

# Environmental Impact Assessment

## Screening

(According to Schedule IB of LN 114/2007, as amended)

<b>PA file no.:</b>	PA02335/07
<b>Other reference:</b>	EA00001/16
<b>Project Title:</b>	Relocation of kerbside pump and construction of ancillary office and servicing garage, car wash and landscaping.
<b>Location:</b>	Site at, Triq Burmarrad, Burmarrad.
<b>Screening date:</b>	February 2016

### 1. Description of Proposal

#### **1.1 Outline of project/development**

PA02335/07 is a planning application for the relocation of kerbside pump and construction of ancillary office and servicing garage, car wash and landscaping at, Triq Burmarrad, Burmarrad, San Pawl il-Baħar, Malta.

The proposal will consist of a fuel service station (including autogas dispensing and electric car charging), a car wash and drying area, a garage for vehicle maintenance and testing, commercial premises selling car consumables and other items, an ancillary office and staff facilities, and a store used for items relating to the garage.

Seven dispensers will be installed to dispense liquid fuels from a total of 36 hoses, with an addition of two autogas dispensers having two hoses each and two electric car charging points. There are water, sewage and electrical services along Triq Burmarrad, which is the road leading to the proposed.

#### **1.2 Site description and related considerations**

The site is located just off Triq Burmarrad, an arterial road which leads to the village of San Pawl il-Baħar and has an approximate site area of 4,045 sqm. Currently (Figure 2), the site consists of abandoned agricultural land with small quantities of waste (inert material, non-hazardous packing waste and a vehicle carcass) present towards the periphery of the site.

The site falls Outside Development Zone (ODZ) with the primary land use in the area is agricultural, with some isolated residences found within 100m of the site. The proposed development site lies approximately 120 metres north from the built-up area of Burmarrad, having mixed land uses ranging from residential, commercial, industrial/storage and transport uses. Although the site does not fall within any of ecological importance and listed archeologically sensitive areas it lies:

- Approximately 230 metres (east and south from site) from Wied ta' Għajn Riħana watercourse which is an Area of Ecological Importance (AEI) and a Level 1 Site of Scientific Importance (SSI) as per Government Notice 226 or 2006; and
- Approximately 350 metres (northwest from site) from Class A San Pawl Milqi Chapel and Catacombs as per Government Notice 829 or 1998.

Figures 1 and 2 below indicate the location of the proposed development:

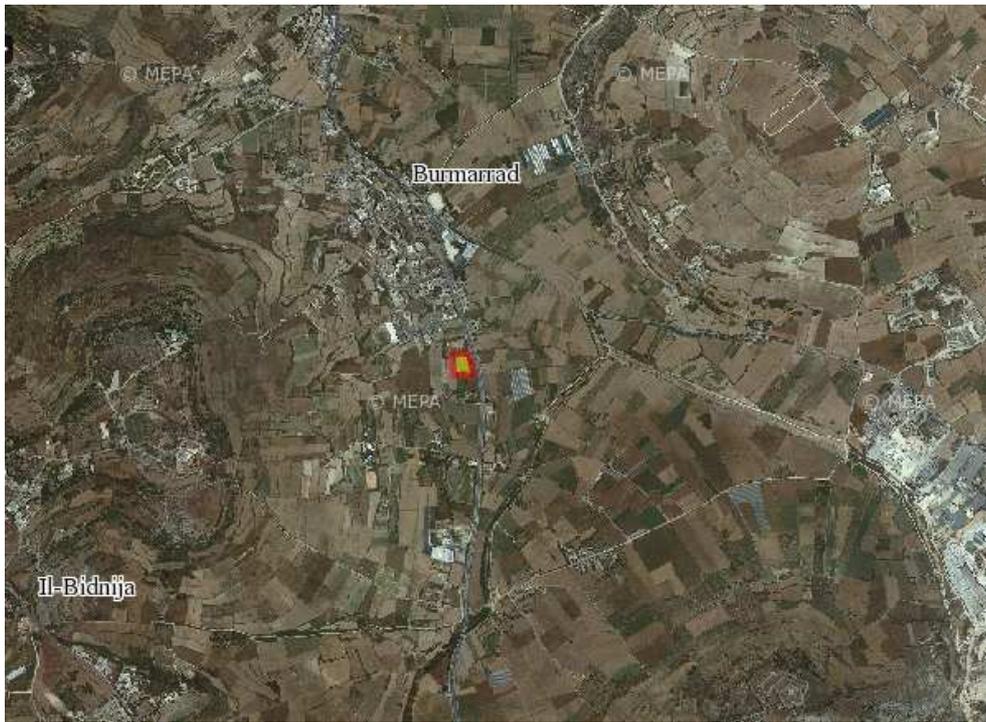


Figure 1: Location of the site earmarked for the proposed fuel station (Source: MEPA Mapserver)



Figure 2: Close-up of the site and its immediate surrounds (Source: MEPA Mapserver)



Figure 3: View into the site (Source: PDS)

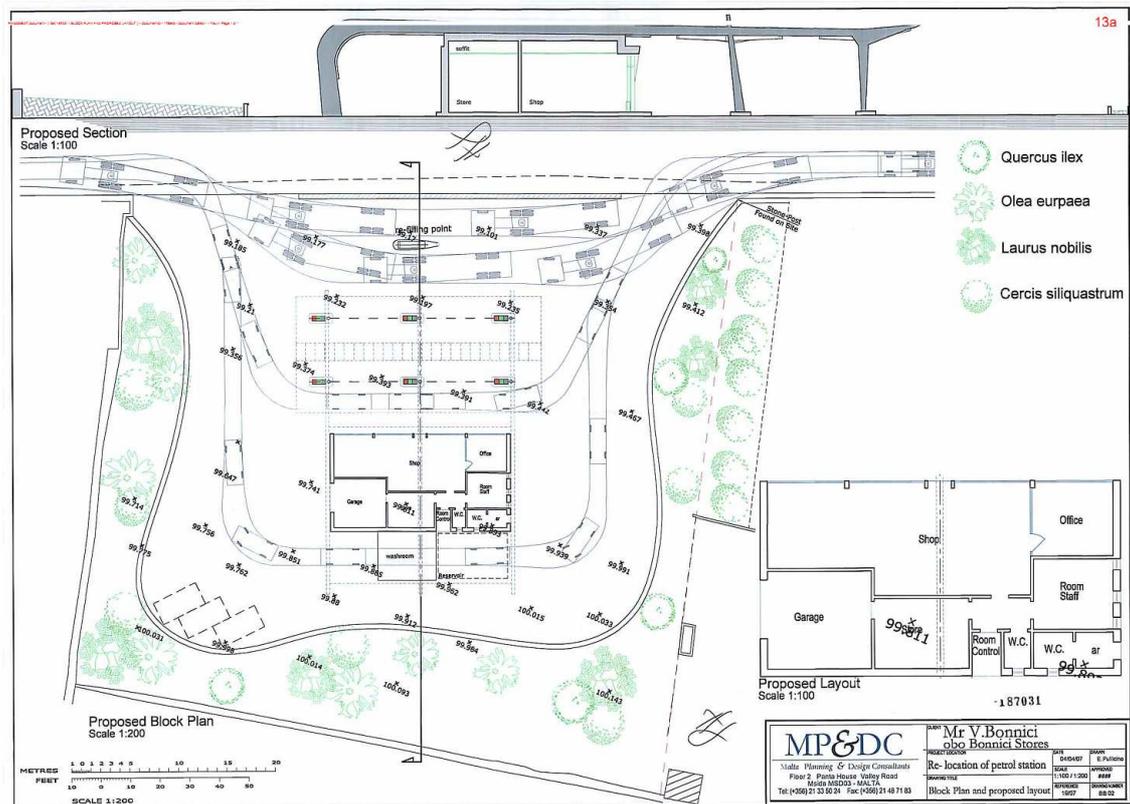


Figure 4: Proposed Ground Floor (Source: PDS)

## 2. EIA-relevant history

### 2.1 Relevant EIA/screening criteria (citations refer to L.N. 114 of 2007, as amended, except where otherwise specified):

Schedule IA, Category 7.6.2.6 of the EIA Regulations, 2007 (S.L. 504.7).

### 2.2 Version of documents used for screening:

1. PDS dated 23 December 2015 (minute 62 A in Artemis)

### 3. Screening Matrix

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
1	Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, landuse, changes in water bodies, etc)?	Yes. Site earmarked for the proposal lies outside development zone. It is currently abandoned agricultural land with small quantities of waste (inert material, non-hazardous packing waste an a vehicle carcass) towards the periphery of the site.	<p><b>Yes <input checked="" type="checkbox"/></b>    No <input type="checkbox"/>    Unclear <input type="checkbox"/></p> <p>Yes. In terms of topography and physical changes to the site, the proposed development will lead to a significant change in the landscape and visual amenity of the site.</p>	PDS Pg. 5-7, 27-28
2	Will construction or operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?	Yes. The proposal will take up approximately 4,045 sqm of land outside development zone. The proposal includes the use of masonry blocks, concrete, steel reinforcement and surfacing material during construction and water and electricity during operations.	<p>Yes <input type="checkbox"/>    <b>No <input checked="" type="checkbox"/></b>    Unclear <input type="checkbox"/></p> <p>No. The use of such resources for this individual project <i>per se</i> is not likely to have a significant impact, particularly since the amounts expected to be used are minimal.</p> <p>The energy requirements of the project are expected to be minimal thus no significant impact is envisaged.</p>	PDS Pg. 5-7. 19-20
3	Will the Project involve use, storage, transport, handling or production of substances or materials or energy, especially any resources which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?	Yes, the project will entail the transportation of fuel to the site, the storage and supply (through retail) of the same fuel. Fumes and/or vapour emissions (including VOCs) are thus expected to be emitted. Furthermore, petrol, diesel and gas (lpg) are classified as hazardous substances.	<p>Yes <input type="checkbox"/>    No <input type="checkbox"/>    <b>Unclear <input checked="" type="checkbox"/></b></p> <p>It is unclear on whether the project is likely to have significant effects on the air quality of the area, in terms of additional fumes and/or vapour emissions (including VOCs) generated, possibly being detrimental to the health of the surrounding residents. Also, the project will introduce the handling of hazardous substances and higher levels of benzene and VOCs, among others in proximity to residential areas.</p>	PDS Pg. 10, 28-29

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
4	Will the Project produce solid wastes during construction, operation or decommissioning ?	<p>Yes. During the construction phase, inert waste is expected to be generated during site clearance and excavation works. The remaining construction phase will generate nominal inert waste, concrete, steel and other materials. It is being estimated that circa 5,000 cubic metres of demolition and excavation waste will be produced.</p> <p>During the operation phase, the solid wastes created are expected to be normal municipal waste and waste oils.</p>	<p>Yes <input type="checkbox"/>    <b>No <input checked="" type="checkbox"/></b>    Unclear <input type="checkbox"/></p> <p>No. The amounts of solid wastes likely to be produced by the project during construction of the project are not likely to be significant, considering the nature of the project (petrol station). The quantities and nature of the waste produced are likely to be manageable through established waste management procedures and facilities. Furthermore, the management of waste is subject to the provisions of the Waste Regulations, 2011 (Legal Notice 184 of 2011, as amended by Legal Notice 441 of 2011, Legal Notice 384 of 2012, Legal Notice 6 of 2014.) and the Waste Management (Activity Registration) Regulations, 2007 (Legal Notice 106 of 2007).</p> <p>No significant solid wastes shall be generated during operation.</p>	PDS Pg. 19-21, 28
5	Will the project release pollutants or any hazardous, toxic or noxious substances to air?	<p>Yes. Dust may be released during site clearing and excavation. Emissions, including fumes and/or vapour emissions (including VOCs), during operation of the fuel petrol station are expected. It is further noted that petrol vapours contain benzene which is classified as a carcinogen.</p>	<p>Yes <input type="checkbox"/>    No <input type="checkbox"/>    <b>Unclear <input checked="" type="checkbox"/></b></p> <p>Unclear. Impacts associated with dust generation during the construction phase are not considered to be of major significance, given the amounts of excavations required for the proposal, and as long as the construction phase of the project respects the requirements of the Environmental Management Construction Site Regulations, 2007 (Legal Notice 295 of 2007, as amended by Legal Notice 358, Legal Notice 371 and 426 of 2007; Act XV of 2009; and Legal Notice 426 of 2012).</p> <p>During operation, the project is likely to introduce higher levels of benzene (a carcinogen) and VOCs amongst others. These emissions are directly related to the operation of the fuel filling service station. The significance of the impacts arising from increased levels of benzene and VOC pollutants on residences in proximity to the site is unclear.</p>	PDS Pg. 28-29
6	Will the Project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	<p>Yes. The project will be the source of noise and vibration during both the construction and the operation phase of the project. Noises and vibration during operation are expected to result from the operation of the fuel pumps, car wash, commercial facility and storage area.</p>	<p>Yes <input type="checkbox"/>    No <input type="checkbox"/>    <b>Unclear <input checked="" type="checkbox"/></b></p> <p>It is unclear whether the noise and vibration impacts will be significant. The project will result in the introduction of new machinery and activity in an area that is not currently characterised by this type of activity, and hence the impact from the net increase in environmental noise in the area and on the immediate surrounding</p>	PDS Pg. 28-29

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
			uses is considered to be unclear.	
7	Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	Yes. There is a risk of surface contamination of land and water, including groundwater due to fuel spillages and runoff, as well as in the event of any leakage from the storage tanks.	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b>  Unclear. The potential impacts resulting from the proposal are not known. Whilst noting that the proposal involves a potential high contamination activity; the PDS indicates that risks of surface contamination due to fuel spillage may be adequately mitigated through impermeable surfacing, surface water and wastewater management infrastructure.	PDS Pg. 29
8	Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?	Yes. Mainly risks during operation due to potential leaks, emissions, polluted runoff from the site, and other worst-case scenarios such as fires or explosions.	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b>  It is unclear whether the project is likely to result in significant impacts vis-à-vis the existing baseline situation. The project will introduce increased risks vis-à-vis fuel leaks, and the emission of benzene, and VOCs).	/
9	Will the Project result in social changes for example, in demography, traditional lifestyles, employment?	Yes, the project will result in the increased number of people and vehicles stopping in the area to service their cars, and access the commercial service area.  On the other hand, no changes in demography are expected given the nature of the proposed development.	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b>  The project is not likely to result in significant social changes. It is however noted that the project may contribute to a number of environmental impacts which are considered to be unclear at this stage. Replies to Questions 5 and 6 refer.	/
10	Are there any such factors which should be considered such as the consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality?	Yes. The introduction of a fuel station and associated facilities in an area which is still relatively undeveloped is likely to introduce eventual pressures for further development in the area.	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b>  The longer-term implications of the proposal are unclear and would need to be investigated further.	/
11	Are there any areas on or around the location which are protected under international or national or local legislation for their ecological,	No formally protected areas for ecological, scenic or landscape, or cultural value are present on site. However, it is noted that the site falls in an otherwise predominantly undeveloped area located outside the development zone (ODZ), where there is a general presumption against new built	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b>  The impacts envisaged are unclear. The proposed project consists of the take up of a considerable amount of undeveloped land falling outside the committed development zone, in a prominent location, located along a main road (Triq Burmarrad).	/

	<b>Issues to be considered</b>	<b>Relevant constraints, environmental considerations &amp; potential impacts</b>	<b>Is any significant effect envisaged?</b>	<b>Document reference</b>
	landscape, cultural or other value, which could be affected by the project?	development.		
12	Are there any areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other water bodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?	Yes. Although the proposal is located approximately 230 metres (east and south from site) from Wied ta' Ghajn Rihana watercourse which is an Area of Ecological Importance (AEI) and a Level 1 Site of Scientific Importance (SSI) as per Government Notice 226 of 2006 and approximately 350 metres (northwest from site) from Class A San Pawl Milqi Chapel and Catacombs as per Government Notice 829 of 1998. Reply to Question 13 refers.	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b> Replies to Questions 7 and 11 refer.	/
13	Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?	Reply to Question 12 refers.	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b> Replies to Questions 7 and 11 refers.	/
14	Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	No. The site is not a formally designated groundwater protection zone.	Yes <input type="checkbox"/> <b>No <input checked="" type="checkbox"/></b> Unclear <input type="checkbox"/> No significant impacts are envisaged in terms of impacts on protected waters. This however does not exonerate the applicant from adopting all the necessary measures to seal the site from the surroundings, and adopt runoff filtering measures accordingly.	/
15	Are there any areas or features of high landscape or scenic value on or around the location which could be effected by the project?	No known areas or features of particular landscape value are located in or around the site. However, the proposed development is located in an open undeveloped land located outside the development zone (ODZ). In addition, the site location is quite prominently	<b>Yes <input checked="" type="checkbox"/></b> No <input type="checkbox"/> Unclear <input type="checkbox"/> Yes. The proposal may have significant impacts on visual amenity and on the overall landscape context given that it shall consist of the take up of a sizeable tract of land falling outside the development zone.	PDS Pg. 7, 27

	<b>Issues to be considered</b>	<b>Relevant constraints, environmental considerations &amp; potential impacts</b>	<b>Is any significant effect envisaged?</b>	<b>Document reference</b>
		located along a main road (Triq Burmarrad).		
16	Are there 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?	Yes. The site lies along Triq Burmarrad, which is frequently used by commuters on a daily basis.	Yes <input type="checkbox"/> <b>No <input checked="" type="checkbox"/></b> Unclear <input type="checkbox"/> No significant impacts on recreational areas are envisaged, other than indicated in Question 17 below.	/
17	Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	Yes. The site lies along Triq Burmarrad, a main road characteristic of congestion especially during rush hour.	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b> The potential contribution of the fuel station to traffic load along Triq Burmarrad is unclear and would need to be investigated further.	/
18	Is the project in a location where it is likely to be highly visible to many people?	Yes. The project is located outside the development zone, in a part which is still relatively undeveloped, and along a main road (Triq Burmarrad). Reply to Question 15 above refers.	<b>Yes <input checked="" type="checkbox"/></b> No <input type="checkbox"/> Unclear <input type="checkbox"/> Refer to Question 15.	/
19	Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?	Yes. Although the site does not fall within any listed archeologically sensitive areas it lies: i. 220 metres (northwest from site) from Class A scheduled Buffer for Chapel and Catacombs as per Government Notice 829 of 1998; ii. 250m (northwest from site) from Class A Punico-Roman Villa as per NPI card NW_0116; iii. 250m (south from site) from Grade 2 scheduled Letter Box as per Government Notice 829 of 2007; iv. 320m (northwest from site) from Class A scheduled SAI for San Pawl Milqi as per Government Notice 829 of 1998; v. 320m (northwest from site) from Grade 1 scheduled San Pawl Milqi Chapel as per Government Notice 829 of 1998; vi. 500m (northeast from site)	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b> Unclear. Although it is unlikely that the proposed development will directly impact the identified scheduled items, the site still seems to be relatively undisturbed. Therefore there may still be undiscovered remains. The area surrounding the site has already revealed a number of archaeological sites and the likelihood of new discoveries is possible. Thus, the SCH are to be consulted for assessment and for any monitoring conditions that may be included.	Internal Consultation

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
		from Class A Neolithic Temple as per NPI card NW_0115; vii. 530m (north from site) from Grade 2 scheduled Letter Box as per Government Notice 829 of 2007; and viii. 550m (northwest from site) from Class A tal-Qaghdi Temple, SAI and Buffer and Class B Hypogea as per Government Notice 829 of 2007.		
20	Is the project located in a previously undeveloped area where there will be loss of greenfield land?	Yes. The proposed project consists of the take up of undeveloped land falling outside the committed development zone.	<b>Yes <input checked="" type="checkbox"/></b> No <input type="checkbox"/> Unclear <input type="checkbox"/> The proposal shall lead to unnecessary and excessive formalisation of land take-up ODZ that is not considered to be acceptable in a predominantly open and rural area. In this regard, impact is considered to be significant.	/
21	Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	Yes. The proposed development is located lies approximately 120 metres north from the built-up area of Burmarrad (having mixed land uses ranging from residential, commercial, industrial/storage and transport uses).  The area and its surroundings are also considered to be predominantly agricultural.	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b> The direct and indirect impacts of the proposed project on both the residential and agricultural areas are considered to be unclear given the nature, scale and location of the project.  The project may also lead to air quality and noise impacts, resulting from the introduction of hazardous substances, as well as due to visual intrusion and the commitment of the currently undeveloped open land nearby for development.	/
22	Are there any plans for future land uses on or around the location which could be affected by the project?	Yes. Site earmarked for the proposal is currently abandoned agricultural land with small quantities of waste (inert material, non-hazardous packing waste an a vehicle carcass) towards the periphery of the site. Given that the site is outside development zone (ODZ); a general presumption against such development is envisaged.	<b>Yes <input checked="" type="checkbox"/></b> No <input type="checkbox"/> Unclear <input type="checkbox"/> Reply to Question 1 refers. This consideration is best addressed directly as a key consideration in the mainstream development control process.	/
23	Are there any areas on or around the location which are densely	No, within 100 metres of the site there are some isolated residences. Additionally, The proposal lies approximately 120 metres north from the built-up	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b> The direct and indirect impacts of the proposed project on both the residential and agricultural areas are considered to	/

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
	populated or built up, which could be affected by the project?	area of Burmarrad (having mixed land uses ranging from residential, commercial, industrial/storage and transport uses). The area and its surroundings are also predominantly agricultural, and the site itself is abandoned agricultural land.	be unclear given the nature, scale and location of the project.	
24	Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities which could be affected by the project?	No such sensitive land uses are located in proximity to the proposed development.	Yes <input type="checkbox"/> <b>No <input checked="" type="checkbox"/></b> Unclear <input type="checkbox"/> No significant impacts are envisaged.	/
25	Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?	Yes. The site and its immediate surroundings are agricultural land.	<b>Yes <input checked="" type="checkbox"/></b> No <input type="checkbox"/> Unclear <input type="checkbox"/> Replies to Questions 20 - 23 refer. This consideration is best addressed directly as a key consideration in the mainstream development control process.	/
26	Are there any areas on or around the location which have already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?	No such areas are known of.	Yes <input type="checkbox"/> <b>No <input checked="" type="checkbox"/></b> Unclear <input type="checkbox"/> Not relevant.	/

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
27	Is the project location susceptible to earthquakes, or subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	Yes. The Maltese archipelago is susceptible to earthquake activity; however the likelihood of the site in question being significantly affected by tremors is slim.	Yes <input type="checkbox"/> <b>No <input checked="" type="checkbox"/></b> Unclear <input type="checkbox"/> No significant environmental impacts are envisaged.	/

#### **4. EIA Screening Conclusion and recommended way forward**

##### **4.1 EIA screening conclusion**

The above EIA screening matrix indicates that the proposed development would qualify for an EIA as per Schedule IA, Category 7.6.2.6 of the EIA Regulations, 2007 (L.N. 114 of 2007, as amended), which would need to address the following aspects:

- Impacts on land use, visual amenity, and the rural landscape;
- Land contamination;
- Impacts on the amenity of the adjacent residential areas vis-à-vis the establishment of a hazardous activity in vicinity to a residential area/building;
- Potential impacts on surrounding fauna and/or flora;
- Effects of the proposal on air quality and noise, including the effects on human populations and public health;
- Impacts due to the increased traffic flows on Triq Burmarrad;
- Potential cultural heritage impacts;
- Risks to the environment given the storage and retail of hazardous substances; and
- Cumulative impacts on the surrounding area of influence.

In the light of the above, it is confirmed that:

1. The proposed development qualifies for an EIA (EPS); and
2. The envisaged impacts of the proposal are such that the development cannot be exempted from such EIA requirement.