

**Environment Resources Authority (ERA)
Report on Environmental Planning Statement (EPS) – January 2018**

PA05477/16: 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

SITE AT, TRIQ HAL QORMI, LUQA, MALTA

1. INTRODUCTION

1.1 Description of the site and proposed development

PA 05477/16 is a development application 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, 7 fuel tanks (30,000 litres each) and water reservoirs. The ground floor level will include an ATM machine, 8 fuel pumps, gas filling station, 3 electrical car charging stations, a landscaped area, and 8 parking bays. The first floor will also consist of the class 4b shop, a storage area, a tyre service garage and a VRT garage, which will total about 200m².

The total built-up area will be of approximately 3000m² with a site area 4,816 m². Currently, the site consists of a number of abandoned fields along with a dilapidated agricultural room and lies along Triq Ħal-Qormi, an arterial road between Qormi and Luqa. 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.

1.2 Relevant case history

ERA's original memo (Doc. PA 5547/16/26) noted that, due to the take-up of undeveloped land beyond the development zone boundary, the proposal was objectionable from an environmental point of view. The proposal also qualified for the submission of an PDS in accordance with Schedule IA, Category II Section 7.6.2.6 (*Construction of a new fuel servicing station*) of the then Environmental Impact Assessment Regulations, 2007 (S.L. 549.46). It was made clear that this requirement was secondary to ERA's overriding objection to the development

Notwithstanding this objection, the applicant, at his discretion, opted to proceed with submission of PDS. Following the PDS submission, ERA carried out detailed EIA Schedule 1B Screening, which identified various potential impacts, as well as confirming the uptake of undeveloped land located beyond committed development zones as the primary impact. In this regard, the screening confirmed the earlier concerns whilst noting that the proposal could not be exempted from the conduction of an EIA.

The EPS, undertaken at the applicant's initiative, was coordinated by Dr. Joe Doublet.

2. EIA CONSULTATIONS

2.1 EIA Scoping

During the scoping stage, the Project Description Statement (PDS) was circulated to the following consultees and made available for a 21-day public consultation period between 20th February 2017 and 13th March 2017:

- Luqa Local Council;
- Malta Resources Authority (MRA);
- Ministry for Sustainable Development, the Environment and Climate Change;
- Malta Tourism Authority;
- Department of Agriculture;
- Transport Malta;
- Environmental Health Directorate;
- Superintendence of Cultural Heritage;
- Civil Protection Department;
- Luqa Local Council
- Environmental NGOs: Din l-Art Hejwa, Kummissjoni Ambjent, Birdlife Malta, Nature Trust Malta, Ramblers Association of Malta, Flimkien għal Ambjent Aħjar, Friends of the Earth Malta, Żminijietna, Fondazzjoni Wirt Artna, GAIA Foundation, Light Pollution Awareness Group, Moviment Graffiti, Malta Organic and Agriculture Movement, Malta Water Association, Youth for the Environment, Biological Conservation Research Foundation, Malta Bat Group, The Malta Ecological Foundation, Tighe and Qui-Si-Sana Residents Association, Hallet Court/ San Roque Owners Association.

The PDS was also circulated for internal review within the ERA.

Within the stipulated consultation period, comments were received from the Malta Resources Authority (MRA) (e-mail dated 21st February 2017), Transport Malta (e-mail dated 27th February 2017), Environmental Health Directorate (e-mail dated 9th March 2017), and Regulator for Energy and Water Services (REWS) (e-mail dated 6th March 2017). These are in Appendix I to this report.

The final Terms of Reference were issued on 16th March 2017.

2.2 EIA Review

The draft EPS was submitted to the ERA on the 26th June 2017 and was circulated for review to the same consultees consulted during the scoping stage (see Para 2.1 above). The EPS was also circulated for internal review within the ERA.

Within the stipulated consultation period, comments were received from the Light Pollution Awareness Group (LPAG) (e-mail dated 28th June 2017), Civil Protection Department (e-mail dated 28th June 2017), the Agricultural Directorate (e-mail dated 30th June 2017), the Malta Resources Authority (e-mail dated 30th June 2017), the Ramblers' Association of Malta (e-mail dated 8th July 2017), and the Environmental Health Directorate (e-mail dated 12th July 2017).

Comments made by the ERA and its consultees during the review stage were forwarded to the EIA Coordinator, the developer and the architect on the 1st August 2017. These comments were addressed by the EIA Coordinator and responses are included in Appendix II to this report.

2.3 EIA Certification

The EPS was certified on the 6th September 2017 and was published for a 21 day consultation period, with a deadline for submissions being the 30th September 2017. Comments were received from Cycling

Advocacy Group Malta, email dated 12th September 2017, and Flimkien għal Ambjent Aħjar, email dated 14th September 2017.

3. ASSESSMENT OF ALTERNATIVES

The EPS outlines alternative technologies which could be used during excavation, construction and operation. Two alternative layouts were considered along with the one under consideration.

Alternative Layout 1 shows the building and the fuel pumps placed in a diagonal position in the middle, while the car wash and the drying area are in the same position. Alternative Layout 2 has both the car wash and the drying area located at the back of the site, whereas the electrical charging points are located on the rear part on the right side of the site next to the drying area. The building and the refuelling area are closer to the entrance and located in a diagonal position. A parking area is found parallel to a landscaped area at the front of the site.

The applicant's justifications for choosing the layout being proposed are as follows:

- A larger shop area when compared to the two alternative layouts;
- Possibility to include more facilities at ground floor level;
- Better layout conducive to efficient flow of vehicles to access available services on site;

The zero option for the site under consideration would imply that either the field would remain in it abandoned state or else it could also be used to grow fodder and crops as in the case of similar fields in the surroundings.

A more detailed breakdown of alternatives can be found in Section 4.2 and 5 of the EPS.

4. EIA FINDINGS

The summary of the characteristics of the site, assessment of impacts, mitigation measures and residual impacts identified in the EPS are as follows:

4.1 Land-use & Agriculture

The proposed built-up area shall result in the direct loss of around 3,000 m² of agricultural land of low to moderately good quality, consisting of (the major) part of two adjacent fields having a total area of 4,816 m². Although the proposed development shall be confined to approximately 62% of the site, the full 4,816 m² of agricultural land will be lost, since the undeveloped part shall also lose its functionality as an agro-system.

Differing parts of the agricultural land within the study area has been classified as dry land, irrigated land, recently reclaimed land, or long abandoned land with an established trend towards regeneration of natural vegetation. There is also a sizable room without any ceiling on the external side of one of the fields. Furthermore, there are also a few *Acacia saligna* trees in different areas of the proposed development site.

The impacts on site include loss of agricultural land, as well as loss of landscape and other rural features; the residual impacts of all these are considered to be of *minor* significance.

4.2 Geo-environment

The area of influence for the geology, geomorphology, and soils extends beyond the site boundary as illustrated in Figures 27, 29, 31-34, 41 of the EIA Coordinated Assessment.

The site under study lies on the eastern gentle slopes of the valley known as Wied il-Kbir, made up of Globigerina Limestone sweeping slopes just above the Marsa plain. The soils found in the area belongs to L-Inglin Complex, developed on Lower Globigerina Limestone and characterised by thin brown soils derived from terracing and weathering of the Lower Globigerina Limestone.

It is estimated that the proposal will generate approximately 1,500m³ of excavated rock material, with excavation also generating approximately 1,500 m³ of soil. Mitigation measures include the re-use of the soil and excavated material, as well as storage and disposal of soil according to the Department of Agriculture. Following such measures, the residual impacts are considered to be of *minor* and *moderate* significance, respectively. .

4.3 Hydrology and Hydrogeology

The area of influence for the hydrology and hydrogeology extends beyond the site boundary as illustrated in Figures 30, 35-39 of the EIA Coordinated Assessment. The site lies within the catchment of Wied il-Kbir and within the drinking water safeguard zone. Impacts during construction are limited to pollution through spillage of oil fuels associated with normal construction site operations. Such impacts can be mitigated through the avoidance of fuelling and servicing of vehicles on site. In this instance, the residual impact is considered to be of *minor* significance.

During operations, impacts can result from pollution through minor spillage of fuel during operation and transport by run-off, spillage due to a major incident and transport by run-off, and leaking fuel tanks. Mitigation measures include collection of storm water in a reservoir for reuse on-site washing and for irrigation of landscaped area, the construction of a secondary impermeable containment, and the regular monitoring of structures and systems which may cause leakages. Following such mitigation measures, residual impacts are considered to be of *minor* significance.

4.4 Landscape Character and Visual Amenity

The EPS assessed the likely impacts on this landscape from six viewpoints, and its visual amenity from six viewpoints. Impacts for each of the viewpoints analysed are as follows:

Viewpoint	Location	Significance	
		Landscape	Visual Amenity
1	Triq Hal-Qormi, Luqa, in front of WSC adjacent to Bus Stop	<i>Minor Adverse</i>	<i>Minor Adverse</i>
2	Triq Hal-Qormi, Luqa, at the exit/entrance of the Industrial Estate	<i>Moderate Adverse</i>	<i>Moderate Adverse</i>
3	Footpath at the east end of the Scheme	<i>No significance</i>	<i>No significance</i>
4	Footpath at the back of the Scheme	<i>No significance</i>	<i>No significance</i>
5	Triq Hal-Qormi, Luqa, adjacent to Schinas Reservoir	<i>Moderate Adverse</i>	<i>Moderate Adverse</i>
6	Triq Giuseppe Garibaldi, Luqa	<i>No significance</i>	<i>No significance</i>

The only impacts on landscape and visual amenity are envisaged from Viewpoints 1, 2 and 5, where the project contrasts with the surroundings, with no impact being perceived at the rest of the viewpoints.

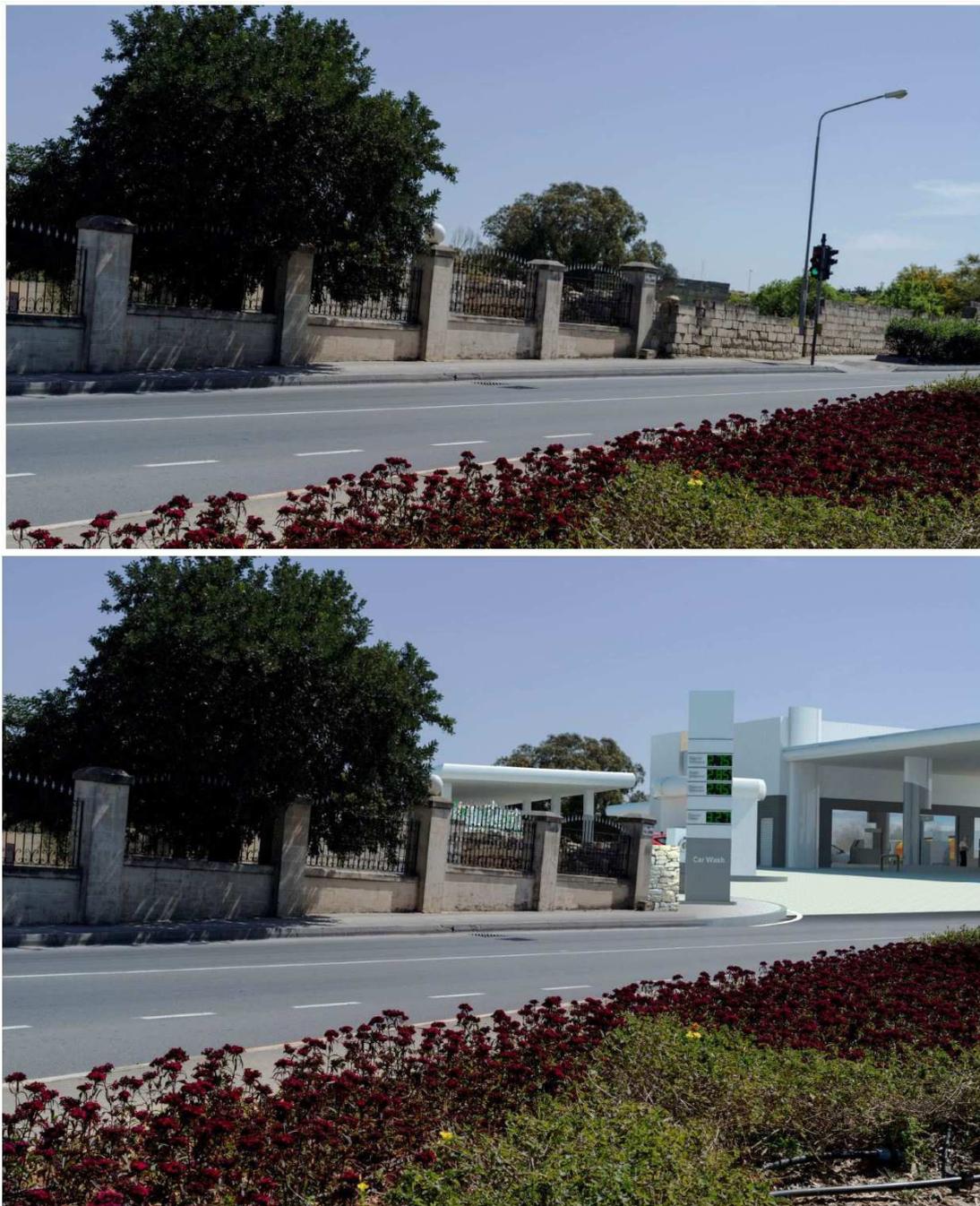


Figure 1. Viewpoint 1 photomontage



Figure 2. Viewpoint 2 photomontage



Figure 3. Viewpoint 5 photomontage

4.5 Air Quality

The impact from dust deposition / soiling arising from the construction of the project, and with no mitigation applied, will likely be of *minor* significance.

Baseline studies covered benzene, volatile organic compounds (VOCs) and odour to predict the effects of the petrol station on air quality. Given that the EPS has identified that the air quality impact from the proposed development is *negligible* on VOC concentration and odour levels, no residual impacts are envisaged as long as the proposed fuel station will be equipped with a Stage 1B and Stage II vapour recovery system. However, even following such mitigation, increased benzene concentrations will still likely result in a residual impact of *moderate* significance.

This aspect per se is normally addressed through operational permitting channels.

4.6 Waste

During construction, the proposal will generate approximately 1,500m³ of excavated rock material, with excavation also producing approximately 1,500 m³ of soil; the residual impacts are considered to be of *minor* and *moderate* significance respectively. Mitigation measures include the re-use of the soil and excavated material, as well as storage and disposal of soil according to the Department of Agriculture. Miscellaneous construction waste, such as stone chippings, plastics, and wood, is expected in relatively small quantities.

During operation, typical municipal waste such as recyclables and food waste are expected to be generated from the commercial development, as well as general automotive waste, such as tyres and used batteries.

4.7 Noise and Vibrations

Construction noise and vibration impacts on the nearby industrial properties are relatively minor and temporary, and are thus *negligible*. According to the Transport Impact Statement results (Appendix VIII of EPS), the operational noise level increase due to the predicted traffic flow will have no significant effect on sensitive receptors.

4.8 Infrastructure and Utilities

The development will connect to existing networks and have a recycling system for water conservation. No particular impacts are thus envisaged. The applicant would need to apply for the necessary permits required by law (e.g. the Sewer Discharge Permit for public sewer use).

4.9 Public Access

The site will be accessible to the public for commercial purposes.

4.10 Climate Change

The proposal will lead to an increase in greenhouse gas emissions from electrical consumption due to the nature of the development. However, energy efficient machinery, lighting and air conditioning will reduce the overall greenhouse emissions. A traffic study showed that car emissions will not increase substantially, as the proposed development is not believed to contribute any AADT to the existing network since there is no additional traffic being generated by the development itself.

4.11 Effects on Human Populations resulting from impacts on the environment

Although benzene emissions were shown to increase as a result of the development (moderate residual impact), the overall air quality study and impact assessment showed that the impacts are not likely to be significant to public health.

4.12 Environmental Risk

The environmental risks during construction (including any ancillary demolition, excavation), and decommissioning phases are expected to be minor as long as management guidelines in accordance with the Environmental Management Construction Site Regulations, 2007 (S.L. 552.09), are adhered to.

The environmental risks during construction (including any ancillary demolition, excavation), and decommissioning phases are expected to be minor as long as the following mitigation measures in Table 47 of the Coordinated Assessment are adhered to:

- Signage, spill kits, double-skinned tanks, leak detection systems, Stage IB and Stage II vapour recovery systems;
- Personnel should be trained to use fire extinguishing media and techniques;
- Management in accordance with the Environmental Management Construction Site Regulations, 2007 (S.L. 552.09) and the Health and Safety Regulations, 2004 (S.L. 424.30) ;
- The decommissioning plan is to be adhered to, along with its guidelines

During the operational phase there are moderate risks related to the release of flammable liquids into the ground in the event of corrosion of tank fabric, pipe leaks due to material deterioration of pipes or their connections, fuel contamination, or detergent and debris contaminated water flow from the car wash. Such pollution can have irreversible impact on the underlying groundwater.

5. ENVIRONMENT RESOURCES AUTHORITY COMMENTS AND CONCLUSIONS

As indicated under Par. 4.1 above, the total site area on which the Petrol Station is being proposed is that of 4,816 m², out of which the built up area shall result in the direct loss of around 3000 m² of agricultural land of low to moderately good quality. In other terms the proposed development shall be confined to approximately 62% of the site located in an undeveloped land (minor adverse residual impact) located outside development zones (ODZ), and currently consisting of agricultural land.,

Moreover, in the course of the EIA process, other impacts were also identified, the residual significance of which depends largely on the effective implementation and enforcement of the mitigation measures identified in the EPS:

1. Impacts on visual amenity and landscape amenity; and
2. Potential impacts on hydrogeology, loss of soil and rock strata, and an increase in benzene concentrations.

Overall, ERA considers that most of the impacts raised by the EPS are either of limited significance (e.g. rock-cutting, impacts on hydrogeology) or can be addressed through adoption of appropriate operation practices (e.g. benzene concentrations) and the introduction of appropriate stringent mitigating measures. But on the other hand, ERA considers that impacts relating to uptake of undeveloped land and visual amenity, which were already foreseen prior to the EPS, cannot be effectively mitigated.

Despite the fact that such development may satisfy certain requirements stipulated under the policy herewith being analysed and applied, yet still ERA considers that there is no overriding justification for the further loss of rural land and associated environmental impacts in order to accommodate a commercial use outside the zones that are officially committed for development.

ERA's consistent position in relation to such projects has been, and consistently remains that there is no valid justification for the further loss of undeveloped land outside the development zone boundary, along with the

associated environmental impacts to accommodate such 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, and in this particular case about the opening up of the remnant rural lands on the Eastern side of the road to development pressures,

As originally pointed out, the EIA for this proposal has left this strategic-level environmental concern unresolved. This can be reaffirmed by the 'Fuel Service Station Policy' itself with particular reference to the hierarchy and sequential approach set under Policy 3.2, which enlists a number of sites being less onerous, and preferred in favour of uncommitted sites, which should be the least favourably considered. In fact such policy integrates fully with SPED general principles namely:

1. Firstly to the re-use of existing developed land and buildings (Through change of use)
2. Secondly to re-develop of existing developed land and buildings; and
3. Finally, where no other feasible alternatives exist, to the use of vacant land.

ERA does not consider that there is over arching justification why this undeveloped land which is also designated as a Green Area in the South Malta Local Plan as indicated in MAP SMSE 04 should be compromised with the proposed development.
