

Environmental Impact Assessment

Screening

(According to Schedule IB of S.L. 549.46)

PA file no.:	PA 03347/16
Other reference:	EA00024/16
Project Title:	Proposed construction of petrol station and auto repair and maintenance centre instead of an existing open storage yard.
Location:	Site at L-Andar Ta' Fuq, Triq Valletta, Mqabba, Malta
Screening date:	July 2016

1. Description of Proposal

1.1 Outline of project/development

PA 03347/16 is a pre-screening application for the construction of petrol station and auto repair and maintenance centre instead of an existing open storage yard at L-Andar Ta' Fuq, Triq Valletta, Mqabba, Malta.

The proposal shall consist of an underground fuelling installation with six pump machines centrally located within a large open area. The fuel station will offer other services such as a car wash service, showroom, and a repair and maintenance centre.

The site is currently permitted as an open yard covered by Permit PA05616/01 used for the operation of a crusher, and the production and storage of concrete block work. The floor bed consists of a levelled concrete platform.

There are water, sewage and electrical services on site.

1.2 Site description and related considerations

The site, which lies within an approved open yard along Triq Valletta, has an approximate site area of 2,600 sqm and is located on a main road which leads to the village of Mqabba and Żurrieq. Currently (Figure 2), the floor bed consists of a levelled concrete platform used to store concrete blocks.

The development in the surrounding vicinity is mainly related to quarrying, the construction industry and other storage related activities.

The site falls Outside Development Zone (ODZ) and lies approximately 600 metres from the nearest built-up area. Furthermore, the site does not fall within any listed ecological or archeologically sensitive areas however it lies: (i) on the border of a Category E archaeological buffer zone for a 2nd or 3rd Century BC tomb; (ii) approx. 200 meters from the Drinking-Water Safeguard Zone as identified by the Malta Resources Authority (MRA) under the Water Policy Framework Regulations (Legal Notice 194 of 2004); and (iii) approx. 300 metres from L-Ajruport ta' Ħal-Luqa Bird Sanctuary (as per Legal Notice 41 of 2003, which in this case is only a nominal environmental constraint, as the purpose of airport safety, and is not really related to environmental protection).

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: PA Mapserver)



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



Figure 3: View into the site

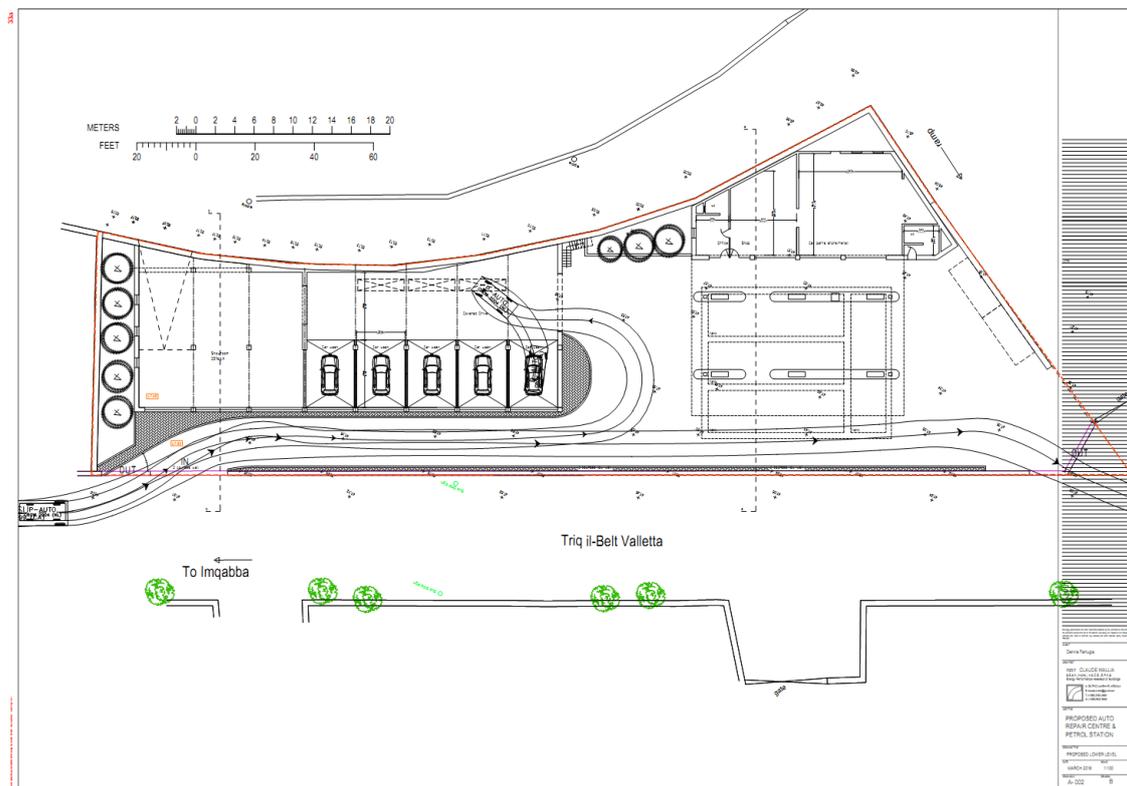


Figure 4: Proposed Ground Floor

2. EIA-relevant history

2.1 **Relevant EIA/screening criteria** (citations refer to S.L. 504.79, as amended, except where otherwise specified):

At EPD screening stage (Minute 13 in file), the proposed development was deemed to qualify for an EPS as per Schedule IA, Category 7.6.2.6 of the EIA Regulations, 2007 (S.L. 549.46) and thus the submission of a Project Description Statement (PDS) was required.

PA 5616/01: To sanction the siting of a mobile crusher (softstone) and blockwork producing machine in an existing quarry at Site at I-Andar Ta' Fuq, Triq Valletta, Ffal Kirkop was subject to an EIA (EPS).

2.2 Version of documents used for screening:

1. PDS dated 5th June 2016 (PA/03347/16/Doc. 43a)
2. Plans and Drawings (PA/03347/16/Doc. 33)

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)?	<p>No.</p> <p>The whole site is already committed as an open storage yard used for the operation of a crusher, and the production and storage of concrete block work [covered by PA/05616/01]. The floor bed consists of a levelled concrete platform covering the entire site area.</p> <p>Furthermore, PA/03347/16/Doc. 33 shows that planned excavations are minimal.</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <hr/> <p>No significant environmental impacts are envisaged which will cause physical changes to the site given the present use.</p>	PDS Pg. 5
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?	<p>Yes.</p> <p>The proposal will take up approximately 3,222 m² of land outside development zone, which has already been committed for use as an open storage yard through PA/05616/01.</p> <p>The proposal also includes the use of masonry blocks, concrete, steel reinforcement and surfacing material during construction and of water and electricity during operations.</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <hr/> <p>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 Pgs. 12-13
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	<p>Yes.</p> <p>The project will entail the transportation of fuel to the site, the storage and supply (through retail) of 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>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <hr/> <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. Also, the project will introduce the handling of hazardous substances and higher levels of benzene and VOCs, among others.</p>	PDS Pg. 13-14

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
	perceived risks to human health?			
4	Will the Project produce solid wastes during construction, operation or decommissioning ?	<p>Yes.</p> <p>During excavation and construction solid waste will be generated which will include steel, stone, concrete, and other materials.</p> <p>During the operation phase, the solid wastes created are expected to be normal municipal waste and waste oils. Waste arising from the car wash and the underground store are not known at this stage.</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <hr/> <p>No.</p> <p>The amount of solid waste likely to be produced by the project during construction is 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, as amended and the Waste Management (Activity Registration) Regulations, 2007.</p> <p>No significant solid wastes shall be generated during operation. Moreover, all waste generated will be stored and recycled in the adjacent plant.</p>	PDS Pg. 13-14
5	Will the project release pollutants or any hazardous, toxic or noxious substances to air?	<p>Yes.</p> <p>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"/> Unclear <input checked="" type="checkbox"/></p> <hr/> <p>Unclear.</p> <p>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, as amended. Furthermore, the PDS states that the site should be cleaned often and stockpiling is to be kept to a minimum.</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 is unclear.</p>	PDS Pg. 15, 21
6	Will the Project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	<p>Yes.</p> <p>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 services noise, car parking,</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <hr/> <p>Unclear.</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</p>	PDS Pg. 19-20

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
		filling station activities, and traffic movement within the proposed site.	of activity, and hence the impact from the net increase in environmental noise in the area and on the immediate surrounding 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. The proposal lies approx. 200 meters from the Drinking-Water Safeguard Zone as identified by the Malta Resources Authority (MRA) under the Water Policy Framework Regulations, 2004 (Legal Notice 194 of 2004). 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"/> Unclear <input checked="" type="checkbox"/> 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 as follows: (i) filling of tanks to a maximum of 95% capacity; and (ii) safety measures for the filling of tanks	PDS Pg. 14
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"/> Unclear <input checked="" type="checkbox"/> Unclear. 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"/> Unclear <input checked="" type="checkbox"/> Unclear. 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, such as aqueous or gaseous spillages and emissions, which are considered to be unclear at this stage. Replies to Questions 5, 6 and 7 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	Yes. The introduction of a fuel station and associated facilities in an area may introduce eventual pressures for further development in the area. This may have an impact on the surrounding agricultural land. However, much of the area is also characterised by industrial activities, namely quarries.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> Unclear. The longer-term implications of the proposal are unclear and would need to be investigated further.	/

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
	in the locality?			
11	Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project?	Yes The site lies approx. 300 metres from L-Ajruport ta' Hal-Luqa Bird Sanctuary (as per Legal Notice 41 of 2003, which in this case is only a nominal environmental constraint, as the purpose of airport safety, and is not really related to environmental protection).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> <hr/> No significant environmental effects are envisaged given that the site and its immediate surroundings are already committed as an industrial site, namely quarry related, thus avoiding uptake of pristine or protected land.	/
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?	Reply to Question 11 refers.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> <hr/> Reply to Question 11 refers.	/
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 11 refers.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> <hr/> Reply to Question 11 refers.	/
14	Are there any inland, coastal, marine or underground waters on or around the location which	Reply to Question 7 refers.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> <hr/> Unclear. Reply to Question 7 refers.	/

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
	could be affected by the project?			
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 outside the development zone (ODZ) with a number of plots of agricultural land present in the vicinity. In addition, the site location is quite prominently located along a main road (Triq Valletta).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No. Although the development may affect the visual amenity of the site due to its location on the main road and the presence of agricultural land, any potential significant effects are unlikely due to the nature of the uses on the proposed development site and its surroundings. Furthermore, the site is currently a flat storage yard and the building raised will be slightly over one storey.	/
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 Valletta, which is frequently used by commuters on a daily basis.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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 Valletta, which is a main road which is frequently used by commuters.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> 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 (Triq Valletta). Reply to Question 15 above refers.	Yes <input type="checkbox"/> No <input checked="" 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 on the borderline of a Category E archaeological buffer zone for a 2nd or 3rd Century BC tomb	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> Unclear. Given that the site lies close to an archaeological constraint, the archaeological potential of the site in question cannot be excluded. In this respect, the Superintendent for Cultural Heritage should be consulted.	/

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
20	Is the project located in a previously undeveloped area where there will be loss of greenfield land?	No. While the site location is located ODZ, the site is also currently used as an open storage yard.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> <hr/> No. The proposal shall not lead to any significant impacts considering the current uses of the site.	/
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 site lies directly adjacent to agricultural land, as well as a number of quarries and other quarry related uses. Furthermore, the proposed development is located approximately 600 metres from the nearest built-up area.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> <hr/> While the impacts on quarrying are expected to be negligible, the direct and indirect impacts of the proposed project on commuters, workers, 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.	/
22	Are there any plans for future land uses on or around the location which could be affected by the project?	No. The site is already committed as an open storage yard. Furthermore, the proposal seems unlikely to affect any other proposals in the area.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> <hr/> No significant impact is envisaged.	/
23	Are there any areas on or around the location which are densely populated or built up, which could be affected by the project?	No The site is situated on a main road (Triq Valletta) and adjacent to agricultural land, as well as a number of quarries. However, the proposed development is located approximately 600 metres from the nearest built-up residential area.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> <hr/> No The distance of the proposal from the built-up residential area (600m) will likely mitigate any negative impacts caused by the development.	/
24	Are there any areas on or around the locations 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"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> <hr/> No significant impacts are envisaged.	/

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
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. Parts of the site's immediate surroundings are agricultural land. It also lies 200m from a Drinking-Water Safeguard Zone (Legal Notice 194 of 2004).	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> <hr/> Reply to Question 7 refers.	/
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?	Yes. The site itself is an open storage yard with a number of industrial activities, mostly related to the quarrying industry are present in the vicinity of the site,	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> <hr/> The impacts of the development are not expected to intensify the already present impacts.	/
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"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> <hr/> 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 (S.L. 549.46), which would need to address the following aspects:

- Land contamination;
- 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 Valletta;
- 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.

4.2 Screening Disclaimer

The above screening results, the ensuing conclusions and recommendations are without prejudice to any required changes or updates should the development proposal be eventually modified or should the information/assumptions provided turn out to be incorrect. Any deviations of the proposal from this submission would need to be re-assessed and the merits of this screening would need to be re-opened.