

Environmental Impact Assessment

Screening

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

PA file no.: PA 05477/16

Other reference: EA 00037/16

Project Title: Proposed Fuel Service Station, including ground floor Class 4B shop, Tyre Service Garage, VRT Garage, ATM, Car Wash Facilities, storage at first floor level and installation of PV panels at roof level.

Location: Site at, Triq Ħal-Qormi, Luqa, Malta

Screening date: January 2017

1. Description of Proposal

1.1 Outline of project/development

PA 05477/16 is a development applicant for the construction of a fuel service station, a class 4b retail outlet, tyre service garage, VRT garage, ATM, and car washing facilities at Triq Ħal-Qormi, Luqa, Malta.

The proposal will consist of three levels, an underground level used for separators, fuel tanks and water reservoirs. The ground floor level will include an ATM machine, fuel pumps, gas filling station, electrical car charging facility, retail outlet, tyre service garage, VRT garage, landscaped area, and parking bays. The first floor will consist of the class 4b shop and a storage area.

There are water, sewage and electrical services along Triq Ħal-Qormi, which is the road leading to the proposed development.

1.2 Site description and related considerations

The site has a site area of approximately 3000m² and lies along Triq Ħal-Qormi, an arterial road between Qormi and Luqa (Figure 1). Currently (Figure 2), the site consists of a number of abandoned fields along with a dilapidated agricultural room.

Developments in the surrounding vicinity include industrial, residential, and agricultural uses. The East of the site is characterised by arable land and agricultural features, while the Luqa Development Zone is located to the site's South-Eastern side. Industrial activity dominates the North and West of the site, with the airport located to South-West of the site.

The site falls Outside Development Zone (ODZ), lies adjacent to the Ħal-Luqa industrial area and approximately 300 metres from the residential area of Ħal-Luqa. Furthermore, the site lies: (i) within a Drinking-Water Safeguard Zone as identified by the Malta Resources Authority (MRA) under the Water Policy Framework Regulations (Legal Notice 194 of 2004); and (ii) approx. 250 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, for the purpose of airport safety, and is not really related to environmental protection).



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 surroundings (Source: PA Mapserver)



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

2. EIA-relevant history

2.1 Relevant EIA/screening criteria (citations refer to S.L. 549.46, as amended, except where otherwise specified):

At ERA screening stage (Doc. PA/05477/16/21A), the proposed development qualified under per Schedule IA, Category 7.6.2.6 (*Construction of a new fuel servicing station*) of the EIA Regulations, 2007 (S.L. 549.46) and thus the submission of a Project Description Statement (PDS) was required.

It should be noted that ERA's position (Doc. PA 5547/16/26) is concerned with regards to the proposal since the overall development includes a new commercial commitment of an excessive size encroaching beyond the development zone boundary onto a rural area. ERA considers that there is no valid justification for the further loss of undeveloped rural land and associated environmental impacts to accommodate such use.

2.2 Version of documents used for screening:

1. PDS dated 1st December 2016 (Doc. PA/05547/16/24);
2. ERA memo dated 17 October 2016 (Doc. PA/05547/16/21);
3. Plans in Doc. PA/05547/16/26

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>Yes.</p> <p>Site earmarked for the proposal mainly consists in a number of abandoned fields along with a dilapidated agricultural room outside the development zone.</p> <p>The proposed development involves the change in land use from abandoned agricultural land into a fuel filling station with ancillary facilities.</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unclear <input type="checkbox"/></p> <hr/> <p>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 due to change in land use outside development zone.</p> <p>The proposal shall lead to unnecessary and excessive formalisation of land ODZ leading to further loss of undeveloped rural land that is not considered acceptable from an environmental point of view. In this regard, the impact is considered to be significant.</p>	PDS Pg. 10, 30
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. The proposal will take up approximately 3,000 m² of land and excavate 1,500m³ of soil outside development zone. The proposal includes the use of masonry (<i>franka</i> stone) blocks, concrete, steel reinforcement and surfacing material during construction and 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 water, material, and energy resources for this individual project <i>per se</i> is not likely to have a significant impact.</p>	PDS Pg. 10, 31
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?	<p>Yes, the project will entail the transportation, storage and handling of fuel on site, thus leading to the emission of fumes and vapours (VOCs). Furthermore, petrol, diesel and gas (LPG) are classified as hazardous substances.</p> <p>Storage of effluent from ablution facilities could lead to groundwater contamination in the surroundings.</p> <p>Storage of all types of waste (including but not limited to tyres) shall be generated from activities proposed on site.</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <hr/> <p>It is unclear as to 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, and the handling of hazardous substances (such as benzene), possibly being detrimental to the health of the surrounding residents located approximately 300 metres from the residential area of Hal-Luqa.</p>	PDS Pg. 20-22

	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.</p> <p>During the construction phase, inert waste is expected to be generated during the site clearing and excavation works. The remaining construction phase will generate nominal inert waste, concrete, steel and other materials. It is being estimated that circa 3,200m³ of demolition and excavation waste will be produced.</p> <p>During the operation phase, normal municipal waste will be generated, together with waste arising from the proposed activities on site.</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <hr/> <p>No. The amount of solid waste likely to be generated by the project during construction is not likely to be significant considering the nature of the project (fuel station). The quantities and nature of the waste can be managed through established waste management procedures and facilities. Furthermore, the management of waste is subject to the provisions of the Waste Regulations, 2011, as amended, the Waste Management (Activity Registration) Regulations, 2007 (Legal Notice 106 of 2007). Moreover, soil will be deposited at a site approved by the Department of Agriculture.</p> <p>No significant solid wastes shall be generated during operation.</p>	PDS Pg. 29-32
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.</p> <p>During operation, emissions, including fumes and/or vapour emissions (including VOCs), from fuel are expected.</p> <p>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. Impacts associated with dust generation during the construction phase are not considered to be of major significance, considering the mitigation measures (e.g. wetting of dust laden tracks and regular washing of entrance routes) outlined in the PDS, 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 Notices 358, 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. 33-34
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 (site excavation) and the operational phases (operation of fuel pumps, commercial facility, storage area) of the project.</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <hr/> <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</p>	PDS Pg. 36

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
			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?	<p>Yes.</p> <p>The proposal lies within 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.</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <p>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) fuel and oil interceptors; (ii) leakage detection systems; (iii) geotextile covering over the ground area; and (iv) concrete flooring.</p>	PDS Pg. 35
8	Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?	<p>Yes. During the construction phase there is the risk of dust generation, engine exhaust, accidental spillage of chemicals/oils, vibrations and noise.</p> <p>Operational phases include risks to (i) release of airborne organic compounds such as benzene; (ii) potential leaks, emissions, polluted runoff from the site; and (iii) storage of highly inflammable and explosive substances.</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <p>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).</p>	/
9	Will the Project result in social changes for example, in demography, traditional lifestyles, employment?	<p>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.</p> <p>On the other hand, no changes in demography are expected given the nature of the proposed development.</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <p>The project is not likely to result in significant social changes.</p>	/
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	<p>Yes.</p> <p>Although the area opposite to the said site is an industrial estate, the introduction of a fuel station and associated facilities in the area is likely to introduce eventual pressures for further development along this side of Triq Hal Qormi, which is still relatively uncommitted to</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <p>The longer-term implications of the proposal are unclear, and potentially significant.</p>	/

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
	cumulative impacts with other existing or planned activities in the locality?	development.		
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?	<p>Yes.</p> <p>The site lies 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). It is however noted that the site falls outside development zone (ODZ) where there is a general presumption against new built development and urban sprawl.</p> <p>The proposal also lies within 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.</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <p>The impacts envisaged are unclear. The proposed project consists of the take up of considerable amount of undeveloped land falling outside the committed development zone boundary.</p> <p>With regards to impacts on groundwater, reply to Question 7 refers.</p>	/
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?	No. There are no known areas which are important or sensitive for reasons of their ecology.	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <p>No significant impacts are envisaged.</p>	/
13	Are there any areas on or around the location which are used by	No. There are no known areas which are used by protected, important or sensitive species of fauna or flora.	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <p>No significant impacts are envisaged.</p>	/

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
	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?			
14	Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	Replies to Question 7 and 11 refer.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> Replies to Question 7 and 11 refer.	/
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 on agricultural land located outside the development zone (ODZ). In addition, the site location is quite prominently located along a main road (Triq Ħal-Qormi).	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unclear <input type="checkbox"/> 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.	/
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 Ħal-Qormi, which is frequently used by commuters on a daily basis.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> The potential contribution of the fuel station and its associated facilities to traffic load along Triq Ħal-Qormi is unclear and would need to be investigated further.	/
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 Ħal-Qormi, which is frequently used by commuters on a daily basis and is susceptible to congestion leading to a degradation in air quality.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> The potential contribution of the fuel station and its associated facilities to traffic load along Triq Ħal-Qormi 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 along a main road (Triq Ħal-Qormi). The proposed development is likely to be conspicuously visible from the road.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unclear <input type="checkbox"/> 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	/

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
			development zone.	
19	Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?	No. There are no known areas or features of historic or cultural importance on or around the location.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are envisaged, however the Superintendence for Cultural Heritage (SCH) may still need to be consulted.	/
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 3,000m ² undeveloped greenfield (ODZ) land.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unclear <input type="checkbox"/> The proposal shall lead to unnecessary and excessive site formalisation and land uptake outside the development zone that is not considered to be acceptable. 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. Developments in the surrounding vicinity include industrial, residential, and agricultural uses. The East of the site is characterised by arable land and agricultural features, while the Luqa Development Zone is located to the site's South-Eastern side. Industrial activity dominates the North and West of the site, with the airport located to South-West of the site. The site falls Outside Development Zone (ODZ), lies adjacent to the Ħal-Luqa industrial area and approximately 300 metres from the residential area of Ħal-Luqa.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> 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. The site is currently zoned as ODZ in the relevant land use plans, for the purpose of safeguarding the remaining rural enclave against further urban sprawl. This zoning would be jeopardised by the proposed development.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unclear <input type="checkbox"/> The proposal is in direct conflict with the current local plan zoning, prejudicing the effectiveness of such zoning as an environmental safeguard.	/
23	Are there any areas on or around the location which are densely populated or built up, which could	Yes. The site falls Outside Development Zone (ODZ), lies close to the Ħal-Luqa industrial area and approximately 300 metres from the residential area	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> 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.	/

	Issues to be considered	Relevant constraints, environmental considerations & potential impacts	Is any significant effect envisaged?	Document reference
	be affected by the project?	of Hal-Luqa.		
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"/> No <input checked="" type="checkbox"/> 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 part of its immediate surroundings are agricultural land. The proposal also lies within 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 checked="" type="checkbox"/> No <input type="checkbox"/> Unclear <input type="checkbox"/> Replies to Questions 1, 7, 15, 20, and 21 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"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are envisaged.	/

	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"/> No <input checked="" type="checkbox"/> 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 (S.L. 549.46), 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;
- 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 Ħal-Qormi;
- Risks to the environment given the storage and retail of hazardous substances; and
- Cumulative impacts on the surrounding area of influence.

It is further noted that, although the above results qualify the proposal for further EIA studies, this requirement is secondary to **ERA's overriding objection** to the development, which encroaches beyond the development zone boundary onto a rural area. ERA considers that there is no valid justification for the further loss of undeveloped rural land and associated environmental impacts to accommodate such commercial use. There is also significant concern regarding the cumulative environmental impact caused by the numerous ad hoc proposals for petrol stations currently being proposed on ODZ land. An ad hoc EIA for this proposal per se would still leave this strategic-level environmental concern unresolved. .

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

1. The proposed development qualifies for an EIA (EPS);
2. The potential impacts of the proposal are such that the development cannot be exempted from such EIA requirement; and
3. The EIA requirement is without prejudice to the overall objection to the proposal from an environmental point of view, as the EIA would not help resolve the main issues affecting the acceptability of the proposal.

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.