

Environment Impact Assessment (EIA) Update Report

PA 0867/09 (GF 0014/09): Development of gas storage and bottling facility including a pipeline from the importation terminal at Bengħajsa, Birżebbuġa.

1. INTRODUCTION

Proposal is a full development permit application (FDPA) for the construction of a facility for importing Liquefied Petroleum Gas (LPG) in bulk by ships, storage in six horizontal mounded LPG storage tanks, bottling and distribution to the end users. An outline development application submitted for the same facility, PA 01947/02 - *Relocation of LPG Depot at Ix-Xoqqiet, Bengħajsa* was approved on 1st February 2007. The proposal for PA 01947/02 was accompanied by an EIS, which was coordinated by Joseph Spiteri from MUS Ltd and was certified on 30th October, 2006.

The EIS submitted for PA 01947/02 examined a number of issues including impacts on ecology, risks, geology, noise, visual and landscape assessments. The outline development permit issued and the certified EIS considered 3000T of compressed LPG gas whereas a number of issues were reserved for further evaluation at the FDPA stage, namely position of storm water discharge point and any related tunnel/s, the pipeline route linking the facility to the Oil Tanking Malta (OTM) quay for receipt of LPG from ships, the landscaping scheme, lighting plan and exact position of all buildings. Regarding the pipeline route, the permit conditions noted that this should be designed in a manner to protect the quaternary deposits at *Wied ix-Xoqqa*.

The current FDPA submitted for the proposal is also limited to the existing quarry at Bengħajsa. The FDPA addresses the above mentioned reserved matters namely, the location of the storm water/ventilation tunnel, the pipeline route linking the facility to the OTM quay, the landscaping plan and lighting scheme. LPG storage has increased from 3000 T to 4500 T.

Given that an increase in gas storage was proposed from the outline development proposal, and the reserved matters, the Malta Environment and Planning Authority (MEPA) requested an update to the Environmental Impact Statement (EIS) for the proposed development in view of the possible impacts on the following:

- Ecological resources (birds and their habitats) and the site's integrity (this aspect also required submission of an Appropriate Assessment);
- Geomorphology (cliff and caves);
- Lighting; and
- Explosion risks and pollutant overspill risks.

The proposed landscaping scheme is not envisaged to significantly affect the ecology of the area since indigenous species are being proposed.

The site is located adjacent to a Natura 2000 under the under the EU Habitats Directive (92/43/ EEC) and the EU Birds Directive (79/409/EEC) – MT 0000024 Rđumijiet ta' Malta: Ir-Ramla tač-Čirkewwa sa Il-Ponta ta' Bengħisa' Special Area of Conservation (SAC) and MT 0000033 Wied Moqbol sal-Ponta ta' Bengħisa Special Protection Area (SPA), published in Government Notice 223 of 2005 and Government Notice 812 of 2008 respectively.

Significant direct impacts are likely to arise through potential disturbance of birds due to proximity of the installation to the SPA, and due to the presence of deep subterranean caves which further extend the landward extent of the relevant habitats. This may arise due to increased disturbance to sea birds and cliff species through noise, vibrations, light, and risk of mechanical damage to cliff and cave habitats and increased discharges of water to the site.

Thus, following the above and on the basis of the information provided, it can be concluded that sufficient uncertainty remains as to the likelihood of significant effects on the Natura 2000 site and so further assessment in terms of Article 6(3) and (4) of the Habitats Directive 92/43/EEC is necessary. An exhaustive exploration of alternatives to the proposed tunnel is also required as part of the appropriate assessment, and this should give detailed attention to both alternative solutions and alternative locations.

The EIS update was coordinated by Paul Gauci of ERSI Ltd.

2. PROPOSED DEVELOPMENT

The proposal is for the relocation of the Liquefied Petroleum Gas (LPG) depot from its current location in the immediate vicinity of a residential area known as il-Qajjenza, in the northern periphery of Birżebbuġa, to a disused quarry located in an area known as *ix-Xoqqiet*, adjacent to the Malta Freeport Terminal.

The depot will consist of:

- Storage for up to 4,500 tonnes of LPG stored in six cylindrical vessels;
- An automated LPG bottling plant filling bottles of capacity ranging from 10 kg to 25 kg with a production capacity of 17,750 tonnes per year;
- A bottle store and distribution depot handling bottles from the filling plant and loading and unloading to delivery trucks;
- A pipeline connecting the LPG bulk storage facility with the loading facility to and from the Oil Tanking depot;
- Interconnecting pipework between the various elements of the plant;
- A centralised plant control room with air compressors for valve actuation, diesel pumps and water storage for fire fighting and emergency;
- Complete instrumentation, gas detection and fire fighting systems; and
- An administration block.

The proposed plant will increase the present storage capacity and will improve the current importation, bottling and distribution activities. Importation will be carried out from the Malta Freeport area and therefore no new quay and port facilities will be constructed. A pipeline will link the port to the LPG depot.

2.1 Conclusions of the Original EIS

The original EIS reached the following conclusions:

- Proposal is not expected to cause significantly adverse impacts on topography, land and chemical emissions;
- Quaternary deposits and caves of significant scientific importance lie adjacent to the site at the bay-head of Ix-Xoqqa. These deposits risk to be degraded further or even destroyed by the proposed development and therefore should be fenced off before any works commence on site;
- Under normal operating conditions there would appear to be no risk of adverse impacts to Il-Fortizza ta' Benghisa that is a Grade A scheduled property in the close vicinity of the proposed development;
- The visual envelope of the proposed project is severely restricted due to the lie of the land and the fact that the facilities will be constructed on the floor of the quarry. No significantly adverse impacts are expected on visual amenity;
- A potential impact on avifauna in the costal SSI resulting from light pollution has been identified. Given the dearth of available data, the full extent of the impact of development on avifauna cannot be quantified. Careful design of lighting to avoid light pollution within this area, and hence avoid adverse impacts on avifauna, was recommended;
- The Risk Assessment Report identifies risks as ranging from low to medium. The new plant should pose less of a risk on public health since it is much further away from the residential areas than the existing depot, and being a new plant, it is considerably safer. The Major Hazard Identification identified principal consequences of a major re-lease of LPG including the risk of explosions;
- Based on noise levels measured at the existing facility at Qajjenza no significantly adverse impacts are expected on noise;
- Under normal operating circumstances, it is not expected that the operations to be carried out facility will give rise to emissions to the air apart from vehicular traffic;
- Eight adverse impacts were identified in the study that concerns the ecological characteristics. Five of these, referring to the construction process and escape of vapours to the environment, which are considered to be of a temporary nature. Another two, namely,

potential obliteration of habitat and introduction of alien species were considered to be of a permanent nature. The probability of both impacts occurring was considered to be high;

2.2 Alternatives

A number of alternatives were assessed in the EIA update.

Alternatives routes for disposal of stormwater

About 140,000m³ of rainwater currently enters the site and drains into the porous ground. However, with the proposed development, this drainage regime will change, mainly because the quarry bottom will be covered by impervious material. Rainwater runoff from the site, which is expected to be generally of good quality (although some small scale contamination would be expected through contact with chemicals, oils etc), shall drain to the lowest part of the site where it will be treated and then discharged into the sea. Treatment shall involve the interception of silts and oils by means of the sedimentation and oil-separation tanks, which will however be bypassed in the event of major storms.

Two options for discharge of water are assessed in the EIA, namely:

- a. **Option 1- Tunnel bored in rock to connect the Site to the cliff face:** A tunnel *circa* 1.5m wide by 2m high and connecting the site at an altitude of *circa* 6m from mean sea level to the cliff face in the area. This is the shortest distance from the sea and located in the coastal margin which is free of caverns. Storm water will be channeled along the road network to this tunnel passing through settlement tanks and oil interceptors. It is proposed to excavate the tunnel by means of a roadheader in the span of a week. Besides serving as a rainwater drainage system, a tunnel in this location would create an opening to the sea which because of the pressure differential resulting from wind action would serve to ventilate this portion of the quarry;
- b. **Option 2- A pipeline installed along the Site and outside it leading to Wied ix Xoqqa:** This option would involve the installation of pipes to drain the plant run-off during flash floods and discharge in Wied ix-Xoqqa. Two sub-options regarding this proposal discharging to the left or right of Wied ix-Xoqqa have been proposed. In both cases and given the depth of the site, a trench would have to be excavated through the site having a length of *circa* 195 metres and a depth of some 4 metres maximum. Storm water pipes would then be laid in the trench which would be back-filled. The pipes would then pass through a tunnel that would run in a southeast direction, avoiding quaternary deposits and discharging in Wied ix-Xoqqa, therefore avoiding any visual impacts on the cliffs.

Both these sub-options will not provide adequate natural ventilation and therefore, the rock between the lowest part of the site and the cliff-face would still have to be drilled to permit the passage of air to ensure the safety of the plant. The ventilation of the plant is essential as leaking gases will accumulate in this area and the potential for an explosion would be high unless such gases are dispersed.

Alternative Lighting

Three external lighting options were submitted and assessed as part of the EIS update, namely:

- a. Street lights mounted on 8m high poles and flood lights mounted on buildings;
- b. As above plus flood lights mounted on 25m high poles; and
- c. Green lighting as promoted by Royal Philips Electronics: An experiment on an oil platform located in the North Sea carried out by Royal Philips Electronics indicated that green lighting systems do not seem to disrupt the flying patterns of birds. However, it appears that such systems are not available commercially yet.

The proposed lanterns/floodlights shall consist of 250 watt high pressure sodium lamps, and the luminaries shall be of the full cut-off type. Fluorescent lights shall be fitted within the emergency staircases. No perimeter lighting is specified and the fittings have to be designed, manufactured, and in-stalled to be explosion proof. The system will be centrally controlled through a Supervisory Control and Data Acquisition (SCADA) system.

3. EIA CONSULTATION

As part of the EIA update process, consultation with various consultees was carried out during the reviewing stages.

3.1 Consultation during review

The first draft of the EIS update was submitted to MEPA on 22nd September 2009 and circulated for review to the following consultees:

- Birżebbuġa Local Council (BLC)
- Malta Resources Authority (MRA);
- Malta Maritime Authority (MMA);
- Civil Protection Department (CPD);
- Department for Environmental Health (DEH);
- Occupational Health and Safety Authority (OHSA);
- Din l-Art Ħelwa (DLĦ);
- Nature Group; and
- Birżebbuġa Environmental Action Group (BEAG).

The EIS was also circulated for internal review within MEPA and presented to the Natural Heritage Advisory Committee (NHAC).

The deadline for submissions was 22nd October 2009. Within the stipulated consultation period, comments were received from BLC (Red 23¹) who stated that they agreed in principle with the proposal subject that public access to the coast is retained and that all vehicles servicing the LPG tanks are constrained to avoid Birżebbuġa. The DEH (Red 26) noted that all mitigation measures in the EIS should be implemented in order to avoid impacts on public health, further measures should be employed to offset any unpredicted nuisances, all complained are investigated and further discussion is to be held with the DEH. CPD commented on the type of hydrants to be used on site, whereas DLĦ (Red 29) submitted comments on regular monitoring of plant operations and the landscaping scheme.

The comments made by MEPA and its consultees during the review stage were forwarded to the EIA Coordinator, the applicant and architect. These comments were addressed by the EIA Coordinator and responses were submitted to MEPA.

All submissions are included as an Addendum to the EIS update.

3.2 Public Consultation

The EIS was certified on 10th December 2009 and was published for a four week public consultation period including a public meeting at Birżebbuġa. Written submissions were received from Birżebbuġa LC (Red 37). Minutes of the public meeting are inserted as Appendix 1 to this document. No responses to submissions were deemed necessary as these were addressed at the public meeting.

4 IMPACTS ON THE SITE AND SURROUNDINGS

4.1 GEOLOGY AND GEOMORPHOLOGY

The EIS update considered the sensitivity of the site in terms of quaternary deposits, caves and stratigraphy, especially in view of the impacts that the options for the disposal of storm water may have on the geological resources of the area.

The quarry primarily exposes Lower Globigerina Limestone and areas of Lower Coralline Limestone. No caves were uncovered during excavation of the quarry, however Għar Qirduwa (Għar Kilwa), Għar in-Nagħaġ and other geomorphic features such as natural conduits, as shown in Figure 2.4 of the EIS Update are present within the area of influence.

IMPACTS ON GEOLOGY AND GEOMORPHOLOGY AND MITIGATION MEASURES

¹ Unless otherwise stated all References are made to minutes in GF 00014/09

Option 1 requires a tunnel, *circa* 40m long that avoids the sea caves in the cliffs. The tunnel would be suitable for both the discharge of the excess run-off generated by heavy storms and natural ventilation of the plant, especially during the hot season. The impacts of this solution would be caused by the actual extraction of the resource for the tunnel excavation and the breaching of the cliff face, which has an impact on the geomorphology of the area and consequently having an impact on the landscape value of the cliffs. The impacts on the geology of the area would be adverse and of relatively low significance. On the other hand, the effects on geomorphology and landscape are considered major adverse. However, if the tunnel avoids caves and solution features and if the shape of the opening is sculpted to blend into the existing context, the significance of the impact on geomorphology and the landscape would be moderate.

Option 2 would require a tunnel length of 420m running in parallel to the longer axis of the site and discharging in Wied ix-Xoqqa. Both sub-options are designed to by-pass the Quaternary deposits. In both cases, the rock face will have to be trenched in order for the pipes leading to the corresponding outlets, to be buried. The adverse impact of this trenching on the geology of the area would be of low significance. The infilling of the trenches and the subsequent surfacing (with concrete) is bound to leave a scar on the rock face, the impact of which is bound to be adverse and of high significance with respect to the geomorphology and landscape value of the area. However, there is the option that the pipes are somehow laid above-ground which is technically unfeasible, given its dependence on pumping of excess water against gravity, which could still lead to flooding in storm events, and the adversity of the visual impact would be high. Moreover, the implementation of this option will not preclude the need to bore through the rock between the site and the cliff face, as the channel/pipes system cannot be used for the natural ventilation of the plant. This could be potentially done through drilling of a number small diameter directional holes to connect the site with the cliff face. The impact of these holes on the cliff face (geomorphology and landscape) would be minor adverse .

4.2 AVIFAUNA

The area is known to contain the following nesting bird species: *Puffinus yelkouan* (Yelkouan Shearwater); *Calonectris diomedea* (Cory's Shearwater); *Monticola solitarius* (Blue Rock Thrush); *Calandrella brachydactyla* (Great Short-toed Lark); *Cisticola juncidis* (Zitting Cisticola); *Sylvia melanocephala* (Sardinian Warbler); *Sylvia conspicillata* (Spectacled Warbler); and *Passer hispaniolensis* (Spanish Sparrow). The area beneath Il-Fortizza ta' Bengħisa hosts the extreme breeding limit of the two shearwaters in Malta.

The Yelkouan Shearwater population at Bengħisa has been estimated at 10-15 pairs. The first birds start to visit the colonies in October and egg laying takes place from the last days of February through the first two weeks of March. Chicks hatch in mid-May and by the third week of June chicks start fledging; the last birds leave the colony by mid-July. Conversely, the Cory's Shearwater starts to make landfall in the last ten days of February. The single egg is laid in a crevice, fissure, or under boulders and vegetation in the latter half of May. Incubation lasts 52 days and the chicks hatch in mid-July. By the third week of October all the colonies are deserted. Bengħisa holds some 25 to 30 pairs of the latter bird species and because of increasing human pressure (direct persecution, noise and lights pollution on the cliffs) these birds are being pushed down the more inaccessible cliff sites. In the last 30 years several relatively accessible nest sites located on the top parts of the cliffs have been deserted.

Shearwaters have specific daily movements associated with feeding grounds and rafting, which normally occurs in the vicinity of their breeding colonies. Birds start assembling about two to three hours before sunset and commence to dissipate around dusk when the whole congregation is within a few hundred metres from the cliffs. Every evening from March to October, streams of flying birds, coming from their feeding grounds, pass within 1km to 4km offshore on their way to their breeding colonies.

Of the above species, the Yelkouan and Cory's Shearwater, the Blue Rock Thrush and Short-toed Lark are protected.

IMPACTS ON AVIFAUNA

The most serious threats to avifauna are the following:

- a. **Light pollution:** Light sources from land and at sea close to the breeding colonies are of particular concern since light interferes with the lifestyle of birds to such an extent that they have completely deserted sites where electricity has been introduced. If light is not permitted to spill beyond the site (through the use of directed luminaries equipped with full cut-off fittings) the impact would be insignificant. On the other hand, if light pollution is not controlled, the evidently adverse impacts would be of very high significance. Of the options considered, adverse impacts of the first option are insignificant whereas those of the second may be high, although luminaries equipped with full cut-off fittings will also be used, since the proposed lanterns are mounted on high poles.
- b. **Taking of birds and/or eggs:** In the event that Option 1 for discharge of stormwater is adopted, birds may set up nests in the tunnel (which is unlikely) which would make it easy for eggs/chicks to be taken during both the construction and operations phase.

The following is a summary of the features of the options for discharge of storm-water with respect to Avifauna:

Activity	Option 1	Option 2	
		Option 2.1	Option 2.2
Birds	Construction works will have to be carried out between November and January. During operations, birds should be expected to build nests in the tunnel. There is the possibility that errant employees would enter the tunnel to steal eggs or chicks. This possibility should be counteracted by means of a gate on the inland opening of the tunnel. The keys to this gate would be handled by selected personnel only.	Construction works will have to be carried out between November and January. No impacts are anticipated during operation	Construction works will have to be carried out between November and January. No impacts are anticipated during operation

- c. **Noise and vibrations during construction works:** Should Option 1 for discharge of water be adopted, noise and vibrations would impact the behaviour of cliff birds if works take place between January and October, in which case the impact is of major significance. Similar problems would occur when excavations are carried out for the foundations, underground pipework, and reservoirs required in the proposed development. Alternatively, any excavation (except the ones required for the tunnel) can be carried out through the drilling of holes at regular intervals, which holes would then be filled with an expanding grout which would in turn crack the rock. The cracked rock could then be removed by means of a bucket fitting.
- d. **Predation:** Predation on nesting birds is a major concern on most cliffs, especially along the southern cliffs of Malta. Rats and the Western Whip-snake (*Hierophis viridiflavus*) both inflict serious damage to the avian populations especially ground nesting species such as the Yelkouan Shearwater and the Short-toed Lark. Due to construction of the proposal, it is not expected that current levels of predation will change by virtue of the operations of the proposed plant. However, the improper handling of bio-waste during the construction and operations phases may attract more rats or contribute to the increase in their populations.

Therefore, building contractors and site managers should ensure that bio-waste is managed properly, entailing, amongst others the placement of appropriate waste containers in strategic locations, and the regular emptying/cleaning. The level of significance in this case would at best be expected to be neutral with respect to current occurrences.

- e. **Major accidents:** There is the possibility that a major accident during the operations of the Plant will have a substantial adverse impact on receptors (including birds) inhabiting or visiting the area and on nearby habitats (including the SAC and SPA).

4.3 Risk Assessment

A number of risks were identified in the EIS Update, also taking into account the proximity with Oil Tanking installation and aircraft flight path:.

- a. Large releases of unignited gas: The evaluation of risks to the environment presented in the Risk Matrix indicates that even quite large releases of unignited LPG pose no substantial risk to the environment. On the scale that such releases occur over the lifetime of the plant, neither propane nor butane represent a hazard;
- b. Large releases of ignited gas: None of the possible effects resulting from an ignited release are likely to cause either extensive or long term environmental damage. Smoke from such fires could be detrimental in the short term bearing in mind that the frequency of such incidents will be very low;
- c. BLEVE: The effect of a BLEVE of a road tanker loading on site could extend to approximately 250m from the source and thus cause significant short term environmental damage beyond the site boundary but the frequency of such an incident is very low. Hence, as demonstrated by the Risk Matrix the overall environmental risk of this installation is minimal;

With regard to the safety risk of LPG releases, these occur as a result of the heat radiation effect of fires. These are more severe because the damage occurs at shorter range within the confines of the plant boundary.

The Safety Report which analyses the risks of the proposed installation to the surroundings draws attention to the need to maintain good control of both environmental and safety risks, in particular the need for preparedness against large spills that are possible. The prime measures for the prevention of major accident scenarios at the Plant are the sound design of the facility and the application of safe operations and maintenance practices. The Safety Report also states that documents on which the safety risk assessment has been based indicate that this plant will be built to a state of the art standard with regards to its safe operations. In particular, automatic sectioning and control logic to isolate inventories of material in the event of detection of leaks will be part of the design. In addition, a sound fixed fire fighting system has also been specified.

The severity of the consequences of a major accident would be mitigated by implementation of the Gasco Emergency Plan which will be prepared by the developer. The plan will include spill containment and clean-up procedures and fire fighting procedures. Additional site-specific Internal and External Emergency Plans will have to be drawn up, based on the findings of the Safety Report, as required by the COMAH Regulations.

5. Significant Residual Impacts

Significant residential impacts are noted on the geology due to excavation of the cliff face.

6. CONCLUSIONS AND EPD RECOMMENDATION

The EIS Update has predicted a number of potential impacts on the environment as a result of the proposal, some of which are negative. The mitigation measures and monitoring proposed in the EIS are aimed at minimising and controlling the predicted impacts of the proposal. EPD finds no objection to the proposed plant *per se* subject that the mitigation measures described in the EIS for PA 01947/02, the EIS Update and other measures deemed necessary are included as permit conditions. As regards to the alternative lighting, EPD recommends the adoption of lighting Option 1, subject to mitigation measures proposed as permit conditions.

As regards to the discharge options for storm water EPD notes that the tunnel proposed to link the site to the cliffs may have an adverse environmental impact. Amongst the options considered for

discharge of stormwater, the passive protection design principle is the most reliable system. The introduction of an active element in the form of a pump would be inherently less reliable and thus increase the risk of an uncontrolled flood event, as well as increase the risk due to gas accumulation in impounding basins. Since the the risk of flooding to the site is already significant and material, both because of access considerations and for the integrity of power and process control equipment, the current passive system is the only reliable system to effectively mitigate such risk. In this respect, given that no effective alternative option is available, Option 1 is considered acceptable on the basis of overriding justification. This has also been confirmed by the Independent Safety Expert through a clarification letter dated 11th May 2010.

Compiled by: Jonathan Henwood, Environment Protection Officer, Environmental Assessment Unit, Environment Protection Directorate
Approved by: Alex Camilleri, Unit Manager, Environmental Assessment Unit, Environment Protection Directorate

Date: 12.04.2010

FINAL

Appendix 1: Minutes of Public Consultation Meeting (27/01/2007).

Minutes of meetings held with Local Council, NGO's and the Public

MEPA: Josianne Abela Vassallo (Chair); Jonathan Henwood, Fleur Bonett;

EIA Consultants: Paul Gauci, Miles Seaman;

Gasco: Paul Agius Delicata, Vince Magri (Architect);

Birzebbugia Local Council (BLC): Joseph Farrugia (Mayor), Anthony Roberts, Joseph Baldacchino, Jesmond Borg, Sarah Cuschieri, Rocco Zahra,;

Birzebbugia Environment Action Group (BEAG): John Grech.

Josianne Abela Vassallo explained the purpose of the public consultation meeting which was being presented to the public following the update of the Environmental Impact Assessment (EIA), for which submissions from the public will be accepted until 3th February 2010 on eamalta@mepa.org.mt.

Dr Paul Gauci gave an overview on the findings of the EIA and explained how a Safety and Risk Assessment was carried out due to the site falling under Seveso II Directive. He gave an explanation of the general layout focussing on the pipeline which will deliver the gas to the tanks.

The following questions made by the members of the panel and the members of the public:

Name	Question	Answer
Mr Josef Farrugia, Mayor, B'Bugia Local Council	Will the general public still have access to the coastline once the project is complete?	Paul Gauci noted that there is access all around the site. Fencing to keep trespassers out due to safety purposes shall be erected at a distance specified by Seveso II safety report.
	Will the gas transportation pass through Hal Far or Birzebbugia? Could the Local Council have a written guarantee the heavy vehicles will not pass though the village?	Paul Gauci noted that gas transportation will pass from Hal Far as shown in the layout plan of the EIS.
	Will the waste water emerging from the plant be treated before it ends up in the sea?	Paul Gauci noted that waste water will be treated before discharge as the new plant shall have its own treatment plant.
Mr Andrew Roberts, Councillor, B'Bugia Local Council	Commented that the Qajjenza plant should be dismantled as soon as possible. Also raised the concern about the smell of the residue left in gas tank and released once tanks are dismantled. Will this smell be kept to a minimum during the dismantling?	Paul Agius Delicata explained the process of cleaning tanks until they are gas free following which they can be cut up.
Mr John Grech, BEAG	Referred to the scoping meeting where it was requested who is to be responsible for the maintenance of the pipeline from oil tanking.	Paul Agius Delicata explained where the pipeline is going to pass through and that responsibility lies with Gasco.
	There was a problem of debris in the area and some caves have been breached when the quarry was being excavated.	Paul Gauci noted the issue and was clear that no caves will be breached by the proposed works.

	Is the capacity of gas at Benghisa expected to increase?	Paul Agius Delicata noted that up to 4000 metric tonnes will be stored which is nearly double that of today.
	Referred to Seveso II Directive and asked if the new plant will have an ISO Certificate since residents would want to rest their minds assured that safety criteria is being adhered to.	Miles Seamen noted that information pertaining to safety and management policies may be found in ISO Standards Section 6.4 of the EIA Update.
	In the case of an explosion emanating from oil tanking and/ or the gas depot will there not be a domino effect in view of the vicinity of the two installations?	A study was carried out, as part of the EIA Update, considering what would happen if there were an explosion and a domino effect took place in relation to Oil Tanking and Med Serv. Risk studies show that severe effects would be contained according to the plan. Mr Seaman said that it was highly improbable that this would take place and constitute a high risk being close to Oil Tanking.
	Pleased to hear that a light pollution study was also carried out in view of the sea birds on site.	Paul Gauci explained the outcome of the light assessment study.
	EIA states that the site is 2km away whereas it is actually just over 1km. Can MEPA condition ADT to impede heavy traffic passing through M'Xlokk?	MEPA noted that the inclusion of this condition will be explored.
	Has it been considered that gas be delivered to Gozo by sea rather than land?	Paul Agius Delicata noted that transport would occur by land.
	With regards to a noise study, has this been considered in conjunction with other activities in the area?	Paul Gauci noted that noise generated by the plant will have no comparison to existent levels at present. The noise of vehicles and minimal machinery will be sustained in the quarry.
	Will a contingency plan be drawn up?	Paul Agius Delicata noted that there will be two actually. One for internal use and the other for external use. These will be drawn up six months prior to finalisation.
	Has third party insurance been considered?	Paul Agius Delicata confirmed this.
	Landscaping should be introduced.	Paul Gauci noted that this may be done on the outside only and not on the inside, as dead/dry bark could catch fire easily, and would be too dangerous.
	What is the level of surface of quarry above sea level? He pointed out that when the wind is southwest the waves are high enough to enter the quarry.	Paul Gauci noted that the bottom part of the quarry is 9m above MSL.
	Will the operating heavy vehicles be entering the site one at a time?	Paul Agius Delicata commented that an on site internal road is planned just for the use of staff

		that load and unload. No queue is envisaged along the public road since the internal road is sufficient to cater for all requirements.
	Will there be some form of compensation for the residents as in the pollution pay principle?	Paul Agius Delicata referred that the query will be directed to the company.
Ms Marlene Ebejer, resident of Birzebbugia	There have been gas leaks from the present plant in the past and I reside 1.5km away from the plant. What are the health risks in a case like this?	Paul Gauci and Miles Seaman noted that the gases released would be dispersed.
	Will the plant be operating 24/7?	Paul Agius Delicata said that the plant will be working as usual daily and possibly extra in the colder months of winter.
Mr Noel Pace, resident of Birzebbugia	As regards to safety, will monitoring be carried out regularly? It is important for monitoring to be ongoing to ensure the safety of residents and anything nearby.	Paul Agius Delicata noted that monitoring shall be carried out on a daily basis.
Mrs Bonnici, resident of Birzebbugia	Where are the entrance and the exit to the site?	Paul Agius Delicata indicated the road on the way to B'Bugia on the plan.
Mrs Connie Cutajar, resident of Birzebbugia	Will there be job opportunities for B'Bugia residents to work at the new plant?	Paul Agius Delicata explained how the company shall be keeping the staff they have at present. If future vacancies should arise, it would be an asset the engage workers from the vicinity.
Fr Nicholas Pace, resident of Birzebbugia	Will the proposal have an affect on landing aircraft?	Paul Gauci noted that the risks to aircraft flying overhead was assessed in the EIS. Miles Seaman explained that airplanes never go below 500m altitude above the site, whereas debris from a BLEVE only reaches 100- 200m. Also probability of an explosion of occurring whilst a plane is landing is very remote.
Mr Jason Vella, resident of Birzebbugia	What is planned for the land to be vacated at Qajjenza?	Vince Magri noted that the Local Plan designates uses to the site.
Mr Grabiell Ebejer, resident of Birzebbugia	Where may officials be contacted in case of further information being sought?	The B'Bugia Local Council will be given additional digital copies of the EIA Update.

Final comments by Josianne Abela Vassallo were made, including that any submissions would need to reach MEPA by 3rd February 2010 on eamalta@mepa.org.mt.