisation unit shall not be mandatory for biogas plants that transform **only** animal by-products which fulfil certain conditions laid down in Section 1(2) of Chapter 1 of Annex V of Regulation 142/2011. Since the biogas plant

will be treating mixed manure with organic waste and not only animal by-products, MEPA is therefore of the opinion that a pasteurisation/hygienisation unit is mandatory. However, such a unit does not feature in the application.

At this stage and prior to any further work on end-of-waste criteria for digestate/compost from the biological treatment of animal manure and organic waste from mixed MSW, MEPA requires confirmation from the Veterinary Department as to whether the proposed plant complies with the requirements of the ABPR. Should it not comply than the output from the treatment process can never achieve an end-of-waste status in accordance with The Waste Regulations, as it would fail the input criteria which are the first step towards achieving an end-of-waste status. Kindly bear in mind that end-of-waste does not depend solely on the output quality.

Reference is made to email by Dr. Duncan Chetcuti Ganado o.b.o the Veterinary Department stating a no objection to the project and it's proposed:

1. ***The quantity of manure to be treated at the plant has been reduced from 150,000 ton p.a. to 39,000 tons p.a. This is due to developments leading to decisions being taken by Wasteserv to exclude the input of pig slurry (111,000 tons p.a.) from the plant. Pig slurry shall now be diverted for treatment by the Water Services Corporation. As a result , the Malta North Plant shall now treat 39,000 tons p.a. of manure composed of cattle manure (35,000 t.a) and poultry manure (4,000 t.a)***

2. ***The original plans were based on separate treatment of manure and organic fraction (from municipal waste) , whereas the revised plans are based on co-mingled treatment of both components. The benefits of this option relate to stabilization of the digestion process, increase yield of biogas and improved operational and economical benefits from such operation.***

- ***Form A***

Section	Duly made?	Comments dated 20th October 2013	WasteServ Feedback		WasteServ Feedback Feb 2015
A1.1	✓	Noted.	-	-	
A1.2	✓	Noted.	-	-	
A1.3	✓	Noted.	-	-	
A1.4	✓	1. Planning Application number PA 01292/12 to be replaced by correct reference- PA 01294/12. 2. Sewer Discharge Permit might be required. Kindly consult the Water Services Corporation regarding the applicability of a Sewer Discharge Permit. Contact details – Ms. Paula Grech Bonnici (Tel: 22443126; email: paula.grech.bonnici@wsc.com.mt) and submit the relevant	1. Noted – Form A updated accordingly. 2. Noted.	Noted. Information pending.	WasteServ submitted an application for a sewer discharge permit to the Water Services Corporation. Refer

		correspondence. If a Sewer Discharge Permit is submitted, kindly submit receipt of application.			to Annex 10 – WWDP.
A2.1	✓	Noted.	-	-	
A2.2	✓	Noted.	-	-	
A3.1	✓	Noted.	-	-	
A3.5	✓	Noted.	-	-	
A3.6	✓	Noted.	-	-	

Form B

Section	Duly made?	Comments dated 4th March 2014	Applicant's response		Applicant's response
General comments				Annexe 3 Supporting documentation is to be updated (still makes reference to designs not available e.g. B2.2.4)	Annex 3 updated.
General comments	x	1. In view of disclaimer submitted in supporting documentation, kindly advise the relevant timeframes with respect to selection of the winning bidder and final approval of the design by WasteServ. 2. In view of the process of	1. The contract has been awarded. This submission includes details provided by the winning bidder. 2. Noted – Form B updated accordingly.	Noted. Noted. WSM to clarify: i. location of quarantine area	Quarantine area location is identified in drawing in

		the design and build contact, form B is to be updated in accordance with the technical information provided as part of the winning bid. 3. The relevant plans submitted are to be updated to include the location of the following: a. raw materials (RM 1, RM2, etc); b. fuel (F1, F2, etc); c. Chemical storage (C1, C2, etc) and toxic chemical (TC 1, TC2, etc) ; d. Ozone depleting	3. The relevant plans and supporting details are included in Annex 4.	(in view of cross reference to this section in inspections in Ghallis); ii. Area of storage of bales. Para. 14 of Land and Groundwater Risk Assessment Report indicated storage of 200m3. With a production of 114 bales per day this amounts to one day storage, this is considered insufficient, considering the	Annex 4 MTP Layout for IPPC. WSM shall be placing a 20-ft hazardous container similar to that used in CA sites. Not shown on plan The storage area is about 2980 m2. Bales can be stored for about 6 weeks. We estimate that 4800 bales can be stored (8160 m3). For a better understanding, please refer to the attached drawing EFAE-MT-CIV-INS-DWG-0001C - Layout - storage bales. (The 200m3 was only used in the risk assessment in order to assess the risk of fire)

		substances and fluorinated greenhouse gases in equipment with a fluid charge of 3kg or more (EQ 1, EQ2, etc) ; e. Location of effluent discharge (E1, E2, etc); f. Point sources for emissions to atmosphere (PS1, PS2, etc)		experience from SAWTP. Noted. TC 5. TC6. TC 7 appear missing from plans.	
B1.1	✓	Kindly include all directly associated activities as part of this section as follows:			

		1. Column 1: 'Operation of a material recovery facility (MRF)' to be placed under heading *Directly associated activities,* 2. Columns 1: It is recommended that the full list of activities which are carried out on site as part of the Operation of a Mechanical Treatment Plant with Anaerobic Digester (MTP/AD) are placed under the under heading *Directly associated activities,* including the following (as applicable):	1. A material recovery facility will not be included. 2. Noted – Form B updated accordingly.	Noted Noted	

		a. Dry mechanical treatment – Collection, sorting, baling and storage of waste; b. Wet mechanical treatment – production of biological waste suspension (slurry) through mixing, screening and sedimentation; c. Biological treatment – hydrolysis and digestion of the biological waste			

		suspension (slurry); d. Aerobisation – aeration of the liquid digestion residue, dewatering and compost storage; e. Associated activity of waste water treatment (reverse osmosis plant); f. Associated activity of biogas production, handling and utilisation g. General maintenance	3. Noted – Form B updated accordingly.	Noted	

		and repairs: Maintenance and repair/s on equipment and/or machines within the installation (MRF & MTP/AD); 3. Column 1: Kindly include other activities such as boilers/engines/generators/RO plants under heading *Directly associated activities.*			
B1.2	✓	Noted.	-	-	-
B1.3	✓	Noted.	-	-	-
B1.4.1	✓	1. Section is to provide a history of the site including past site uses.	1. Noted – Annex 3 Supporting information updated	Noted.	Noted

		To this end you may wish to refer to past aerial photographs. 2. Article 22 (2) of the IED stipulates that *Where the activity involves the use, production or release of relevant hazardous substances and having regard to the possibility of soil and groundwater contamination at the site of the installation, the operator shall prepare and submit to the competent authority a baseline report before starting operation of an*	accordingly. Further to this an aerial photograph dated 1998 has been included as part of Waste Serv's submission. 2. A consultant to conduct this risk assessment has been engaged. Report shall be submitted by XXX.	Kindly see separate review to be provided later.	

		installation or before a permit for an installation is updated for the first time after 7 January 2013. Hence a risk assessment is required to be submitted in line with the *Interim guidance document on land and groundwater baseline reports* (inserted as Annex II). A baseline report with land and groundwater monitoring may be required, as determined by the conclusions of the risk assessment report.			

B1.4.2	✓	Noted.	-	-	-
B1.4.3	✓	Noted. The block plan of both sites shall clearly label all activities and structures mentioned in section B2.2.1 et. seq, including the different tanks, emission sources, abatement, etc.	Noted – Reference is made to revised drawings including labels of activities and structures submitted: - VBL-MT-CIV-ARC-DWG-0006 - MTP Layout for IPPC - VBL-AD-CIV-ARC-DWG-0008 - AD Layout for IPPC	Noted.	Noted.
B2.1	✓	Noted. Kindly advise the expected timeframes for ISO14001 implementation.	The planning, development and implementation of ISO14001 shall start 6 months from the operation of the facility.	Noted.	Noted.
B2.2.1	✓	Use of fast roller doors for	Fast roller doors will be used	Noted.	Noted.

		entrance is to be specified. It is unclear where the bales will be stored and whether this shall be a fully enclosed shed. It is unclear how connection between MBT and AD is made. Shall pipework be used and if so, kindly provide details and location on plan. Kindly advise the type of mixer that shall be used in the digestion tank, i.e. whether it shall be supported at the bottom to prevent damage. Safety valve mechanicsm is to	for entrances to MT Reception Hall (for BW and MSW admission) and in AD Manure Reception Hall (for Manure admission). Bales of paper/cardboard, plastics and RDF will be wrapped and stored outdoors. Kindly refer to "List of Relevant Details – IPPC" and "VBL-MT-CIV-ARC-DWG-0006 – MTP General Layout Plan – Relevant Locations for IPPC Application" also in Annex 4, reference OD1 (Documents in Annex 4). The connection between	Noted.	

		be discussed in more detail including the gauges used and pressure limits. Technical details of RO are to be provided. Technical details re exhaust air filtering system to be provided.	MBT and AD will be via pipework. See location in Drawing "VBL-GE-CIV-ARC-DWG-0003", included in Annex 4. Details: • Approx. 600 m long • 3 pipes: 1 line for sludge – 150 mm diameter and 2 lines for process water – 100 mm diameter The suspension inside the digesters will be mixed by means of gas lances which will provide a proper circulation inside the tanks.	Noted.	

			The lances will be fixed to the bottom of the tanks. Protego pressure relief security valves, for proper ATEX environment, will be used in Digesters and Suspension Buffer tanks. Specific model not yet defined; if necessary it can be indicated in a later stage. Pressure limits foreseen: - Underpressure: - 5 mbar - Overpressure: 40 mbar Reverse Osmosis (RO) will	Noted.	

			not be used in this project. With regards to the air filtering system, we will use nutrients on both biofilters. The nutrients are used to feed the bacteria's inside the biomass, once the air comes from the scrubber with a percentage of sulfuric acid, please see the attached documents “Biofilter” and “Desulphurisation process fertiliser”. Both documents are found in Annex 3.	Noted. Page 36 and 45 of Annexe 3 indicates this will be used in conjunction wit the WWTP . Sections to be clarified/ amended accordingly. Noted. Regarding transport of solid manure, will this be carried out through	Annex 3 – Supporting information updated. Transport of manure shall not be carried out by WSM. Information on the source of manure will be

				vehicles provided by WSM? If not, kindly advise the measures to be taken to ensure the source of manure (cow/ poultry vs sheep/ goat/ horse, etc) and that this is not mixed with human waste.	requested at the weighbridge. Carrier will be asked to specify the type of the manure and the source from where it is produced. It may be the case, that the manure is analysed prior to acceptance, however through time, the company intends to form a database of manure producers which will be considered as repetitive clients and therefore analysis is not deemed to be necessary.
				In view that poultry manure (in particular waste originating from layers) is considered a semisolid, albeit it cannot be transported by bowser,	Discharge of the poultry manure will be directly into the dosing buffer.

				kindly advise the measures inside the reception hall for physical containment of manure. Kindly advise as regards to the management of liquid which settles from solid manure being stored in the reception hall. A system of collection is to be provided. Regarding liquid manure reception, will this be carried out through vehicles provided by WSM.	The solid manure will be discharged directly into the dosing bunker in the manure hall. From there it is dosed into the mixing tank. Liquids on the floor go to a drainage system which ends in the liquid manure buffer. Transport of manure shall not be carried out by WSM. Information on the source of manure will be requested at the

				If not, kindly advise the measures to be taken to ensure the source of manure (cow vs pig/ human) Kindly advise whether prior to the liquid manure input, the bowser operator or producer of manure shall be made to process the liquid slurry, such as through maceration or use of separator.	weighbridge. Carrier will be asked to specify the type of the manure and the source from where it is produced. It may be the case, that the manure is analysed prior to acceptance, however through time, the company intends to form a database of manure producers which will be considered as repetitive clients and therefore analysis is not deemed to be necessary. The bowser operator or the producer of manure does not need to pre-treat the manure prior to the liquid manure input at the plant.

				Kindly advise whether the facility shall also treat liquid slurry from farm cesspits. Kindly clarify why manure maturation area shall not be fitted to the process air treatment plant.	Yes The manure reception hall is connected to the air treatment system. There is no specific area for the maturation of manure since the organic sludge from manure and from MSW are mixed as they are mixed in the digesters. So, the maturation (of compost) is also done all together, in an open area, not subjected to air treatment.

B2.2.2	✓	Noted.	-	-	
B2.2.3	✓	Noted.	-	-	
B2.2.4	×	This section requires further exhaustive details as regards to the comparison with the relevant BAT conclusions listed hereunder. For ease of reference a summary table of relevant BREF conclusions has been inserted in Annex III: i. Waste Treatments Industries (Aug 2006) in particular sections 5.1, 5.2 (para. 65 to 94), and Additional Information submitted during the information exchange on Waste Treatments	Submitted BREF document revised by WasteServ.	Kindly review comments in separate document provided.	Please see update Annex III

		Industries (Oct 2005), in particular section 8; ii. Emissions from storage (July 2006); and iii. Energy Efficiency (Feb 2009). These are available at http://eippcb.jrc.ec.europa.eu/reference/			
B2.2.5	✓	Noted.	-	-	
B2.3	×	The materials and other substances proposed to be used are required to be marked on the site layout plan, including whether they are stored inside or outside. Should	Requested plans are included in Annex 4. Updated Tables 3 and 4 included in Annex 3 and missing MSDS sheets	Noted. Kindly provide details of bunding capacity vis-à-vis storage of TC 3-TC7 and F3, F4.	Updated document IPPC_G02 - List of Relevant Details _ 150128A_VR in Annex 3 – Supporting information.

		these be stored outside, the provision of security is considered important. The maximum storage capacity for each substances and the bunding capacity shall be included, including details of the bund and a calculation of volume. For each product in which a 'Product name' is included in the MSDS sheet, the corresponding name shall be included in Table 3. MSDS sheet missing for Antifoaming agent, oil CHP, Grease, Oil, Hydraulic oil, Fuel/ diesel.	included in Annex 5.		

B2.4	×	**Noted. Information to be updated in full.**	This information will be provided at a later stage.	Noted. Kindly provide.	Annex 3 Supporting information, B2.4 updated accordingly.
B2.5	✓	Noted. Information to be updated following issue of tender and as soon as available.	Provided in Annex 6 of original submission.	Noted.	Noted.
B2.6.1	×	The Figures are to read 20 and 21. Information to be updated following issue of tender and as soon as available.	Noted. See revised figures in Annex 3.	Noted.	
B2.6.2	✓	Noted.	-	-	
B2.7	×	Further details are required as regards to utilisation of freshwater, which should be broken down in terms of sources and end-use, including any washings. Should accurate data not be available, estimates are considered sufficient.	Refer to file Process Description in Annex 7.	Noted.	Noted

		All infrastructural elements (e.g. different reservoirs) are to be cross referred to the layout plan.			
B2.8	×	Details regarding fire are noted. Further information are requires as regards to: (a) plans for action to be taken in case of failure of abatement equipment; and (b) plans for actions/ procedures to be taken to stop the plant in case of other environmentally relevant incidents (e.g.	The failure of abatement equipment is mitigated as indicated in B3.6. In case of relevant environmental incidents in respect of spillages or gas leakages, the respective cut-off valves shall be closed. Plant stop, partial or total will depend of the place of the incident. Details to be indicated in O&M Manuals which shall be provided at a later stage.	Noted.	

		spillages and gas leakages)			
B2.9	×	1. A training programme on environmental and waste management issues, including the environmental permit and any ongoing improvements is to be included; 2. The TCP for the training shall be identified.	Noted. Section amended accordingly. TCP has not yet been identified.	Noted.	
B2.10	✓	Details noted.	-	-	
B 3.1.1	×	Noted 1. Kindly advise whether collection and sorting of 20 03 01 and 20 03 07 would also result in the following wastes,	- Tables 8, 9A, 9B and 10 were revised as per the foreseen separation and are included in Supporting Information in	Noted.	

		and the fate of such waste 2. Output figures in Table 8 are short by 4000. Kindly advise; 3. Table 9 does not include an input EWC code.	Annex 3. Table 11 is not applicable.		

EWC Code	Description
19 12 04	plastic and rubber
19 12 01	paper and cardboa
19 12 05	Glass
19 12 06*	wood containing d
19 12 11*	other wastes (inclu mechanical treatm dangerous substar
19 12 07	wood other than t

B3.1.2	×	The bunding capacity for each of the hazardous liquid waste collection areas as a % of the material stored within each bund shall be provided. Note that such wastes are required to have bunding which meets the greater of the following: - 110% of the capacity of the largest container within the bunded area - 25% of the total volume of substance which could be	Calculation of bunding capacity of hazardous liquid waste collection, in digesters pit, is included in Annex 3, and fulfills the minimum capacity requirements. Additional protective and security measures: • Digesters pit has a sloping floor to direct the flow of rain water towards open channel gutters located at the North and South walls;	Noted	

		stored within the bunded area. More details on protective measures including security measures are required to be submitted.	• These gutters will channel the liquids to a pump sump which shall deliver the liquid into the 3rd chamber of the AD 2nd class reservoir; • The sump pump will be manually operated to ensure that no contaminants are delivered to 2nd class water system; • In case of contamination (e.g. spillage), the pump shall not be started and the liquid shall be removed by mobile equipment		

			for further treatment.		
B3.1.3	✓	Kindly clarify references to Tables 8 to 12.	References have been removed as no details were found related to these tables.	Annexe 3 supporting documentation has not been amended	Annex 3 Supporting information, B3.1.3 updated accordingly.
B 3.2	✓	Noted.	-	-	
B 3.3.1	✓	Noted.	-	-	
B 3.3.2	✓	Noted. As regards to plans in Annexe 4 the following is being noted and clarification is required, also to be reflected on plan; 1. The sources of foul water drainage are unclear and hence each	These details are identified in drawings, included in Annex 4: • VBL-MT-CIV-TDT-DWG-0004 – MTP foul water drainage • VBL-AD-CIV-TDT-DWG-0004 – AD foul	Noted.	

		source needs to be described and pointed out clearly (ablution facilities, showers, etc); 2. The destination of the foul water drainage is unclear (i.e. location of cesspit/s) and needs to be clarified on plan; 3. The management process of the surface water from asphalt areas' is required to be clarified including the conditions and reasons upon which the water from reservoirs may be emptied by bowser and the final destination of this water. This includes any treatment of the	water drainage Surface rain water from asphalt areas will be collected through a series of culverts channeling the water to an oil/sand separator prior to its collection in the reservoirs. Conditions and reasons upon which the water from reservoirs may be emptied by bowser: • Tank repair ➔ water transferred to other sections (separated section of tanks); • Surface		

		said water prior to its collection such as oil water interceptor. 4. If applicable, the location of the process water tank and whether any process effluent is discharged to cesspit/sewer; 5. The source of water reservoir for fire fighting.	contamination ➔ water transported for further treatment accordingly with the contamination needs. These details are identified in drawings, included in Annex 4: • VBL-AD-CIV-TDT-DWG-0001- AD Underground services • VBL-MT-CIV-TDT-DWG-0001 - MTP Underground Services		

			The only process effluent is produced by WWTP. This effluent will not be discharged to cesspit/sewer but a connection point will be provided for the operator to transport and dispose accordingly. The source of water reservoir for fire fighting can be found in thedrawing "VBL-MT-CIV-ARC-DWG-0006 - MTP Layout for IPPC", labeled OD4, in Annex 4.		
B 3.3.3	✓	3. In view that there will be no connection to the sewer,	Sewer discharge permit will be required. WasteServ has	Noted	

		kindly confirm whether Sewer Discharge Permit is required or otherwise.	started talks with WSC regarding this subject.		
B 3.3.4	✓	Noted.	-	n/a	
B3.4	✓	Noted.	-	n/a	
B3.5	×	See comments on section B 3.3.1. Drainage map is pending.	Drawings included in Annex 4	Noted	
B3.6	×	1. A block plan which indicates all the emission points on site is requited, including the RTO. 2. Technical specifications of equipment resulting in emissions to atmosphere are required to be	Emission points referred to in drawings in Annex 4: - ***VBL-AD-CIV-ARC-DWG-0008 - AD Layout for IPPC*** - ***VBL-MT-CIV-ARC-DWG-0006 - MTP Layout*** RTO will not be used in this	Section 3.6 Page 83 of Annex 3 to be updated.	Characterization of the emissions of points PS1-PS5 updated in List of Relevant Details (identical of the information existing for the boiler – PS6) in Annex 3.

		submitted, including the expected emission content and rate. Conditions upon which emissions will occur and whether these are continuous or episodic are to be clarified; 3. Kindly note that Para 11.95 of the EIA coordinated assessment states that 'Full details of the mitigation measures that will be employed to contain odours are presented in the application for an IPPC permit (April 2011) and are not reproduced here […]' Clarification is required whether the	project. Technical specifications of equipment resulting in emissions can be found in Annex 3. . In the areas where the odour production is higher, the air will be treated in a system of biofilters being the odour contention assured inside these areas (Reception Hall of MSW, BW and Manure) by fast roller doors and air curtains. Additionally,		

		proposed further mitigation measures are inserted in the IPPC application as no reference could be found; 4. Clarification is also required whether the modelling results (such as reproduced in Table 11.10 of the EIA coordinated report are being taken on board.	located extractions in the most critical equipments, namely, for example, the Pulpers, GRS, sieve drum, bunker, etc to reduce the dispersion of odor in these areas. In order to reduce the impact of any failure in the deodorizing system two separate systems are used composed of several independent circuits for extraction (piping, ventilation) allowing separate maintenance without resource to system shutdown.		

			For design proposes the following odour guarantees were considered, namely: Odour at biofilter outlet < 500 OUe/m3 (hourly average) Dust at biofilter outlet < 10 mg/m3 (hourly average)		
B3.7	✗	As above.	As above.	As above	Areas of the plant, in which there is a malodorous process air, are designed to have an air collection system to remove that air by means of suction and treat it in scruber-biofilter systems.
B3.8	✓	Noted.	-	-	

B3.9	✓	Noted.	-	-	
B 3.9.4	×	Noted. Information to be updated, also considering the existing monitoring, the requirements of the EIS. This also to consider the experience gained through the Sant' Antnin Waste Treatment Plant.	WasteServ proposes that once the plant is in operation, the noise monitoring programme currently being implemented for the Ghallis and the Zwejra non-hazardous landfills are reconsidered in view of the new MTP and AD plant and taking into consideration the requirements as per the EIS and the experience gained through Sant'Antnin Waste Treatment Plant.	Kindly advise how an integrated monitoring programme will be in place. Details of the full programme to be provided.	It is WasteServ's plan to engage consultants to: - Consider the already existing data gathered for the close proximity sites (Zwejra and Ghallis). This data will provide a baseline assessment prior to the operation of the Malta North Waste Treatment Plant. - Consider the sensitive receptors at the vicinity of the new plant – including AD and MTP. - Consider the effluents, emissions and other potential pollution generated from the operation of the plant – including the AD and the MTP. - Consider the experience gained through the operation of the Sant'Antnin

					Waste Treatment Plant. - Determine the monitoring requirements for: o Air quality monitoring (both offsite and onsite) o Stacks monitoring o Waste water, ground water, surface water o Soil and agricultural products o Coastal water and coastal sediments o Noise o Odour At this point WasteServ cannot submit a full programme for monitoring since the plant is not yet operational. Ideally the programme is compiled after some months the plant is operational so as to base the programme on

					facts.
B3.10	×	Noted. Information to be updated, also considering the existing monitoring, the requirements of the EIS. This also to consider the experience gained through the Sant' Antnin Waste Treatment Plant.	WasteServ proposes that once the plant is in operation, the monitoring programme currently being implemented for the Ghallis and the Zwejra non-hazardous landfills are reconsidered in view of the new MTP and AD plant and taking into consideration the requirements as per the EIS and the experience gained through Sant'Antnin Waste Treatment Plant.	As above.	As above.
B3.11	✓	Noted.	-	-	
B4.1	✓	Noted.	-	-	
B4.2	×	Noted. The EIS does not provide an assessment of impacts between the different IPPC	-	-	

		sites in question.			
B5.1	✓	Noted.	-	-	
B6.1	✓	Noted.	-	-	
B6.2	×	In view that the MBT-AD plant forms part of the operations of the larger Ghallis complex, it is considered that the operations of this new activity may affect the activities of the sites within this site. In this respect, this section shall include the names and relevant IP/ EP numbers for these sites. Noted.	Updated supporting information in Annex 3.	Noted.	
B6.3	✓	Noted.	-	-	
B7.1	×	Noted.	-	-	
B8.1	×	Noted. Information to be updated following issue design	WasteServ is still to engage a technically competent	Noted. This information needs to be submitted	Noted.

		and build contract and as soon as available.	person and team to operate the plant. Contractor will assist in the management of the facility.	prior to issue of permit.	
B8.2	×	Noted. Information to be updated following issue design and build contract and as soon as available.	WasteServ is still to engage a technically competent person and team to operate the plant. Contractor will assist in the management of the facility.	Noted. This information needs to be submitted prior to issue of permit.	Noted.
B8.3	×	Noted. Information to be updated following issue design and build contract and as soon as available.	WasteServ is still to engage a technically competent person and team to operate the plant. Contractor will assist in the management of the facility.	Noted. This information needs to be submitted prior to issue of permit.v	Noted.
B9.1	×	Noted. Information to be updated following issue design and build contract and as soon as available.	Updated supporting information in Annex 3.	Noted.	Noted.

B10	✓	Noted.	-	-	

Section	Environmental Health Directorate Comments dated 9th December 2013	Applicant's response
n/a	Regarding IPPC application for operation of anaerobic waste digester and biogas plant, please note that during operation all mitigation measures highlighted in documents forwarded especially regarding emissions to air and odour and health and safety/risks are to be strictly implemented. Noise and vibration impacts during transportation of waste to site should also be taken into consideration and mitigation measures implemented if necessary. It is also highly recommended that an on-line monitoring system of operations especially regarding air monitoring is implemented. Cesspit is to be duly registered with the Superintendent of Public	Noted

	Health. Reservoir water is not to be used for human consumption or for personal use. Conditions relating to issues of concern to human health and well being should be included in the IPPC permit.	

Section	MRA Comments dated 10th January 2014	Applicant's response
n/a	Climate change unit would prefer that the Waste treatment plant is in a position to provide an inputs/outputs report which contains: Total waste input by EWC, · Amount Intermediate products transferred from one process to the next, · Amount of CH4 generated and flared, · Amount of energy produced by plant. · Outputs of the plant and their faith	Noted.

	Energy: CHP related comments As long as the CHP being mentioned is the one already existing and licensed, there is nothing to comment, otherwise it will be suggested to apply for the authorisation to construct the CHP generation station, after getting MEPA (Planning) approval and Enemalta's No objection letter.	Noted.
	Energy: Fuel related Comments The text for Malta North IPPC application Oct 2013, mentions oils and fuels particularly fuel/diesel for mobile equipment. It is of extreme importance that the operator should only use diesel EN 590 for all mobile equipment, even if these are used exclusively on the Malta North site only. This should preferably be clearly documented. Hereby the operator should store any oils and fuels according to the recommendation by a competent person under LN 53/2010. The list of competent persons is attached and the operator should submit an application for the authorization (or notification) to	Noted.

	store liquid fuels on site. Please see application form which is also attached.	
	Water related Comments The Authority has no further comments regarding groundwater issues, however it was noted that there was drilling of two boreholes for a geotechnical investigation without MRA's permission. This matter will be taken up with the subcontractor	Noted.