

# Environmental Impact Assessment

## Screening

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

**PA file no.:** PA/05448/16

**EA file no.:** EA00032/16

**Project Title:** To regularise site and construction of petrol/service station, car wash, ATM and signs

**Location:** Site at, Triq Tal-Balal, Iklin, Malta

**Screening date:** October 2016

### 1. Description of Proposal

#### 1.1 Outline of project/development

PA/05448/16 is a full development application by Mr. Paul Falzon for the construction of a petrol station and ancillary facilities on an open undeveloped unutilised flat land at, Triq Tal-Balal, Iklin, Malta (Figures 1-3). The proposal involves the construction of a fuel service station, a car wash and drying area, a tyre service station, an ATM facility, a service shop and a commercial space mainly to be used as a shopping outlet for car care related items (Figure 4). The applicant is proposing landscape buffer strips along the whole perimeter of the site and external lights are to be directed away from the road to prevent light spill and glare.



**Figure 1: Aerial Image with site indicated in yellow (Mapserver: 2012)**



Figure 2: Close-up aerial image with site indicated in yellow (Mapserver: 2012)



Figure 3: Aerial image of site (Mapserver: 2012)

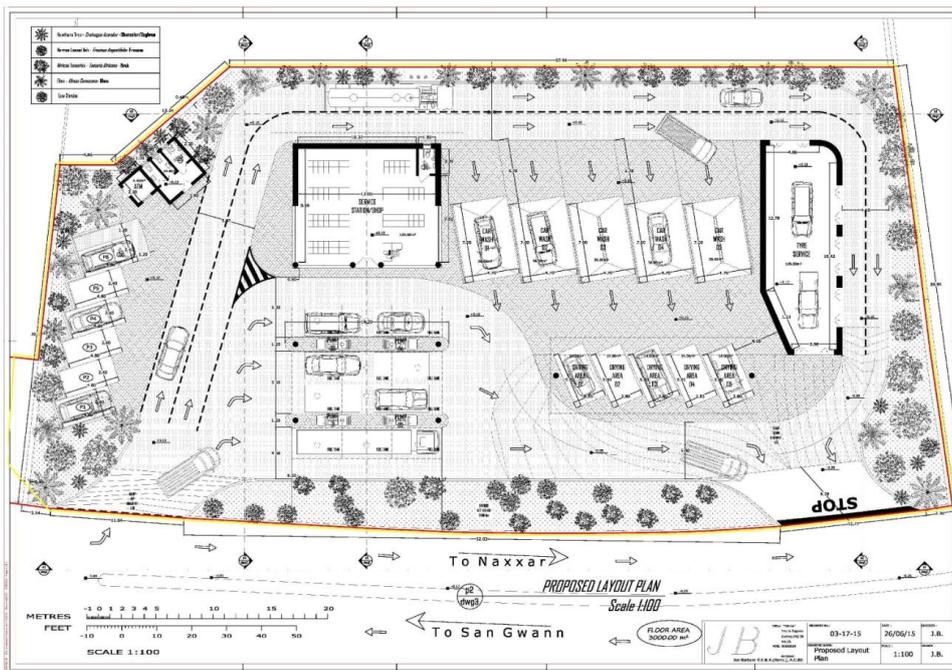


Figure 4: Proposed Layout Plan

**1.2 Site description and related considerations**

The proposed site has an area of approximately 3,000 sqm and is located on Triq Tal-Balal, which links Iklin to San Gwann. The site falls within the Central Malta Local Plan and is designated as a 'highly traffic area'. During the six months construction period, all the vehicles, including those of the workers together with the machinery to be used will be parked on site, thus the on street parking should not be affected, and the present traffic flows will continue.

The proposed development is located Outside Development Zone (ODZ), within the Drinking-Water Safeguard Zone as identified by MRA under the Water Policy Framework Regulations (Legal Notice 345 of 2015 [S.L.549.100]). The same site is currently consists of abandoned agricultural land.

The adjacent land uses are mainly industrial, with an exception of a residential area, in the limits of Hal Għargħur, lying approximately 250 meters North West of the site.

The site was subject to a number of Enforcement Notices:

- EC/00294/12 which addresses development without permission consisting of changes in the use of the site than for agriculture that is being used as parking for vehicles.
- EC/00226/16, which addresses development consisting of billboard/advertisement and any resulting structure/ancillary fencing without permission. The latter was issued after a proposal for the installation of single sided, illuminated, free-standing advertising billboards in 2006 was rejected.

**2. EIA-relevant history**

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

The proposed development is deemed to qualify for an EPS as per Schedule IA Category II Section 7.6.2.6 of the EIA Regulations, 2007 (S.L. 549.46).

It should be noted that the former EPD (PA **5448/16/14**);is concerned with regards to the proposal since the overall development will commit to urban sprawl and take-up of additional undeveloped agricultural land for urban-type development which can be accommodated in areas already designated for these types. The former EPD is also concerned with the introduction of large-scale structures, hard surfacing and other ancillary facility. The former EPD determined that there is no valid justification for the further loss of undeveloped rural land and associated environmental impacts, thus, the proposal has been determined unacceptable from an environmental point of view,

**2.2 Version of documents used for screening:**

1. PDS dated 19<sup>th</sup> October 2016 (PA **5448/16/62a**);
2. EPD dated memo 21<sup>st</sup> July 2015 (PA **5448/16/14**);
3. Plans in Minute 1 attached to PDS.

**3. Screening Matrix**

Question Number:	Questions to be Considered	Identified potential impacts  Briefly describe	Is this likely to result in a significant effect?  Briefly justify	Document reference
1	Will construction, operation or	Yes.	<b>Yes</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Unclear <input type="checkbox"/>	PDS Pgs 4,

Question Number:	Questions to be Considered	Identified potential impacts  Briefly describe	Is this likely to result in a significant effect?  Briefly justify	Document reference
	decommissioning of the Project involve actions which will cause physical changes in the locality (topography, landuse, changes in water bodies, etc)?	<p>The site proposed is currently abandoned agricultural land which lies Outside Development Zone (ODZ) and borders an Area of Containment.</p> <p>The proposed development involves the change in land use from agricultural land into a petrol station and ancillary facilities.</p>	<p>The site will be physically modified since the proposed development will lead to a significant physical change in the landscape and visual amenity of the site due to change in landuse.</p> <p>Furthermore, as indicated in earlier EPD correspondence (PA05448/16/14), the proposal shall lead to unnecessary and excessive formalisation of land ODZ that is not considered acceptable from an environmental point of view. In this regard, impact is considered to be significant.</p>	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 proposed development will take approximately 3,000sqm of land outside development zone. The proposal includes the use of Franka stone blocks, concrete block work/insulated bricks, various grades of concrete, steel reinforcements, structural steel beams and columns during the construction period.</p> <p>Water and electricity will be used during operation</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <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 Pg 7

Question Number:	Questions to be Considered	Identified potential impacts  Briefly describe	Is this likely to result in a significant effect?  Briefly justify	Document reference
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.</p> <p>The proposal involves the transportation, storage and handling of fuel on site, thus leading to the emission of fumes and vapours. Furthermore, Benzene, a chemical compound found in petrol is carcinogenic.</p> <p>Storage of effluent from the ablution facilities could lead to contamination of the groundwater in the surroundings.</p> <p>Storage of all types of waste (including but not limited to tyres) shall be generated from all activities on site.</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 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 lying approximately 250 meters North West of the site, in the limits of Hal Għargur. The areas for the storage of hazardous waste shall be adequately covered and protected from the elements.</p> <p>It is also unclear whether the effluent of the ablution facilities and any oil-water separators shall be discharged to the main sewer or a cesspit.</p>	
4	Will the Project produce solid wastes during construction, operation or decommissioning?	<p>Yes.</p> <p>During the construction phase, inert waste will be generated during site clearing and excavation works.</p> <p>During the operational phase, normal municipal waste will be generated, together with waste arising from the car wash, service and tyre station.</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <p>The amount of solid waste likely to be generated during construction is not likely to be significant, considering the nature of the project (fuel 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 Management Regulations, 2011 (Legal Notice 184 of 2011, as amended by as amended by Legal Notices 441 of 2011, 384 of 2012 and 6 of 2014.), the Waste Management (Activity Registration) Regulations, 2007 (Legal Notice 106 of 2007).</p> <p>No significant solid wastes shall be generated during operation. All waste that shall be generated shall be separated according to the different waste streams as per EWC codes as defined in Commission Decision 2000/532/EC, and deposited in sites permitted by ERA to accept</p>	PDS Pg 10-11

Question Number:	Questions to be Considered	Identified potential impacts Briefly describe	Is this likely to result in a significant effect? Briefly justify	Document reference
			such wastes.	
5	Will the project release pollutants or any hazardous, toxic or noxious substances to air?	<p>Yes.</p> <p>During the construction phase, dust, engine exhaust and accidental spillage of chemical/oils can be expected.</p> <p>During operation, fumes and vapours emissions from fuel and oil spill can be expected.</p> <p>It is further noted that petrol vapours contain benzene which is classified as carcinogen.</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b></p> <p>Impacts associated with dust generation during the construction phase are not considered to be of major significance, given the amount of excavations (not identified in PDS) 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 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 10 - 11

Question Number:	Questions to be Considered	Identified potential impacts  Briefly describe	Is this likely to result in a significant effect?  Briefly justify	Document reference
6	Will the Project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	Yes.  Noise and vibrations during both construction (site excavation) and operational (service noise, car parking, filling station activity, traffic movement and refrigerated vehicles) stages are expected.	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.	PDS pg 10
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 construction work and operations of the fuel station have the potential to be a source of groundwater pollution and also result in contaminated surface runoff. 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.  Effluent from the ablution facilities, also have the potential to be a source of pollution.	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. The proposal involves a potential high contamination activity and therefore the storage tanks shall not be filled above 95% capacity.  Even though fuel leakages from storage tanks are an issue, there is no mention in the PDS regarding impermeable surfacing.	PDS Pg 8, 11
8	Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?	Yes.  During the construction phase there is the risk of dust generation, engine exhaust, accidental spillage of chemicals/oils, vibrations and noise.  Operational phase include risk due to (i) release of airborne organic compound such as benzene, which increases the risk of cancer; (ii) potential leaks, emissions, polluted runoff from the site; and (iii) storage of highly flammable and explosive substances.	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	Yes.  During construction, 10 skilled labourers will be employed.	Yes <input type="checkbox"/> <b>No <input checked="" type="checkbox"/></b> Unclear <input type="checkbox"/>  The project is not likely to result in significant social changes.	PDS Pg 7

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	lifestyles, employment?	<p>During the operational phase there is the risk of increase in the number of vehicles in the area to service their cars and access the fuel station.</p> <p>No changes in demography are expected given the nature of the proposed development.</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 cumulative impacts with other existing or planned activities in the locality?	<p>Yes.</p> <p>The development lies in an area which is still relatively undeveloped and is likely to introduce eventual pressures for further development in the area, especially the potential expansion of the nearby Area of Containment.</p> <p>Furthermore, another fuel service station is operated approximately 350m away from this proposed development, thus increases the probability of cumulative impacts.</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b></p> <p>The longer-term implications of the proposal are unclear and would need to be investigated further.</p>	
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>No formally protected areas for ecological, scenic or landscape, or cultural value are present on site. It has however noted that the site falls within an Outside Development Zone (ODZ), where there is a general presumption against new built development.</p> <p>The proposed site fall within the Drinking-Water Safeguard Zone as identified by MRA under the Water Policy Framework Regulations (Legal Notice 194 of 2004).</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b></p> <p>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.</p>	
12	Are there any areas on or around the location which are important or	The proposed site falls within the Drinking-Water Safeguard Zone as identified by MRA under the Water Policy Framework	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b></p> <p>The impacts on the underground water are unclear.</p> <p>The impacts on the protected site</p>	

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	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?	Regulations (Legal Notice 194 of 2004).  A protected site is located 1km away from a proposed Level 4 Area of Ecological Importance (AEI).	are insignificant given the distance.	
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?	No.  There are no known areas which are used by protected, important or sensitive species of fauna or flora	Yes <input type="checkbox"/> <b>No <input checked="" type="checkbox"/></b> Unclear <input type="checkbox"/> No significant impacts are envisaged.	
14	Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	Reply to Questions 7 and 11 refer.	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Unclear <input checked="" type="checkbox"/></b> Reply to Questions 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 open undeveloped land located outside the development zone (ODZ).	<b>Yes <input checked="" type="checkbox"/></b> 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	Yes.  The site lies along Triq tal-Balal, a Distributor road as designated in the Central Malta Local Plan (CMLP), Road Hierarchy Map TR1.	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 those indicated in Question 17 below.	PDS pg 4

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	to recreation or other facilities, which could be affected by the project?			
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?	<p>Yes.</p> <p>Triq tal-Balal may become susceptible to congestion during the operation of the proposed development.</p> <p>This could also lead to degradation in air quality, or eventual pressures for road modifications.</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <p>The potential contribution of the fuel station to traffic load along Triq Burmarrad is unclear and would need to be investigated further.</p>	PDS pgs 5-6
18	Is the project in a location where it is likely to be highly visible to many people?	<p>Yes</p> <p>The proposed development is likely to be conspicuously visible from the road.</p> <p>On the other hand, there aren't any residential areas close to the proposed site.</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unclear <input type="checkbox"/></p> <p>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.</p> <p>The landscaping proposed is not sufficient to mitigate the visibility of the proposed development.</p>	PDS Pg 8, 10
19	Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?	<p>No.</p> <p>There are no known areas or features of historic or cultural importance on or around the location</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <p>The Superintendence of Cultural Heritage (SCH) may still be consulted and they may request further studies during the processing of the application.</p>	
20	Is the project located in a previously undeveloped area where there will be loss of greenfield land?	<p>Yes.</p> <p>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.</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unclear <input type="checkbox"/></p> <p>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.</p>	
21	Are there existing land uses on or around the location e.g.	<p>Yes.</p> <p>The proposed site is located 100m from mixed land uses ranging from car rental</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <p>The direct and indirect impacts of the proposed project on both the residential and agricultural areas</p>	

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	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?	agency, building materials supplier, mechanic, solar energy equipment supplier, fast food restaurant and a home goods store and 250m away from a residential area.  The area and its surroundings are also considered to be predominantly agricultural, with the site under assessment being located on an abandoned field.	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 Central Malta Local Plan does not indicate any designated use for the site under assessment, however given that the site is outside development zone (ODZ), a general presumption against such development is envisaged.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> <hr/> No significant impact.	
23	Are there any areas on or around the location which are densely populated or built up, which could be affected by the project?	Yes.  The proposed site is located 250m NE of a residential area and is surrounded by predominantly agricultural land, and the site itself is abandoned agricultural land.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> <hr/> 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.	
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?	Yes.  A school is located approximately 650m East of the proposed site.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> <hr/> The direct and indirect impacts of the proposed project are considered to be unclear given the nature, scale and location of the project.	
25	Are there any areas on or around the location which contain important, high	Yes  The site and its immediate surrounds are agricultural land.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unclear <input type="checkbox"/> <hr/> Replies to Question 20 and 21 refer.	

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	quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?	Also the proposed site is found within the Drinking-Water Safeguard Zone as identified by MRA under the Water Policy Framework Regulations (Legal Notice 194 of 2004).		
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.	Yes <input type="checkbox"/> <b>No <input checked="" type="checkbox"/></b> Unclear <input type="checkbox"/> No significant impacts are envisaged.	
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 1A Category II Section 7.6.2.6 of the EIA Regulations, 2007 (S.L. 504.79), 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 nearby 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 tal-Balal;
- 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 in addition to the EIA requirement, the environmental land use issues raised by this proposal are such that the proposal and its siting is considered objectionable from an environmental point of view, *“since there is no valid justification for the further loss of undeveloped rural land and associated environmental impacts as a result of urban development which could be accommodated in areas already designated for these types or similar uses such as the Area of Containment”*.

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

1. The proposed development qualifies for an EIA (EPS);
2. The envisaged 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.