



TN 160087

DEMOLITION OF EXISTING STRUCTURES AND CONSTRUCTION OF FUEL FILLING DEPOT INCLUDING ANCILLARY OFFICES, FACILITIES AND WIDENING OF ACCESS ROAD, AT ĦAS-SAPTAN, OFF VJAL L-AVJAZZJONI, ĦAS-SAPTAN, GĦAXAQ

**ADDENDUM TO
ENVIRONMENTAL PLANNING STATEMENT**



Version 1: November 2016



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**Demolition of Existing Structures and Construction of Fuel Filling Depot including Ancillary Offices, Facilities and Widening of Access Road, at Has-Saptan, off Vjal I-Avjazzjoni, Has-Saptan, Għaxaq (TN 160087)
Addendum to Environmental Planning Statement
November 2016**

Report for: **Enemed Co Ltd**

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Rev	Date	Details	Written by:	Checked by:	Approved by:
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Comments on the 1st draft of the Environmental Planning Statement (EPS)

20 September 2016

PA03607/16 [EA 00003/16] - Demolition of existing structures and construction of fuel filling depot including ancillary offices, facilities and widening of access road. Site at Has-Saptan, off Vjal I-Avjazzoni, Has-Saptan, Għaxaq, Malta

I. ERA Comments

Coordinated Assessment

No.	Page	Para.	ERA Comment	Response from EIA Coordinator	ERA Response	Response from EIA Coordinator	ERA Response	Response from EIA Coordinator
<i>Detailed comments</i>								
1	/	General	The EPS is to outline whether the developer is planning for any extensions or further development in the near future to the proposed development. Given that the surrounding land is undeveloped, further development will be of concern to ERA.	The Applicant has advised that there are no plans for future expansion.	Noted.	No further comments.	/	/
2	/	General	Further information and plans on the	The Applicant has advised that no	Updated site plan showing the	The only available plan	Kindly confirm that by “currently not in use” the	The Applicant confirms that the

			<p>associated processes occurring at Marsaxlokk Reclamation Area and the Gudja Filling station is required. This is to include but not be limited to: storage of raw material at these installations, un/loading of fuel, the pipework linking them to Has Saptan site any past decommissioning work/dates and future plans.</p>	<p>unloading or loading of fuel takes place at Gudja or Marsaxlokk reclamation area. There is also no storage of fuel. The dewatering system leads to Marsaxlokk reclamation area in the water separator whereby any oils are then pumped back through the 'black' pipeline to Has-Saptan.</p>	<p>connections (e.g. pipelines, galleries etc.) with these sites are still to be submitted.</p>	<p>for the Gudja Filling Point is included in Appendix I.</p> <p>The Applicant points out that this filling point is currently not in use. The Applicant also confirms that the Marsaxlokk polishing plant will be upgraded to handle existing and proposed discharges from Has-Saptan. There will be no discharges of water into the valley at Has-Saptan.</p>	<p>reply means that the Gudja site is in no way going to be operationally linked to the proposed development.</p> <p>In view that potentially contaminated effluent from the proposed Has-Saptan site shall be discharged through the Marsaxlokk polishing plant, applicant is required to confirm that any such oil-water interceptor shall be designed and certifiable to EN 858.</p>	<p>Gudja site is in no way going to be operationally linked to the proposed development.</p> <p>The Applicant further confirms that the oil-water interceptor at the Marsaxlokk polishing plant shall be designed and certifiable to EN 858.</p>
3	/	General	<p>Indicate whether refuelling of vehicles for own-use shall take place on site, in which case an engineer's report cleared by the Regulator for Energy and Water Services</p>	<p>The Applicant advises that currently it is not planned that refuelling of own vehicles will take place on site. This can be done at any</p>	<p>Noted.</p>	<p>No further comments.</p>	/	/

			(REWS) showing how these are/shall be constructed and operated in accordance to the relevant requirements is required.	petrol station in Malta.				
4	/	Changes in plans	<p>Drawings 008B and 009B (page 39 and 41) are to be updated to indicate how each day-tank will be individually banded in line with the engineer's report in the REWS clearance and Drawing 6A of the Risk Assessment Report.</p> <p>Updated plans showing the location of the calibrating tank referred to in item no. 3.26 of the Master EPS document. Such a tank needs to be provided with impermeable bunding of a capacity equal to or greater 110% the total capacity of such tank.</p>	<p>See Annex I for updated plans.</p> <p>The calibrating tank is a tank on wheels which is taken to the road-tanker filling area when calibrating the meters. The tank is immediately emptied into the day tanks before being returned to its store. Additionally, it is noted that the entire Scheme site will be linked to oil-water interceptors.</p> <p>See updated plans in Annex I.</p>	<p>Noted</p> <p>Noted.</p> <p>Noted</p>	No further comments.	/	/

			<p>Updated plans and sections showing the location of the proposed cesspit and how this shall:</p> <ul style="list-style-type: none"> (i) be appropriately ventilated so as to avoid the accumulation of explosive, toxic or corrosive gasses; (ii) have the surface area surrounding the cesspit-manhole rendered impermeable and the ground laid to fall towards the cesspit. 					
5	11	3.7	<p>The EIA Coordinator is to confirm that there will be no increase in the present fuel storage at Has-Saptan. Additionally, what will be the use of the remaining unutilized fuel storage at Has-Saptan?</p>	<p>The EIA Coordinator can only obtain such information from the Applicant. The Applicant advises that no increase in storage at Has-Saptan will happen. There is no unutilized fuel storage space (the</p>	Noted.	No further comments.	/	/

				remaining storage space will continue to be rented out to third parties).				
6	11	3.7	What will transpire of the third parties currently making use of the Has Saptan site? Is it expected that they will seek an alternative site?	The Applicant advises that the third parties currently making use of Has-Saptan site (proposed site) have already applied for an alternative site allocation.	Noted. However kindly note that ERA is concerned that the EIA does not take into consideration the alternative site allocation for the third parties given that an indirect impact may arise from current application.	It is clarified that third parties who currently Has-Saptan storage facilities, will no longer be allowed to do so and will thus need to seek alternative locations for fuel storage both locally and abroad. The Applicant advises that the amount of third party fuel that will no longer be stored at Has-Saptan is not sufficient to warrant the construction of another storage facility in Malta.	Noted.	/
7	12	3.8	ERA is concerned	ERA's concerns	Noted. However	No further	/	/

			<p>with the various possibilities for the afteruse of the 31st March 1979 installation site following its decommissioning. This is in light that an undeveloped tract of land at Fhas Saptan will be industrialised to make space for the newly proposed fuel filling depot and therefore a justification indicating potential future use of the 31st March 1979 site is to be provided.</p>	<p>noted. However, in terms of this the EPS Appendix I contains a letter from Enemalta that confirms that the site will not be used for fuel handling activities. Future potential use for 31st March installation will be detailed in the relevant planning process for the site.</p>	<p>kindly note that ERA is concerned that the EIA does not take into consideration the use for 31st March installation site given that an indirect impact may arise from current application.</p>	<p>comments since the EIA cannot assess impacts of another site especially since the application of the other site is still being processed and no definitive land use has been proposed.</p>		
8	12	3.8	<p>The EPS states that the decommissioning will improve the visual amenity and air quality in the Birżebbuġia area. The EIA Coordinator is to identify what air quality impacts are arising from the existing plant and if such impacts will still result from the proposed fuelling</p>	<p>In terms of air quality, currently at the 31st March installation there is no vapour recovery at the loading gantry. At Fhas-Saptan there will be full vapour recovery at all stages, as described in Chapter 3 of the EPS. Air quality impacts from the proposed Scheme at</p>	<p>Noted. Noted.</p>	<p>No further comments.</p>	/	/

			<p>station.</p> <p>The EIA must also identify how the proposal will improve the Birżebbuġia residential area. Additionally, as stated above, the after use of the 31st March 1979 installation site is to be identified to support the statement that there will be an improvement in the visual amenity.</p>	<p>Has-Saptan are assessed in Chapter 10 of the EPS.</p> <p>Appendix I of the EPS states that site will no longer be used as a fuel storage facility. Since the site will not be used for fuel storage, the tanks will be dismantled, thereby improving the visual amenity. Any subsequent development earmarked for the 31st March Installation would necessarily undergo planning permission for its redevelopment and visual impacts would be considered under this process.</p>				
9	49 – 50	3.40 – 3.47	A summary table is to be provided for ease of reference	See Annex 2.	Noted.	No further comments.	/	/

			indicating all proposed sites together with their advantages and disadvantages.					
9	49 – 50	3.40 – 3.47	Kindly confirm whether the sites considered as alternatives are exhaustive.	The Applicant advises that consideration has been given to the sites that could be technically feasible for them to operate from. The Applicant points out that the truck loading facility must be near a fuel storage facility and connected to the Port of entry of vessels carrying fuels to Malta. Has-Saptan was chosen among the various alternatives as described in the EPS (Chapter 3) as it is close to a fuel storage depot that is already connected to the Marsaxlokk harbour.	Noted.	No further comments.	/	/
11	49	3.40	What kind of	The environmental	Noted.	No further	/	/

			environmental and risk motives are being identified in the 'do nothing' option?	risks refer to the fact that the current installation is located in very close proximity to a residential area.		comments.		
12	5, 49 – 52, & 133	Alternatives. 3.40 – 3.52	The EPS identifies a number of alternative sites and designs. However, ERA is enquiring about the possibility that the obliteration of the managed woodland is avoided as much as possible and the project is shifted upon the agricultural parcel of land situated to the west of the site in Holding No. 4 (pg. 133).	The Applicant advises that the Western part of Fias-Saptan is not land that belongs to the Applicant.	Noted.	No further comments.	/	/
13	61 & 79	3.86, 4.30	With regards to the petrol storage and loading installation, applicant is to submit an updated report by a competent person in primary-fuel storage installations showing that the installation will be	In Annex 3 below is the latest report for an independent engineer on the VRU.	Report in Annex 3 is being noted. Competent person is still to indicate that the proposed system shall be of suitable capacity to handle also emissions from the existing	The engineer's report is found in Appendix 2 . It is also noted that these issues will be further addressed in the Environmental	Kindly note that the engineer's report does not make reference to the VRU system's connection and associated with the existing underground fuel storage installation. Should both the existing and the proposed	Please see Appendix 4 . The Applicant confirms that, as stated in the suppliers letter, there is no requirement to upgrade the VRU.

		<p>compliant to Schedules IV, V, VI) and VIII of LN 228 of 2016 with regards to vapour recovery covering the existing and proposed installation. Such declaration shall cover the tank design and indicate that the proposed system shall be of suitable capacity to handle emissions from both the existing storage and the proposed refuelling installation. When these requirements are not currently achieved, the applicant shall submit a binding plan with timeframes by when such improvements shall be made.</p> <p>(Although the underground storage system does not fall within the scope of this development application, connection to the</p>	<p>underground storage installation (apart from the proposed tanker filling area). When these requirements are not currently achieved, the applicant is being requested to submit a binding plan with timeframes by when such improvements shall be made.</p>	<p>Permit.</p>	<p>installations be connected to the same VRU system, the engineer's report is to be updated to indicate that the proposed system shall be of suitable capacity to handle also emissions from the existing underground storage installation (apart from the proposed tanker filling area). When these requirements are not currently achieved, the applicant is being requested to submit a binding plan with timeframes by when such improvements shall be made.</p>	
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			vapour recovery unit will be an operational requirement. In view that the VRU is being designed and installed as part of this development application, submitted documentation must however show that these are also connected).					
14	141 & 163	Table 6.1 and 7.2	Minor to Major significance of residual impact for accidental spills and disturbance/damage to habitat during operation cannot be viewed as acceptable by ERA. Such significance of impact is to be more critical and not too broad. It is being suggested that either the worst case scenario is provided or the impacts on such criteria are further subdivided (the minor and the major one).	Following from the risk assessment, risks from spills of fuels are classified as low therefore in this scenario most spills would be of a minor nature in terms of significance of impacts for both ecology and agriculture. An impact would be major only in a very worst case scenario where a spill results in fuel reaching agricultural or ecological areas. The impact is unlikely in such a scenario	Noted. However kindly refrain from using broad significance of impacts and already suggested; either the worst case scenario is provided or the impacts on such criteria are further subdivided (the minor and the major one).	Noted.	/	/

				because of the numerous mitigation measures that are in place in the design of the installation and also noting the findings of the risk assessment.				
15	5.0	Geo-Environment	In view of the site's history and current activities on site, kindly confirm whether there may be issues related to any chemical contamination on land and groundwater.	Impacts on hydrology are summarized in Table 5.1 and in paragraphs 5.44 to 5.51.	In order to substantiate the proposal in the outline decommissioning plan in page 69 of the Master EPS document and in view of the site's history, a baseline survey is required to assess contamination in the site and surrounding areas. The baseline survey is to be prepared by experts in the field and include land and groundwater investigations that assess the current extent, level and significance of contamination,	Given the nature of the site (predominantly agricultural and an olive grove) and also noting that this requirement was never in the scope of the EIA, the Applicant has agreed to submit a draft Method Statement (see Appendix 3) wherein the Applicant commits to undertake such monitoring as part of the eventual environmental	Draft method statement is hereby being noted. A full method statement which includes a layout plan with the actual proposed sampling locations (considering the location of the various proposed activities on site) will be required as part of the Environmental Permit application prior to the issue of the executable version of the development permit application. This is to be in line with the Terms of Reference for Land and groundwater investigations issued by the Authority (attached).	Noted and agreed.

					<p>taking into account past history and current activities. The method statement for said survey is to be submitted to ERA for review prior to the start of any investigations.</p> <p>The baseline survey will define the current status of land and groundwater and provide a basis for interim remediation and monitoring measures that may be required over the long term. This will feed into the outline decommissioning plan that will be required as part of the EP.</p>	<p>permitting process.</p>		
16	137 – 138	Loss of Protected Trees	Kindly indicate the number of carob (<i>Ceratonia siliqua</i>)	The number of carob trees to be transplanted is 10.	Noted. However should any of the transplanted trees	Noted. The Applicant is committed to	/	/

	6.29 – 6.30 & 6.34	<p>trees that will be removed / transplanted. The transplantability of carob trees has a very low success rate and is thus not recommended. Transplanting of Olive trees has a much better success rate and is thus acceptable. Additionally, should any of the transplanted trees not be successful, these are to be compensated as per LN 200 of 2011 (Trees and Woodlands Protection Regulations) with a compensation of 40 indigenous trees. These interventions are to be substantiated through the submission of a detailed method statement indicating the transplanting methodology that will</p>	<p>Impact of tree removal is noted as major. The Applicant intends to plant an estimated 280 trees.</p>	<p>not be successful, these are to be compensated as per LN 200 of 2011 (Trees and Woodlands Protection Regulations) with a compensation of 40 indigenous trees.</p>	<p>compensate with the required amount of indigenous trees.</p>		
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			be adopted.					
17	149	7.13	Errata: <i>Error! Not a valid bookmark self-reference 7.2).</i> Kindly confirm reference.	Figure refers to 7.2.	Noted.	No further comments.	/	/
18	237	Table 10.10	Benzene levels (both baseline and with scheme) should be expressed to 2 significant figures. Kindly note that the change as a result of the scheme is being expressed to 5 significant figures for the purpose of illustrating the fact that the predicted increases in concentration will be very low.	Baseline benzene levels are already expressed to 2 significant figures. The change as a result of the scheme is also expressed to 2 – 3 significant figures (except at receptor 9, where use of additional figures would not be appropriate). As noted, the annual concentration with the Scheme (column 3) is expressed to 6 significant figures to illustrate the very low predicted increase in concentration.	Noted.	No further comments.	/	
19	243	10:58	What is the likelihood of the episodes in 2 giving rise to odour nuisance complaints?	This reference is not clear. However, odour impacts are assessed in Chapter	Noted.		/	/

				10 of the EPS.				
20	261	11.40	Kindly indicate the type of secondary containment for the day-tank/built in tank of the emergency generator and fire pumps including any drip-trays, floor drains, sumps and gutters.	As mentioned in paragraph 11.40, the pump room will be bunded.	Noted. All bunding is to be of a volume not less than the greater of the following: <ul style="list-style-type: none"> • 110% of the capacity of the largest tank or drum within the bunded area. • 25% of the total volume of substance which could be stored within the bunded area. All filling and off-take points shall be located within the bund.	Bunding requirements noted.	/	/
21	261	11.40	Indicate the sump capacity of each oil-water separator in relation to the catchment area these are designed to cater for (including calculations). Furthermore applicant is to provide the geo-reference	As mentioned in the EPS, the exact location and number of the separators, as well as the dimensions required, will be further defined following the award of the tender for construction of the Scheme.	Whilst it is understood that the exact separator details cannot be provided at this time, calculations of the total collective sump capacity of all separators on site	The project engineers advise that: <i>oily water from all areas (except the roof of the truck loading canopy and the administration building) shall be collected through</i>	As part of the drawings to be submitted to the Planning Authority for determination, applicant is to provide an updated site plan showing the pipeline route connected to the final discharge point at Marsaxlokk Reclamation Area. Such a plan shall need to be	Applicant confirms that such drawings will be submitted to the Planning Authority prior to commencement of works.

			<p>coordinates and site plans of all discharge points to surface waters.</p>	<p>However, the separators will be sized to cope with a flash flood, with the worst rainfall event over the previous 10 years informing this sizing</p>	<p>is to be provided. An indication of the possible discharge points to surface waters and their geo-reference coordinates is also required.</p>	<p><i>the oily water sewer system to the total collective sump which according to our preliminary estimations shall be 150 m³. The collected water shall be gradually discharged to the oil water separator that we have specified with maximum flowrate of 65 m³/h. If the collection sump is higher than the separator then a set of 2x100% submerged pumps inside the sump shall be used. The oil water separator will have water discharge to the oily water line that will be connected to the oily water lines and the collected</i></p>	<p>approved by the Planning Authority prior to the commencement of any excavation/construction works on site. Details on the separator construction standards as requested in No. 3 above are required.</p>
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						<p><i>oil from the separator will be pumped out by an approved hydrocarbon removal contractor as required.</i></p> <p><i>Any overfilling of the sump or the separator shall be discharged directly to the oily water line that will be connected to the oily water lines of Has Saptan.</i></p> <p>There will be no discharges into the Has-Saptan valley.</p>		
22	265	11.63	A clearance from the WSC (owner of nearby borehole and sewage services provider) is required.	Noted. Also note no objection from REWS below.	Clearance from the WSC is still to be submitted as part of this Development Permit application.	Noted. This is being addressed by the Applicant.	Noted.	/

2. Consultees' Comments

A. Regulator for Energy and Water Services (Email dated 02/09/2016)

Comments	Response from EIA Coordinator
REWS does not object for the above mentioned proposal.	Noted.

B. Gudja Local Council (Email dated 15/09/2016)

Comments	Response from EIA Coordinator
<p>Observations and objections raised by the Gudja Local Council</p> <ul style="list-style-type: none"> • The Has Saptan site is partly covered by policy SMGH 03, which promotes the use of the olive grove for informal recreation and does not allow the development of any built structures other than those that may support the use of the area as a recreational area, such as benches. It also requires that no lighting be installed at the Has-Saptan site. • The area is identified by MEPA as a priority area for compatible and sensitive positive interventions and activities (particularly informal recreational activities in the form of walking or cycling footpaths as well as educational initiatives) intended to upgrade and rehabilitate Areas of High Landscape Value. • Policy SMGH 07 prohibits the expansion of existing uses at the existing Has-Saptan underground fuel storage installation and encourages the relocation of such facilities elsewhere. • The site lies within an area that either entirely or partly includes the following designations: <ul style="list-style-type: none"> ○ Area of High Landscape Value (as designated through policy 	<p>Comments noted. All policies are described in Chapter 4 of the EPS.</p>

<ul style="list-style-type: none"> ○ SMCO 04); ○ Valley Protection Zone (as designated through policy SMCO 07); ○ Aquifer Protection Zone (policy SMCO 06); ○ Agricultural Area (policy SMAG 01); ○ Proposed Area of Ecological Importance (AEI) and Site of Scientific Importance (SSI) (SMCO 03); and ○ Archaeologically Sensitive Areas (policy SMCO 04). <ul style="list-style-type: none"> • Policy SMCO 07 and Policy SMCO 03 provide a presumption against development in these designated areas (Valley Protection Zone and Area of Ecological Importance/Site of Scientific Importance, respectively). • The proposal also means that a large number of trees in the eastern part of the scheme will need to be removed to make space for the construction of the loading bay and to ensure sufficient distance in case of a lightning strike. Though Enemalta pledges to transplant the uprooted trees, this is scant solace as during such exercises a large number of trees normally die. Also, the agricultural area to which the farmer operating on site will be relocated has not been specified in the PDS. The dumping of soil on garigue, steppe or other natural habitat should not be contemplated in any agricultural reclamation exercise. Any newly planted trees will always be younger and the resulting environments cannot be compared to the original. • The project will also mean that 40 refuelling road tankers will be passing daily after its completion, and 130 vehicle trips will be made monthly during its construction. This will definitely have a negative effect on residents' health and wellbeing and create noise and air pollution in an area which is currently free from such pollution. • The PDS considers the closest sensitive receptor of noise and air pollution as being 200m away but the PDS fails to consider the recreational activities within the sites. The street leads and is adjacent to a recreational area. 	<p>Impact on agriculture and impacts on trees have been classified as major in Chapter 6 of the EPS.</p> <p>The EPS clarifies that the number of road tankers is 9, which will make a maximum of 3-4 trips per day, totaling 40 trips per day. See paragraph 3.27 of Chapter 3 of the EPS.</p> <p>The Land uses are described in the EPS, Figure 3.5.</p>
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<ul style="list-style-type: none"> • The risks of fire and spillage also merit further consideration, especially given the high number of mature trees on site and the nearby La Stella Fireworks Factory. If such a project is approved, we believe the fireworks factory is to be assured in writing by the developers that it will not be affected in its manufacturing and trials in any way. • The project should NOT be exempted from further studies and the Council believes that a full Environmental Planning Statement should be carried out, especially since there is a high degree of uncertainty. In fact, in 12 of the 27 relevant issues identified by the PDS, the impact was marked as 'unclear'. The document presented is just a PDS and is not an adequate assessment and further studies should be conducted. Moreover, we believe the EIA matrix to not be completely accurate. As an example, point 26 says there is No significant effect envisaged on 'any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project', when everyone knows the area is a popular recreation zone, identified as such also by MEPA policies. • The site selection exercise is not satisfactory, as the proposed site is not an industrial site but is a rural area with agricultural, landscape, ecological and recreational value. The site is in fact used by hundreds of people each weekend for recreational purposes (camping, picnics, hiking, biking etc). The PDS notes that the proposed site may also have archaeological value, which further confirms its unsuitability. Sites that have already been excluded for valid reasons, such as Kordin or Ghar Dalam, should not be included in the site selection exercise. However the reasons for excluding the site at Beng?ajsa have not been adequately presented, and the justifications given by Enemalta for excluding the latter site are not watertight (e.g. that site is not currently possessed by applicant and that a considerable investment in pipework needs to be done so as to hook up this site with the rest of grid). If there is a need for such an investment in order to safeguard an uncommitted site, then be it. That would be a small price to pay in return of saving and protecting Has-Saptan. The Gudja, 	<p>A risk assessment is found in Chapter 11 of the EPS.</p> <p>An EPS has been prepared.</p> <p>Chapter 3 of the EPS describes the alternatives considered.</p>
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<p>Ghaxaq and Birzebbugia Local Councils in a joint letter sent to the Minister responsible for Enemalta back in July 2005 when such a project was first proposed, had also suggested Wied ix-Xoqqa as an alternative site which might be considered.</p> <p>Given the above points, the Gudja Local Council does not agree that TRK 160087 (EA 00003/16) is not likely to have significant environmental effects and believes it goes against current MEPA policies and the South Malta Local Plan, and submits these points for MEPA's consideration. MEPA should also request a full EIA study, complete with a proper site selection exercise.</p>	<p>Comment for ERA/PA.</p>
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C. Front Harsien ODZ (Email dated 16/09/2016)

Comments	Response from EIA Coordinator
<p>Front Harsien ODZ notes the submission of an Environmental Planning Statement (EPS) for the demolition of existing structures and construction of fuel filling depot including ancillary offices, facilities and widening of access road. Site at Has-Saptan, off Vjal l-Avjazzoni, Has-Saptan, Ghaxaq. Whilst welcoming the decision to remove the fuel depot from Birzebbuga, Front Harsien ODZ is objecting to the Has-Saptan proposal before a comprehensive assessment is carried out of possible alternative sites for the development in question. The assessment should be public in terms of consultation and publication.</p>	<p>Comment for PA.</p>

D. Environmental Health Directorate (Email dated 19/09/2016)

Comments	Response from EIA Coordinator
<p>With reference to your e-mail dated 17 August 2016 regarding subject indicated in caption and following review of the Environmental Planning Statement Statement , please be informed that the following impacts which may have an adverse effect on</p>	<p>Comments noted and also forwarded to Applicant. Comments with regards to potential conditions should be forwarded to the Planning Authority.</p>

public health should be taken into consideration by applicant regarding this proposed development:

Applicant is to adopt best practice methods together with good site practices and ensure compliance with Environmental Management Construction Site Regulations during the site clearance, demolition, excavation and construction phase. Moreover applicant is to implement all proposed mitigation measures so as to cause least nuisance and mitigate adverse air (from dust dispersal and emissions from vehicles and machinery), noise and vibration impacts on sensitive receptors in the Area of Influence and on the general public. Hence the importance of drawing up and implementation of a Construction Management Plan to ensure adherence to proper site management practices so as to address groundwater and surface water pollution, to mitigate other adverse construction impacts, including construction traffic impacts and to ensure safety measures. Monitoring of construction works is also highly recommended so as to ensure implementation of all necessary mitigation measures and adherence to work practices throughout all the phases of the project.

Safe and proper handling of raw materials on site should also be ensured. Adequate preventive measures are to be taken regarding the potential accidental spillage of hazardous fluids, fuel and lubricants which are also to be well managed and adequately stored.

In view that the Scheme Site is located adjacent to the Has-Saptan public borehole, to private boreholes and to the Has-Saptan valley and is within the Ground water Protection Zone and that there is a potential risk of contamination of aquifer and in change of quality of surface water run-off, it is pertinent that all proposed mitigation measures highlighted in the PDS are strictly implemented both during the construction and operation phase so as to prevent contamination of water especially water intended for human consumption. Monitoring to ensure that all mitigation measures taken by the developer are effective in preventing any possible negative impacts from this development on the underground water supplies is highly recommended.

With regards to air emissions (VOC) during the operation phase it is pertinent that

the proposed vapour recovery systems be installed in line with the relevant legislation so as to mitigate adverse impacts on sensitive receptors. Moreover, the vapour recovery systems should be maintained regularly to ensure their effectiveness in abating emissions and odours and continuous monitoring of hydrocarbon emissions should be implemented as proposed.

Adequate measures are also to be taken to ensure that surface run-off, any water used for dust control and for wheel washing be strictly managed and properly channelled and do not run off the site.

It is also pertinent that during the operation of the scheme all proposed mitigation measures are strictly implemented so as to mitigate all environmental risks especially through underground, surface and airborne pollution.

A Waste management strategy should be adopted and implemented during the site clearance/demolition/ excavation/ construction and operation phase so that all generated waste streams will be contained, separated and disposed of safely through the appropriate facilities and according to the necessary permits/licences. With regards to removal and disposal of any hazardous waste, adherence to regulatory codes and procedures and due diligence is important in view of the health and safety and any adverse impacts on sensitive receptors.

Soil removal from the site is to be in compliance with the relevant legislation and with any conditions imposed by the competent authorities.

It is recommended that construction traffic follows established specific routes and adequate site management together with other measures such as covering of all trucks leaving site with proper tarpaulin sheets are taken to mitigate adverse dust impacts and nuisances from heavy vehicles during transportation. All other mitigation measures which may be necessary to minimise nuisances and adverse health impacts from construction traffic are to be implemented.

Reservoir-harvested rain water should not be used for human consumption and/or

personal use.

The proposed cesspit is to be duly registered with the Superintendent of Public Health.

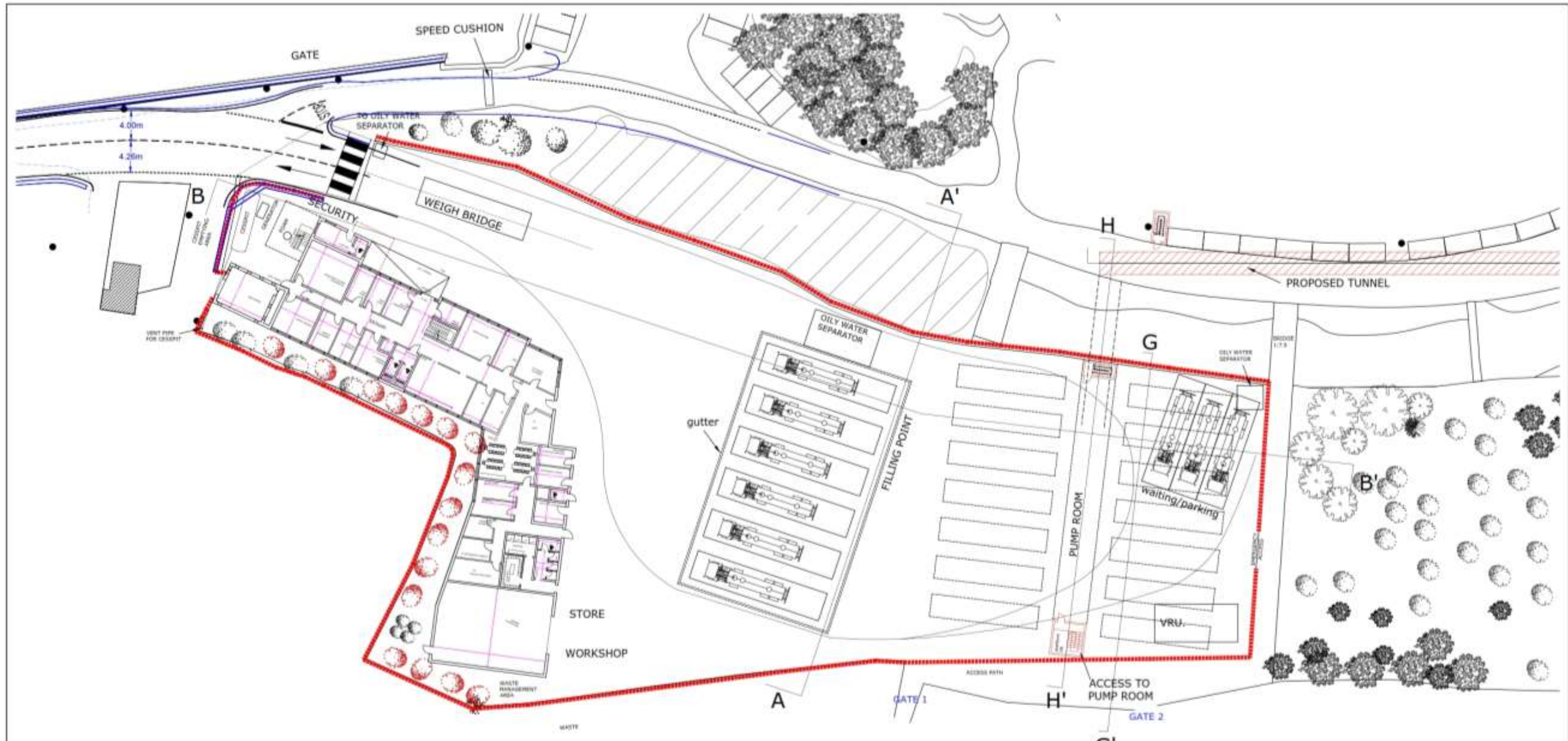
All proposed mitigation measures regarding adverse impacts arising from this development are to be implemented by applicant to mitigate any significant adverse health effects and nuisances on sensitive receptors in the Area of Influence and the general public. The possible health effects of any residual impacts that cannot be mitigated should also be taken into consideration.



Moreover any other unpredicted impacts and nuisances which may arise from this development and that may have a significant adverse effect on public health are to be immediately addressed by the applicant and the necessary mitigation measures taken.

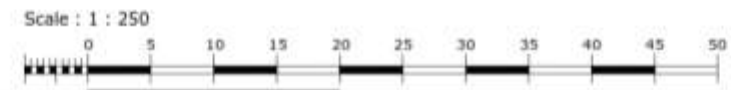
A monitoring programme for all the phases of the development and during the following years is also highly recommended.

Complaints lodged by the public regarding any adverse impacts/nuisances should be immediately addressed by the applicant. All complaints lodged and actions taken are to be recorded and such records are to be readily available to the Competent Authorities when requested.

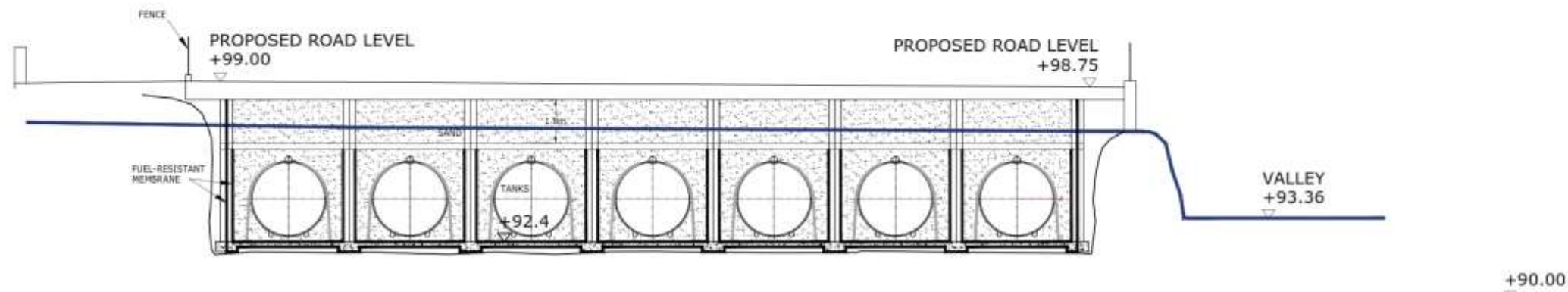
A pollution incident control plan should also be in place. Records of all pollution incidents, especially regarding potential pollution of the surrounding environment, are also to be kept and reported to the respective authorities accordingly. Regarding any future plans for Scheme decommissioning, the procedures in an approved decommissioning plan are to be followed.



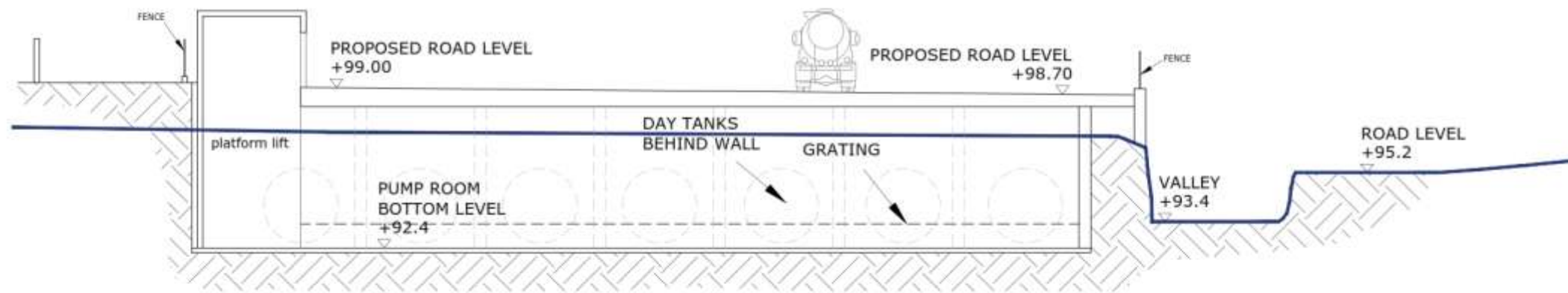
 TO CONSTRUCT
 TREES TO BE PLANTED



 ENEMED CO. LTD. HAS SAPTAN PROPOSED FILING STATION	
Scale: 1:250 @ A1 Checked by: EM Drawn by: LP	Date: 2015.01.07 Drawing No: 004 Job No: 15009

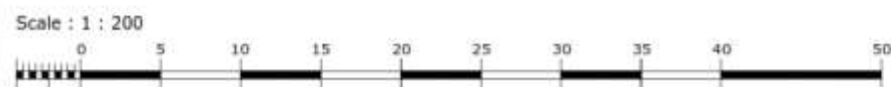


SECTION G-G'



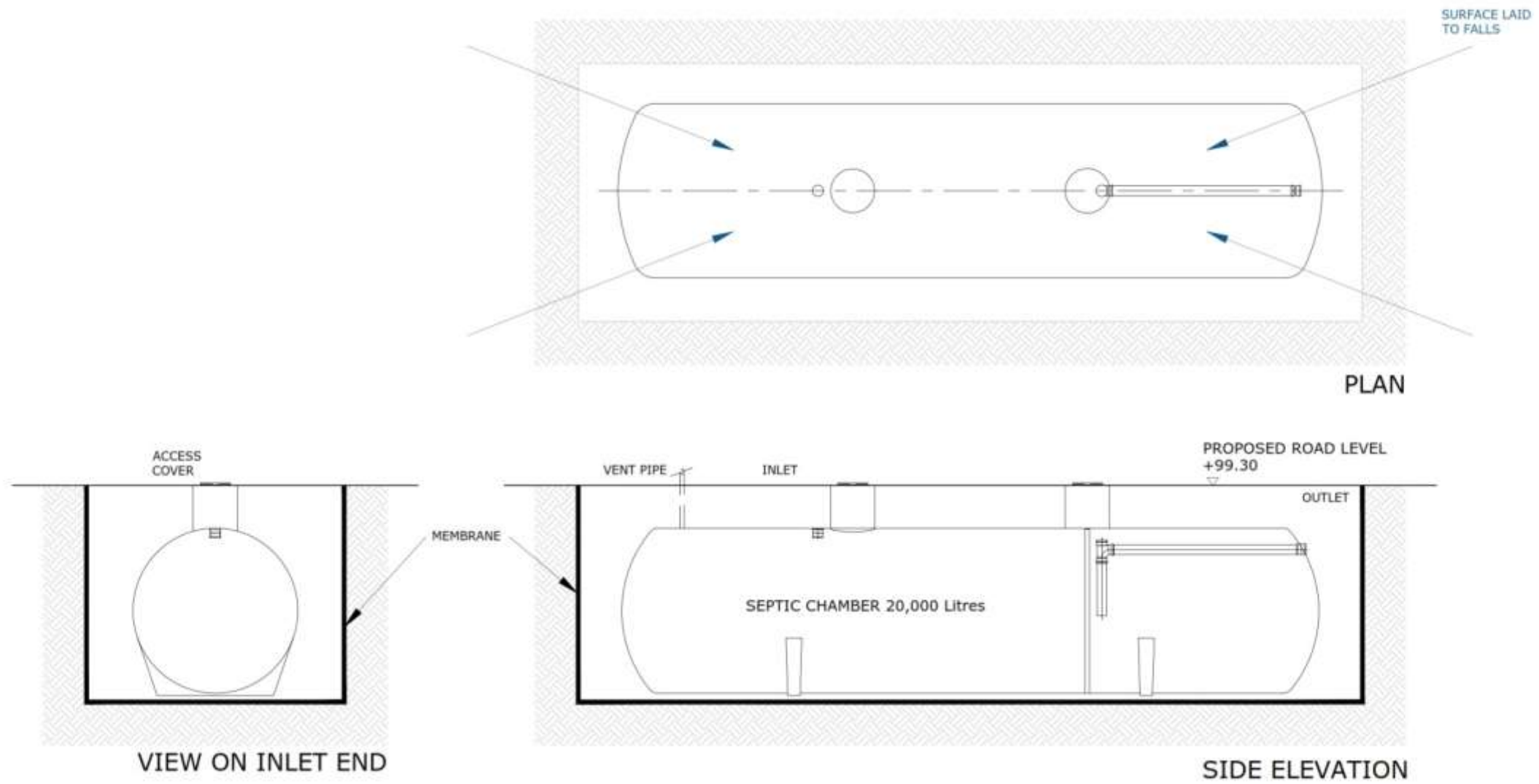
SECTION H-H'

SECTIONS THROUGH DAY TANKS



Note: Each fuel tank will be installed within a fuel tight bund and the inside surface of each bund will be lined with a fuel resistant membrane.

A	2014-02-24	Update to proposed day tanks
B	2014-02-24	Update to proposed day tanks
C	2016-09-23	Clarification re individual tanks
D		
Rev. No.	Date	Revision
 DR 200454 HEMTOPP 8504 (Denton), Ph D (Newcastle), AUSTRALIA 11/200 University Boulevard Street, Street, Victoria VIC 3122 (7463)		
Client		
ENEMED CO. LTD.		
Building		
HAS SAPTAN		
Draw Title		
DAY TANKS		
Scale	Date	
- @ A1	2015.01.07	
Checked By	EM	009 C
Drawn By	LP	



Scale : 1 : 25



1.		
2.		
3.		
4.		
5.		
Rev. No.	Date	Revision
 508, 50200th STREET WILLOW GROVE, PA 15122 412.227.7600		
Client		
ENEMED CO., LTD.		
Building		
HAS SAPTAN		
Block Title		
PROPOSED BLOCK PLAN		
Scale	1:25 @ A1	Date
		2015.03.02
Checked By	EM	Sheet No.
		014
Drawn By	LP	Cell No.
		C

Annex 2 – Summary of alternatives

As requested by ERA, a summary table of the alternatives proposed and their advantages and disadvantages has been prepared.

Site	Advantages	Disadvantages
31 st March 1979 installation ('do-nothing' option)	Site operational and close to a port.	<ul style="list-style-type: none"> • Site located within a residential area. • Government commitment to relocate the fuel storage facility.
Ras Hanzir installation at Corradino	Site operational and close to a port (only used for gasoil storage, since tankers with low flash point liquids are not permitted to enter the Grand Harbour and these fuels cannot be offloaded here).	<ul style="list-style-type: none"> • This option would have required the existing installation there to be upgraded to store gasoline and other fuels. • The construction of new pipelines for gasoline, diesel and kerosene to another site would raise the Applicant's costs significantly and potentially render the project unfeasible. • The Applicant also considered that the close proximity of residential buildings in the outskirts of Paola and the proposed expansion of the MCAST campus in Paola would shift some of the risks currently associated with the existing 31st March 1979 installation to Paola, both due to the new storage of gasoline and because of frequent road tanker movements close to these receptors. • Therefore because of the vicinity to Paola, to MCAST and to the existing factories this option was discarded by the Applicant.

Site	Advantages	Disadvantages
Wied Dalam installation at Birzebbuġa	Site currently stores Jet A1 fuel and close to a port.	<ul style="list-style-type: none"> • The site is located within a valley. • The site is designated as an Area of Archaeological Importance and a Special Area of Conservation of International Importance.
Bengħajsa	<ul style="list-style-type: none"> • Site close to a port. • The site is located some distance away from residential areas. 	<ul style="list-style-type: none"> • Land not property of the Applicant. • There are existing facilities in the area, including the Liquigas gas bottling plant and the Oiltanking Malta Ltd installation - these could increase the hazards in the area. • Locating the fuel dispensing station at Bengħajsa would also require extensive construction of new pipework to connect the dispensing station to a storage location operated by the Applicant, since the Applicant currently has no storage facilities at Bengħajsa. Additional pipelines would need to be passed to and from Ħas-Saptan (since Enemed's main storage is at Ħas-Saptan) and the Marsaxlokk Dolphin • Another alternative would be to also construct storage facilities at Bengħajsa, in which case the Scheme site would have to include land to accommodate both the storage of fuel as well as the dispensing facilities; therefore a much larger site would be required.
Has-Saptan	<ul style="list-style-type: none"> • Enough storage capacity at the existing nearby Ħas-Saptan installation so no need to construct large storage tanks or lengthy pipework. 	<ul style="list-style-type: none"> • Loss of agricultural land and protected trees. • Visual impact from limited views.

Site	Advantages	Disadvantages
	<ul style="list-style-type: none"> • Existing Has-Saptan installation is already permitted to handle gasoline. 	<ul style="list-style-type: none"> • Landscape impacts. • The site is located within a valley. • The site lies within an area that either entirely or partly includes the following designations: <ul style="list-style-type: none"> • Area of High Landscape Value; • Valley Protection Zone; • Aquifer Protection Zone; • Agricultural Area; • Proposed Area of Ecological Importance (AEI) and Site of Scientific Importance (SSI); and • Archaeologically Sensitive Areas.

Annex 3 – Engineer’s certificate for Vapour Recovery Unit



INSPECTION REPORT

Client: Enemed, Birzebbuga
Date: 30.08.2016
Equipment: Vapor Recovery Unit (VRU)

Supplier: Cool Sorption A/S
Smedeland 6
2600 Glostrup, Denmark
Contract: MT23117
**Year of
Installation:** 2004

Terms of Reference:

To check the installed VRU and verify that its performance conforms to **LN 228 of 2016**.

Inspection Dates:

Site Inspection: Carried out on 30.08.2016 in the presence of Enemed personnel.

Brief Description:

The VRU is used to control and reduce the emissions of hydrocarbons to the atmosphere caused by loading / unloading of gasoline into road tankers and bulk storage tanks.

The system consists of a twin adsorber, including activated carbon, valves and pipes, liquid ring vacuum pumps, a heat exchanger, instrumentation and a gasoline pumping unit. CO gas analyzers are installed for monitoring purposes.

Findings:

The system was inspected in the presence of Enemed personnel. The pipework was inspected according to the Schematic Drawing MT 23117-001E, Vapour Piping MT 23117-230A and General Arrangement MT 23117-221A, included in the following O&M Manual.

During the site visit, the following aspects were inspected:

- Vapour pipelines from Tanks 3, 4, 7, 9 and 10.
- The twin adsorbtion unit and absorber column
- The gasoline pump to transfer collected HC's to the tankfarm



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- The two vapour pumps
- Internal pipelines within the system
- The Maintenance Log of the equipment
- Any Accident logs indicating hot spots, leakages or major breakdowns / emergencies.
- The O&M Manual was also inspected at the Office, not during the site visit.
- Records concerning internal alarms
- The Operational Log Sheet

Conclusions:

Following the inspection on site and the documentation review, including daily emission results of the HC values after the VRU, we can confirm that the equipment and system are in good operational condition and that the original performance criteria are still being maintained. The owner has a maintenance agreement in place with the supplier to monitor operations of the said unit via internet connection, and a yearly maintenance / inspection is carried out by the foreign engineer from the supplier.

For the new Terminal Project, the VRU suppliers will be dismantling the existing unit, re-installing and re-commissioning the same unit in the new premises. They will be entrusted to ensure the unit continues to preforms to the requirements of the LN 228-2016.

The emission values reviewed clearly show levels of emissions well below the threshold limits, and the measuring instrument has the capability to reach levels well below 3g/Ncu.mtrs, as stipulated by the same Legal Notice.

According to LN 228 of 20169, the maximum VOC rate of escape is to be 35g/Nm³ – Clause 3 (9).

This plant has a design operational parameter of 10g/Nm³, and readings of less than 10g/N.mtr³ have been noted.

It is our opinion that the equipment still meets the general requirements of LN 228 of 2016.

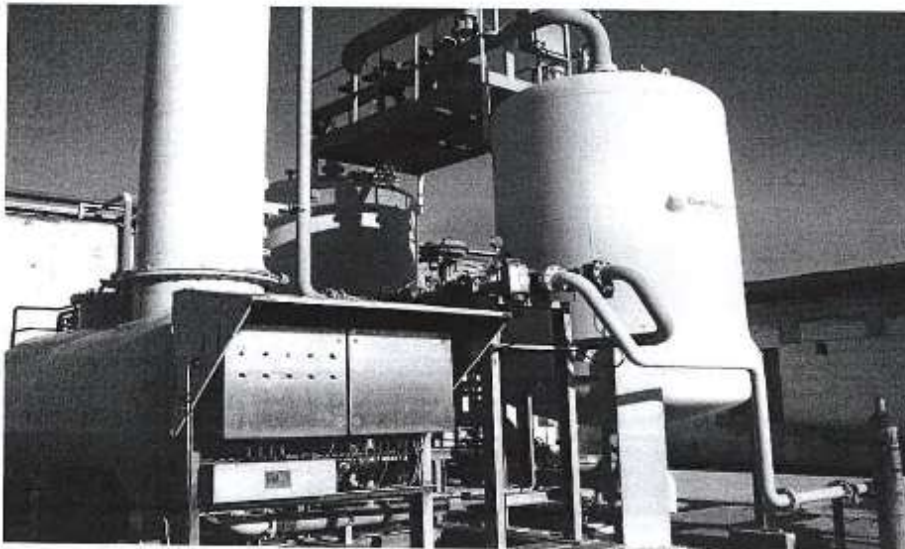
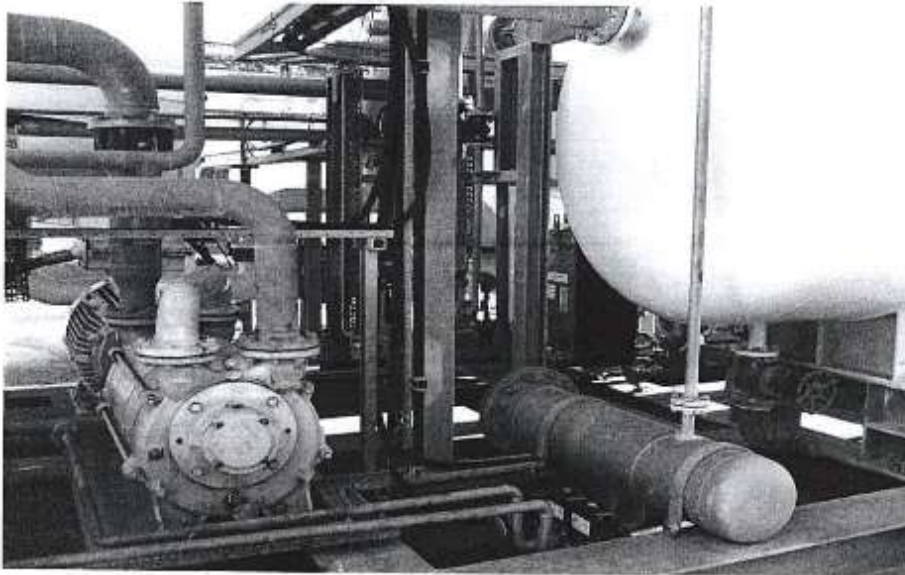
Ing. Nicholas Bellizzi
Warrant No. 213



30.08.2016

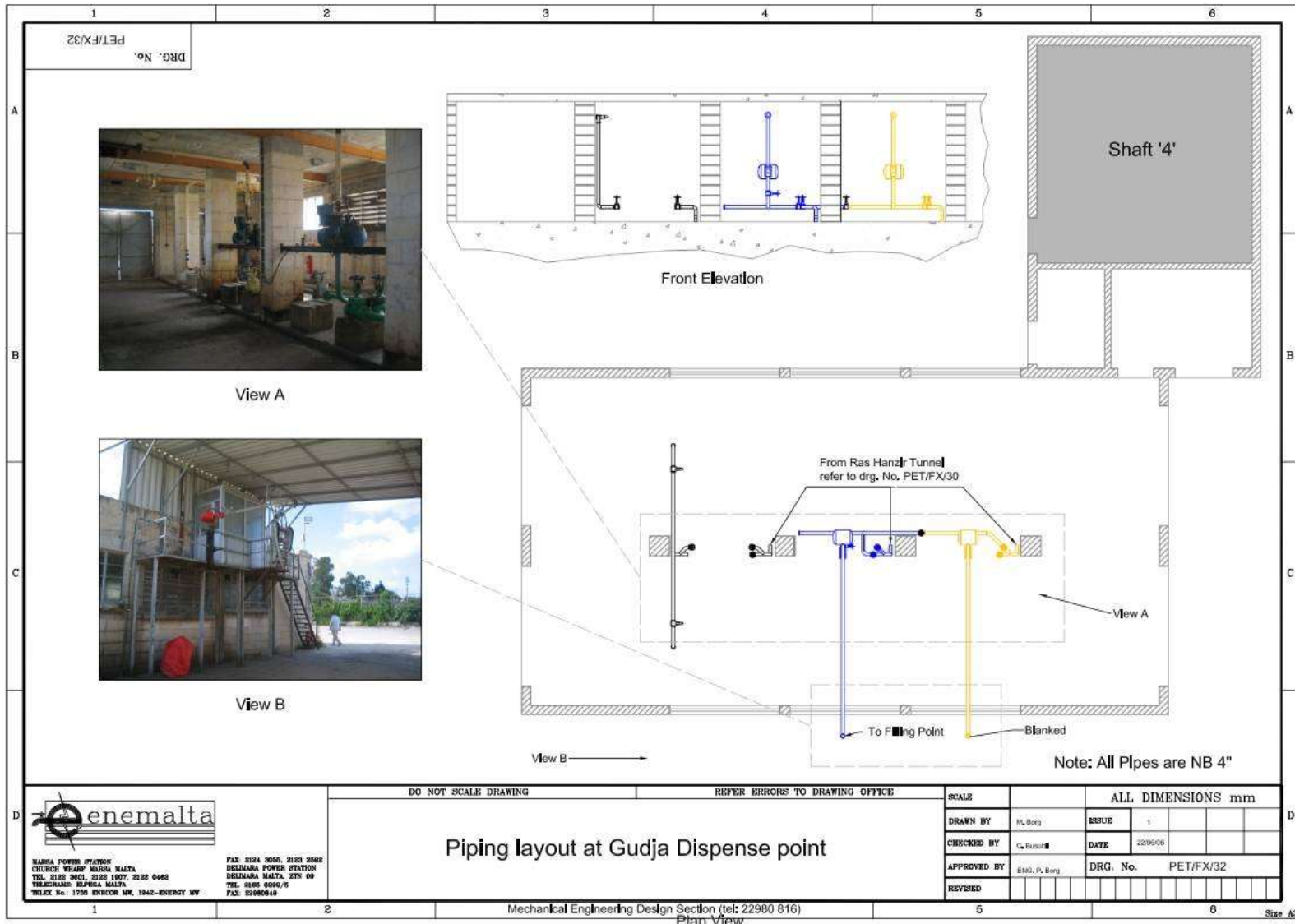


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Warrant No. 213
Tel/Fax: 692647
VAT No 1580-8323
30/8/2016

Appendix I: Gudja Filling Point Plan





Appendix 2: Engineer's Report Updated

New Fuel Dispensing Station
For the
Existing Has-Saptan Fuel Storage Facility

Clarification Regarding VRU Capability
02.10.2016

Reference is made to the Application by Enemed to move its fuel dispensing facilities from 31st March Installation in Birzebbuga to the Has-Saptan Complex.

It has been clearly documented that the existing Vapour Recovery Unit (VRU) currently installed at the 31st March Facility, and originally supplied by the Danish Company Cool Sorption A/S, is in very good working order, and still maintains its original vapour handling capacity due to the rigorous maintenance programme maintained by Enemed. In view of this, Enemed has decided to shift this working unit to its newly proposed site in Has-Saptan.

Enemed has confirmed that the pumping rate from vessels off-loading fuel supplies to its installation shall remain at a maximum of 650 cubic meters per hour. This is the current maximum supply rate. Therefore the current VRU is adequate for the new installation during ship off-loading operations.

It is envisaged that the new installation in Has-Saptan will actually produce slightly less vapours than the current installation due to the fact that since the new installation will have below ground tanks, the vapour generated by sun exposure is next to none. Hence, the existing VRU will be less loaded in the new facility than the existing facility. The VRU is more than capable of handling the vapours from the splash tanks, day tanks and truck loading points.

In view of the fact that the VRU is considered a critical component of the installation, the Client, Enemed, has sought the expert advice of the

original supplier regarding this situation, Annex 1 attached. The position of the supplier of the equipment is noted.

In view of the above, we the undersigned declare that the new fuel dispensing station to be installed at Has-Saptan shall meet the requirements of LN 228/2016 Schedules IV, V and VI with regards to vapour recovery.



Ing. Nicholas Bellizzi

Warrant No.: 213

MRA Competent Person – Primary Storages





Enemed
Enemalta Corporation
Petroleum Division
Birzebbuga, Malta

Date:
30 September 2016

Our reference: MT-2015-263/BB

To Whom It May Concern:

During our discussions regarding the VRU in your offices in February we came to the following conclusion:
The new configuration of VRU and loading arrangements will basically be identical to the existing:

- When the new storage tanks are filled with products from a ship, the emitted vapours will be directed to the VRU. The future import pump rate from the ship of 650 m³/h is the same as the present and therefore this will not increase the load on the VRU.
- With the present lay out, the VRU is also receiving vapours, created from sun heating of the storage tanks. With the new location there will not be any sun heating and therefore no thermal expansion of the vapour space in the tanks. Therefore, this load to the VRU will disappear in the future.
- The vent from the small day tanks should be connected to the same vapour line and so should the vapours from the truck loading points. That way, vapours will be balanced back to the tanks when gasoline is moved from underground tank to day tank and from day tank to truck. The VRU will only take the small amount of vapours generated from splashing plus the vapours coming from trucks being filled with diesel since the diesel storage- and day tanks are not connected to the system. This situation is the same as the present.

Our conclusion was, that once the relocation is complete and the VRU installed, the amount of vapours will be slightly less with the new configuration than with the existing configuration. And since the existing VRU is well maintained and in good working order, we see no reason to replace it at this time.

Yours faithfully,
for and on behalf of Cool Sorption A/S

Ben Barker
Sales Manager
Vapour Recovery
Tel: +45 43 45 47 45 | Mob: +45 4027 0897

ben.barker@fjordsprocessing.com | www.fjordsprocessing.com

Cool Sorption A/S | Part of Fjords Processing
Postal address | Visiting address:
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Registered in Denmark, registration no. DK 87980014 VAT



Competent Person
Primary Storage
02/10/2016.



Appendix 3: Draft Method Statement for Ground Contamination Baseline Study



TN 160087

DEMOLITION OF EXISTING STRUCTURES AND CONSTRUCTION OF FUEL FILLING DEPOT INCLUDING ANCILLARY OFFICES, FACILITIES AND WIDENING OF ACCESS ROAD, AT ĦAS-SAPTAN, OFF VJAL L-AVJAZZJONI, ĦAS-SAPTAN, GĦAXAQ

DRAFT METHOD STATEMENT FOR GROUND CONTAMINATION STUDY



Version 1: October 2016



Report Reference:

Adi Associates Environmental Consultants Ltd, 2016. Demolition of Existing Structures and Construction of Fuel Filling Depot including Ancillary Offices, Facilities and Widening of Access Road, at Ħas-Saptan, off Vjal I-Avjazzjoni, Ħas-Saptan, Għaxaq (TN 160087). Draft Method Statement for Ground Contamination Study. San Gwann, October 2016; v + 9pp.

**THIS IS A DIGITAL COPY OF THE REPORT.
RESPECT THE ENVIRONMENT – KEEP IT DIGITAL**

Quality Assurance

**Demolition of Existing Structures and Construction of Fuel Filling Depot including Ancillary Offices, Facilities and Widening of Access Road, at Has-Saptan, off Vjal I-Avjazzjoni, Has-Saptan, Għaxaq (TN 160087)
Draft Method Statement for Ground Contamination Study
November 2016**

Report for: **Enemed Co Ltd**

Revision Schedule

Rev	Date	Details	Written by:	Checked by:	Approved by:
0.0	Nov 16	Submission to ERA	Rachel Xuereb Consultant	Rachel Decelis Director	Adrian Mallia Managing Director

File ref: G:_Active Projects\Pollution Studies\Contamination Studies (land & water)\EMD006 - HAs-Saptan Ground contam study\Method Statement\Method Statement.docx



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DRAFT METHOD STATEMENT

INTRODUCTION

1. This draft method statement outlines the proposed methodology for baseline monitoring at the site of a proposed construction of a fuel dispensing station for the refuelling of road tankers, as requested by the Environment and Resources Authority (ERA).
2. The facility, hereinafter referred to as the “Scheme”, is located in the vicinity of an existing fuel storage facility at Has-Saptan in Luqa (see **Figure 1**). The Scheme will provide a refuelling service for road tankers supplying fuels to service stations throughout Malta. Gasoline, diesel, gasoil and other fuels will be dispensed from filling points connected to 14 new prefabricated underground day tanks. The fuel dispensing station will consist of six loading lanes with three loading arms in each lane supplying different fuels. The day tanks will receive fuel on a daily basis from the existing underground Has-Saptan fuel storage facility via pipelines constructed within a new tunnel to be excavated as part of the Scheme. A detailed description of the Scheme is found in the EPS.

Terms of Reference

3. This study was requested by the ERA during the review of the Environmental Planning Statement for the Scheme. Specifically the ERA stated:

In order to substantiate the proposal in the outline decommissioning plan in page 69 of the Master EPS document and in view of the site’s history, a baseline survey is required to assess contamination in the site and surrounding areas. The baseline survey is to be prepared by experts in the field and include land and groundwater investigations that assess the current extent, level and significance of contamination, taking into account past history and current activities. The method statement for said survey is to be submitted to ERA for review prior to the start of any investigations.

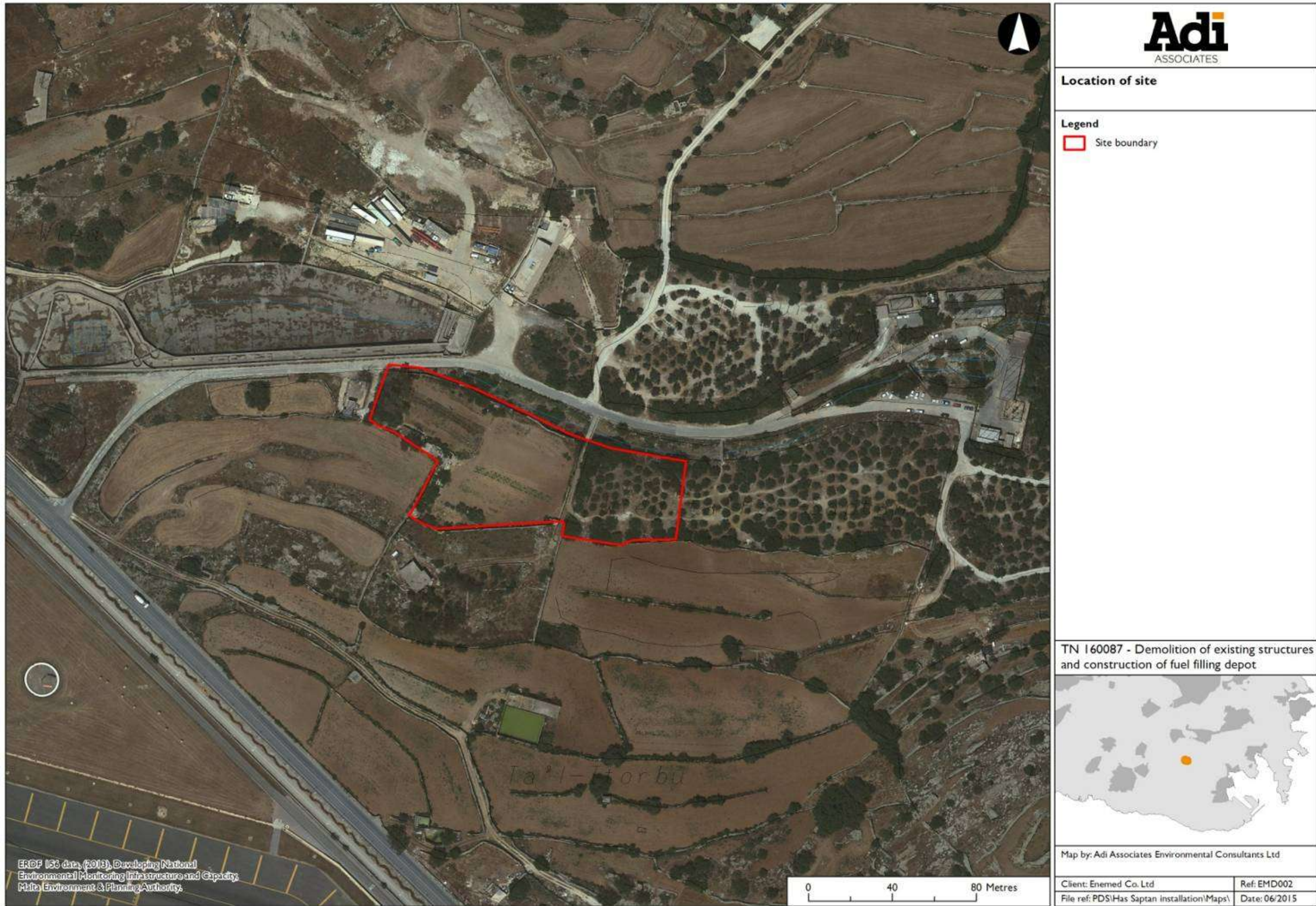
The baseline survey will define the current status of land and groundwater and provide a basis for interim remediation and monitoring measures that may be required over the long term. This will feed into the outline decommissioning plan that will be required as part of the EP.

4. No specific Terms of Reference for the Study was provided but during a meeting with ERA¹ it was agreed that these draft Terms of Reference would be used solely as

¹ Meeting with ERA (Environmental Assessment and Environmental Permitting Units, Applicant and EIA Consultant) dated 31st October 2016

a sign of commitment from the Applicant to undertake this monitoring, however outside of the EIA process.

Figure 1: Site location



INDICATIVE ONLY - Not to be used for direct interpretation

POLLUTANT LINKAGES

5. **Table I** identifies the principal potential source-pathway-receptor linkages for land and groundwater contamination at the site; these linkages cover emissions that could occur from Scheme operation (without the mitigation measures proposed).
6. Environmental risk occurs when there is a means by which a hazard can result in a deleterious impact on the surrounding environment, i.e. receptors. The presence of a hazard alone does not constitute a risk. A risk is only present if there is a pathway which links the source (hazard) to the receptor. This is known as the source-pathway-receptor linkage.
7. If any of the three elements are absent then there is no complete linkage and thus no unacceptable risk to the environment. It is noted that the risk assessment for the EPS concluded that as a result of the planned mitigation measures, risks to land and groundwater from the Scheme are low and very low.

Table I: Pollutant pathway identification

Source	Pathway	Receptor	Potential sources of land / groundwater contamination		
			Scheme operation ²	Historical activities	Surrounding activities
Spillage of fuel / oils / coolants / lubricants	Permeable strata above water table; rainwater runoff	Land Groundwater	Diesel, oils and oily waste stored and handled on site Leaks from vehicles / equipment / maintenance activities	N/A as part of the site is currently agricultural land and part is afforested.	Although the Has-Saptan fuel storage facility is located in the vicinity this is underground and not directly beneath the Scheme Site.

² The identification of these sources at the Scheme does not consider the presence of mitigation, which reduces risk levels and in some instances removes the pollutant linkage entirely (as described in the Risk Assessment in the EPS prepared for the Scheme).

MONITORING METHODOLOGY

Aims

8. The principal aim of the analytical programme is to assess baseline levels of pollutants, to enable a quantified comparison to be made with the contamination levels upon decommissioning.
9. A secondary aim is to determine whether the rock to be excavated during construction works is to be considered hazardous, non hazardous or inert, to enable identification of the appropriate waste disposal / recovery route. Therefore a proposal for waste acceptance testing is included.

Sampling Strategy

10. With regard to the baseline assessment, considering that contaminants will need to first permeate through the land strata to reach the groundwater, a phased approach is proposed.
11. Initially land monitoring will be carried out from cores on site taken at the surface, at 1 metre and at a depth of 2 m. At this stage groundwater testing is not proposed as if the results show that the land is not contaminated then it will be assumed that groundwater is not contaminated.
12. However, should further testing show the 2 m core is contaminated, groundwater monitoring would also be considered, in consultation with ERA and the Malta Resources Authority (MRA), and preferably making use of existing boreholes.
13. Since the purpose of the baseline assessment is to enable a comparison of the current condition of the land with that upon definitive cessation of activities, a targeted sampling strategy is proposed that takes into account the planned location of the Scheme activities involving potential release of hazardous substances.

Analytical Programme

14. **Table 2** presents a proposed list of analytes proposed for the baseline testing and a rationale for their inclusion, based on the potential pollutant linkages identified in **Table 1**. In the context of the Scheme, the reference to potential sources of contamination in **Table 2** does not consider the mitigation measures that will be in place.

Table I: Proposed analytes (baseline monitoring)

Analyte	Rationale for inclusion	Potential sources of site contamination
		Scheme operation
Total petroleum hydrocarbons	Main constituents of fuels, oils, coolants and lubricants.	✓
Total petroleum hydrocarbons (C35-C40)		✓
Total petroleum hydrocarbons (C10-C40) (sum)		✓
BTEX (benzene, toluene, ethylbenzene, xylene)	Fuel additives.	✓
PAHs ³	Components of fuel, lubricating oil.	✓
Cyanide (total)	Component of lubricating oil.	✓
Metals, as follows: As, Cd, Co, Cr, Cu, Hg, Mn, Ni, Pb, Se, Sb, Sn, Tl, V, Zn	Certain metals are / used to be components of fuels, lubricating oils, batteries.	✓

³ 16 US EPA PAHs, as follows: acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b/k)fluoranthene, benzo(ghi)perylene, chrysene, dibenzo(ah)anthracene, fluoranthene, fluorene, indeno(123-cd)pyrene, naphthalene, phenanthrene, pyrene.

Sampling Points

15. The proposed sampling points will be agreed with ERA in the detailed Method Statement however in accordance with MEPA guidance on previous projects, five sampling points are proposed to ensure adequate site representation. The sampling locations will be selected to correspond to the potential location for future emissions.
16. International guidance^{4,5} recommends that samples are taken at three depths to determine whether there has been any vertical distribution of pollutants; in Malta this is typically done by taking the first sample from the surface, the second at 1 m depth, and the third at 2 m depth. Each core sample will be around 15 cm in length.

Sampling Methods

17. Land investigations will be conducted in accordance with BS 4019: 1993: Rotary core drilling equipment, and BS 5930: 1999: Code of practice for geological site investigations. Sampling will be supervised by a chemist.
18. The sampling point will be cleared and the core sample drilled using a Beretta T44 drill rig fitted with an auger to drill through soil and rock. This technique removes the material from the base of the borehole towards the top, and does not require the use of circulation fluids.
19. After each of the five points has been sampled, the drill rig will be moved to a wash-down area and cleaned using a power wash. Voids will be backfilled using the remaining part of the core not sent for analysis.
20. Core samples will be stored in glass jars and a small portion will also be placed in a 40 mL septum-capped vial immediately upon sampling. The vial will be used by the lab for testing of volatile substances.
21. All samples will be photographed, labelled, and logged before being sent to the laboratory. Additionally, a record will be kept of any visual or olfactory evidence of contamination (e.g. stains, hydrocarbon odours).

Analysis

22. The samples will be delivered for analysis at a UK laboratory accredited to ISO 17025; a copy of the laboratory's certification schedule will be presented in the detailed Method Statement..

⁴ Environmental Protection Department (2011) *Practice Guide for Investigation and Remediation of Contaminated Land*
http://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/waste/guide_ref/files/pg_conland_eng_2011.pdf.

⁵ Ministry for the Environment (2011) *Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils* <http://www.mfe.govt.nz/publications/land-hazards/contaminated-land-management-guidelines-no-5-site-investigation-and>.

44. Delivery will take place by courier within two working days of sampling, although typically this will be done within 12-24 hours. The vials will be kept chilled during transport.

Appendix 4: Engineer's Report

New Fuel Dispensing Station
For the
Existing Has-Saptan Fuel Storage Facility

Clarification Regarding VRU Capability Rev 1
16.10.2016

Reference is made to the Application by Enemed to move its fuel dispensing facilities from 31st March Installation in Birzebuga to the Has-Saptan Complex.

It has been clearly documented that the existing Vapour Recovery Unit (VRU) currently installed at the 31st March Facility, and originally supplied by the Danish Company Cool Sorption A/S, is in very good working order, and still maintains its original vapour handling capacity due to the rigorous maintenance programme maintained by Enemed. In view of this, Enemed has decided to shift this working unit to its newly proposed site in Has-Saptan.

Enemed has confirmed that the pumping rate from vessels off-loading fuel supplies to its installation shall remain at a maximum of 650 cubic meters per hour. This is the current maximum supply rate. Therefore the current VRU is adequate for the new installation during ship off-loading operations.

It is envisaged that the new installation in Has-Saptan will actually produce slightly less vapours than the current installation due to the fact that since the new installation will have below ground tanks, the vapour generated by sun exposure is next to none. Hence, the existing VRU will be less loaded in the new facility than the existing facility. The VRU is more than capable of handling the vapours from the splash tanks, day tanks and truck loading points.

In view of the fact that the VRU is considered a critical component of the installation, the Client, Enemed, has sought the expert advice of the

original supplier regarding this situation, Annex 1 attached. The position of the supplier of the equipment is noted.

We can also confirm that the existing VRU is capable of handling any vapours produced by the existing below ground tanks at Has-Saptan. Again, being well below the ground level, and not exposed to sunlight, means the vapours being produced are of very small quantity.

In view of the above, we the undersigned declare that the new fuel dispensing station to be installed at Has-Saptan shall meet the requirements of LN 228/2016 Schedules IV, V and VI with regards to vapour recovery.

Ing. Nicholas Bellizzi
Warrant No.: 213
MRA Competent Person – Primary Storages



Enemed
Enemalta Corporation
Petroleum Division
Birzebbuga, Malta

Date:
30 September 2016
Our reference: MT-2015-263/BB

To Whom It May Concern:

During our discussions regarding the VRU in your offices in February we came to the following conclusion:
The new configuration of VRU and loading arrangements will basically be identical to the existing:

- When the new storage tanks are filled with products from a ship, the emitted vapours will be directed to the VRU. The future import pump rate from the ship of 650 m³/h is the same as the present and therefore this will not increase the load on the VRU.
- With the present lay out, the VRU is also receiving vapours, created from sun heating of the storage tanks. With the new location there will not be any sun heating and therefore no thermal expansion of the vapour space in the tanks. Therefore, this load to the VRU will disappear in the future.
- The vent from the small day tanks should be connected to the same vapour line and so should the vapours from the truck loading points. That way, vapours will be balanced back to the tanks when gasoline is moved from underground tank to day tank and from day tank to truck. The VRU will only take the small amount of vapours generated from splashing plus the vapours coming from trucks being filled with diesel since the diesel storage- and day tanks are not connected to the system. This situation is the same as the present.

Our conclusion was, that once the relocation is complete and the VRU installed, the amount of vapours will be slightly less with the new configuration than with the existing configuration. And since the existing VRU is well maintained and in good working order, we see no reason to replace it at this time.

Yours faithfully,
for and on behalf of Cool Sorption A/S

Ben Barker
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Vapour Recovery
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Competent Persons
Primary Storage
02/10/2016.