

ERA Ref.: EA/00019/22
Description of Proposal: Construction of an Organic Processing Plant in Malta
Location: ECOHIVE Complex, Naxxar.
Subject: Table with recommendations and ancillary reasoned justifications provided by the public, government entities, E-NGOs and relevant local councils, during 30-day public consultation on Terms of Reference, on any matters that they wish to see included in the EIA terms of reference.
Consultation Period: 11/08/2022 - 17/09/2022

Ref No.	From	Comment
1.	Malta Resources Authority (email dated 18/08/2022)	<p>The MRA has no comments in so far as the functions under its immediate remit.</p> <p>However, if the proposed development includes excavation works that reach partially or totally within the saturated zone, then the developer should submit an application in writing to the MRA including the details specified in regulation 5(1) of the Borehole drilling and excavation works within the saturated zone regulations (SL423.32).</p> <p>This assessment is based primarily on the information provided as on the date of the assessment. The Authority made its assessment on a good faith basis and reserves the right to review its position and, or to take action against the authors of the documentation and, or the applicant if information relevant to its assessment (particularly the prior use of the site where the development is proposed) is 'buried' or concealed (including through the submission of documentation that is not text searchable).</p> <p>This, and any other response in writing by the MRA to the application submitted for consultation or to any other documentation, should not in any way be deemed as approving or endorsing the application in any form or of condoning any matter that falls beyond the MRA's immediate remit as established under the Malta Resources Authority Act and as in force on the date of the relevant response. In particular, you are reminded that with the coming into force of the Act No. XXV of 2015 establishing the Regulator for Energy and Water Services, the Water Policy Framework Regulations and the Protection of Groundwater against Pollution and Deterioration Regulations have been excluded from the remit of Malta Resources Authority and as such the MRA has no authority to take a position on matters regulated by these regulations or indeed any other matter that does not fall within its remit. While this response may be published, any response by the MRA</p>

		may not be publicly used or mentioned as a general or partial approval by the MRA of the matter referred to for consultation.
2.	Environmental Health Directorate (email dated 16/09/2022)	<p>With reference to your e-mail dated 11th August 2022 regarding subject in caption and following review of the Project Description Statement, please be informed that we would like to have the following issues related to public health included in the terms of reference for this proposed development should include:</p> <ol style="list-style-type: none"> 1. Air pollution impacts assessment, including the necessary monitoring and mitigation measures: <ul style="list-style-type: none"> • For excavation, and construction • Emissions from heavy vehicles during construction and operation phase. • Emissions from the operational phase of the organic process including odour pollution. • Construction and Operational traffic including mitigation of foul smells from waste collection. • And their effects on the surrounding area. 2. Noise and vibration impacts including construction activities, operational traffic and from other operational activities. Required monitoring and mitigating measures must be clearly stated. 3. Traffic Impact Study and Assessment regarding the consequence of this project that area of influence. Mitigation measures are to be clearly stated. 4. Light pollution impact and mitigation measures. 5. A Waste Management Plan which includes the impacts from waste generated both during the construction (excavated and construction material) and operation phase. Hence it is important to have a detailed Construction and Waste Management Plan enforced by the site project manager. Details of monitoring and feedback mechanisms must be clearly stated and adhered to. The plan should also include details on the wastewater treatment plant and any reuse of second-class water. 6. Adverse impacts caused by unsafe, inadequate storage and improper handling of raw materials on site and from potential accidental spillage of hazardous fluids, fuel, and lubricants. 7. The overall cumulative impacts of the development on the public.

		<p>8. Details of measures proposed to be taken to prevent nuisances at all stages of the project on the Area of Influence.</p> <p>9. A hydrology assessment. Such assessment must include details for the supply, distribution, and storage of potable water. Furthermore, it must include details of collection, storage, overflow and use of rainwater. The assessment should also include any adverse impacts on the ground water and surface water. Mitigation and monitoring measures are to be clearly identified.</p> <p>10. Details of proposed sanitary facilities for workers</p> <p>11. Pest control management on site and the surroundings.</p> <p>The EIA should also include a detailed description of the measures envisaged to prevent, minimise and where possible offset any significant temporary or permanent adverse health effects and nuisances on the Area of Influence and on the general public. This should include details regarding monitoring programmes that may be proposed. The EIA should also identify, describe and discuss in detail any possible health effects from any residual impacts that cannot be mitigated.</p>
3.	Regulator for Energy and Water services (email dated 16/09/2022)	<p>REWS does not have any input to be included in the Terms of Reference (TORs) for the EIA. However the installation requires various authorisations under the subsidiary legislation falling under the REWS Act.</p> <p>The applicant will be informed accordingly.</p>
4.	BirdLife Malta (email dated 16/09/2022)	<p>BirdLife Malta analysed the PDS available online as a part of the public consultation process with regards to the EIA ToRs for the development of the Organic Processing Plant (OPP) in Maghtab. In relation to this we would like to provide our comments listed below.</p> <p>First of all, it must be noted that the location and nature of the proposed OPP raises high environmental concerns, particularly due to the fact that it is adjacent to several Natura 2000 sites, including the Marine Protected Area <i>Il-Baħar Ta' Madwar Ghawdex</i> (MT0000112), and also is in close proximity to SAC <i>L-Ghadira s-Safra</i> (MT0000008) and <i>Is-Salini</i> SAC (MT0000007), as well as in just 300m away from the protected natural coast (as per the Local Plan Policy NA04). Article 6 of the Habitats Directive (Council Directive 92/43/EEC) provides that “any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implication” (also according to S.L. 549.44). The site is about to occupy an area of 20,262 m².</p>

		<p>The development in such a sensitive coastal area should be assessed in terms of light pollution both during the construction and operation phases. Malta hosts colonies of protected seabird species (Yelkouan and Scopoli's Shearwaters, Mediterranean Storm-petrel) nesting on its cliffs. Seabirds are attracted to light sources from as far away as 15 km. Therefore, outdoor lighting schemes within light-induced grounding hotspots and other coastal areas must be designed with particular attention to seabirds, especially given that Malta is heavily polluted with light¹. To limit any increase in light pollution at these areas, new developments should adhere to the best practices described in our Guidelines for Ecologically Responsible Lighting², as well as ERA's Guidelines for the Reduction of Light Pollution in the Maltese Islands. It is critically important to work on reduction of the light pollution levels in Malta, therefore, strategically thinking, we suggest reassessing the outdoor lighting scheme in Maghtab complex as a whole taking into consideration the lighting scheme of the proposed OPP and the scheme already present on site.</p> <p>It is highly important to assess the impact on ecology during the construction and operation of the OPP, including the impact on protected habitats and species which can be affected by the development. Apart from others, we strongly suggest analysing possible implications on the Yellow-legged gull population which feed on waste at Maghtab. With the OPP coming into operation the amount of organic waste in the landfill is expected to be gradually reduced, thus depriving the gulls of their source of food. This, in turn can lead to them exploring other foraging areas which can potentially overlap with the foraging areas of the protected seabird species (particularly, Annex 1 species Yelkouan and Scopoli's Shearwaters, Mediterranean Storm-petrel) creating a situation of additional food competition. Having been a food source for various years, the impact of the removal of this food source on gull populations needs to be assessed and predicted, such that suitable mitigation measures are implemented. These could take the form of a gradual reduction in availability rather than a sudden one, which could result in the starvation of large numbers of birds that may venture into nearby urban areas or even create a possible hazard along the coast road. In this relation, the impact on the protected seabirds should be evaluated carefully and in detail.</p> <p>At the moment, the area in question is occupied by agricultural fields as can be clearly seen on Picture 1. Since the development is going to take up the agricultural land, there is a need to assess the impact of further loss of the arable land, as well as impacts on agroecosystems.</p>
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Picture 1. The border of the EcoHIVE complex and the proposed OPP. Source: PDS

At the same time, according to the Central Malta Local Plan, “agricultural production and efficiency is being impeded by problems of pollution at Maghtab”. The facility of such a nature as OPP creates risks of soil contamination which should be addressed accordingly under the EIA process. The complexes which involve the processes of anaerobic digestion can potentially become a source of toxic spills, causing environmental damage. For instance, the UK’s Environment Agency has tracked rising incidents of serious pollution associated with the operation of organic processing facilities, in some cases increasing more than 50% during the year^{3,4}. This is a concerning sign and we believe that close attention should be given to the evaluation of such risks. Specifically, it is important to assess the risks and propose relevant mitigation measures of nitrates and other contaminants leaching into the soil during the operation of the plant. Besides that, the impacts coming from the loss of soil should also be assessed accordingly.

The assessment of an impact of the construction and the operation of the OPP on the ambient air quality should also be given special consideration. During the construction, the major pollutant is expected to be particulate matter which concentration is already of high concern in the Maltese Islands. The studies show that residual digestate set for composting frequently becomes a source of release into the air of such gases as CO₂, CH₄, N₂O, NH₃, H₂S, CO₅. In addition, the combustion of biogas produced during the process of anaerobic digestion is a source of carbon monoxide, nitrogen oxides and sulphur dioxide emissions into the air. It is estimated that “the use of internal combustion engines to burn this biogas

also can generate formaldehyde emissions at higher levels than occur with other fuels”⁶, therefore it would be useful to include in the EIA the assessment of the impact on air quality in this perspective.

In line with the PDS, as much as 44,500 m³ of material is planned to be excavated during the construction phase. Therefore, it is important to analyse the impacts on geology and geomorphology (with special attention given to the fact that the scheme is located in the immediate distance from the coast). Most of the excavated material is said to be set for disposal. In this regard, we suggest exploring further options besides disposal of a potentially reusable material. The EIA process should also thoroughly cover the assessment of the Waste Management Plan for the site, both during the construction and operation phases.

Another concern originating from a development of such a nature is the cumulative effect combined with other proposed developments and already operating facilities in the area (EcoHIVE complex as a whole; Waste to Energy plant; proposed 2nd electrical interconnector between Malta and Sicily). According to the Rural Objective 3 (SPED, 2015) the cumulative effect of developments in rural areas should be controlled, therefore we strongly recommend conducting a rigorous assessment of the possible negative consequences for the environment and human health in relation to the operation of the listed facilities altogether.

We also would like to stress on the importance of analysing all the possible options, giving detailed review of different processes which the organic processing farm could use for its purposes with in-depth study of the advantages and disadvantages of each. For example, and independent research conducted in Brunel University London found that aerobic digestion using LFC biodigesters in a community produces 73% less emissions than anaerobic digestion⁷.

BirdLife Malta reserves its right to make further comments, recommendations, and observations during the EIA process of such a development.

1 Major new study on light pollution in Malta - Newspoint - University of Malta (um.edu.mt)

2 <https://birdlifemalta.org/wp-content/uploads/2020/07/Guidelines-for-Ecologically-Responsible-Lighting.pdf>

3 Document template: green report (environment-agency.gov.uk)

4 [Pollution_incidents_2015_evidence_summary_LIT_10487.pdf](#) (publishing.service.gov.uk)

5 Air Pollutant Emission Rates for Dry Anaerobic Digestion and Composting of Organic Municipal Solid Waste | Environmental Science & Technology (acs.org)

6 Anaerobic Digesters | Department of Environmental Conservation (vermont.gov)

7 https://powerknot.com/wp-content/uploads/2021/09/Research_from_Brunel_University_AD_and_LFC.pdf

5.	<p>Malta Sociological Association</p> <p>(email dated 16/09/2022)</p>	<p>With reference to the consultation in question, the Malta Sociological Association (registered VO 1323) proposes that the policy process employs a social impact assessment process.</p> <p>The International Principles for Social Impact Assessment defines SIA as being “the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions”.</p> <p>An SIA is an interdisciplinary process, and should employ various methods, both quantitative and qualitative. Social impact assessments should not be one-off exercises: To the contrary, they should be ongoing processes which engage with various stakeholders and which report back so as to ensure effective policy processes.</p> <p>In this regard, you may refer to international SIA standards, for example those set by the International Association for Impact Assessment, which is accessible from this link:</p> <p>https://www.socialimpactassessment.com/documents/IAIA%202015%20Social%20Impact%20Assessment%20guidance%20document.pdf</p> <p>Reference: Frank Vanclay (2003) International Principles For Social Impact Assessment, Impact Assessment and Project Appraisal, 21:1, 5-12, DOI: 10.3152/147154603781766491</p>
6.	<p>Superintendence of Cultural Heritage</p> <p>(email dated 15/11/2022)</p>	<p>In response to your request, please find recommended Terms of Reference for a Cultural Heritage Assessment i.c.w. the Environmental Impact Assessment (EIA) related to the Construction of an Organic Processing Plant in Malta.</p> <p>1.0 Preamble</p> <p>The Superintendence notes that the site subject to the current EIA (EA/00019/22) was included within an area subject to an earlier Planning Application (PA 3932/22). This application was for the clearance of the site from topsoil, subsoil and loose material to study the terrain in preparation for future plants. An archaeological study was initiated as part of PA 3932/22 which initially included fieldwalking. The Superintendence has provided a way forward for further study consisting of the opening of a trial trench and subsequent soil clearance across a field which was of archaeological interest to the Superintendence. The Superintendence will communicate further following the conclusion of the archaeological evaluation.</p>

		<p>The current project shall consist of an Organic Processing Plant (OPP). The OPP will be designed to receive, and process source separated organic waste from both household and commercial sources in Malta.</p> <p>The proposed project would involve development over an extensive area where excavation work will result in loss of natural features including rock, soil, some sporadic trees and smaller shrubs. The ECOHIVE Complex covers an area of approximately 50Ha, part of which is an archaeologically sensitive area. Potential impacts may occur within the footprint of the project, in the immediate environs, and along access routes to the site. Potential impacts may include direct and immediate material impacts, as well as subsequent impacts that might arise from the modification of the existing situation. Once the project is constructed this will also have a visual impact to the coastal road and landscape.</p> <p>2.0 Scope and Definitions of the EIA</p> <p>For the purposes of this document, cultural heritage is defined by Article 2 of the Cultural Heritage Act (2019). This includes movable or immovable objects of artistic, architectural, historical, archaeological, ethnographic, palaeontological and geological importance.</p> <p>2.1 The study area shall include the proposed area of development as well as their immediate environs. The Superintendence has already conducted fieldwalking within the area, including the site of the proposed OPP.</p> <p>2.2 In the context of this particular application, cultural heritage considerations may include:</p> <ul style="list-style-type: none">• Features of archaeological value and potential;• Military or civil architecture covering all historic periods;• Vernacular structures;• Field systems and agricultural features such as irrigation systems. <p>The Superintendence draws the attention to the following features as indicated in the map below and identified in the legend overleaf.</p>
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Figure 1: Cultural Heritage Features in Close Proximity to the Development

Number	Property Name
1	Qalet Marku Tower
2	Church of the Assumption of the Madonna
3	Qalet Marku Battery (Remains)
4	Qalet Marku Redoubt remains
5	Bahar ic-Caghaq Redoubt
6	Madliena Entrenchment
7	Chapel of Saint John Evangelist
8	Chapel fo Saint Peter the Fisherman
9	Church of Mary of the Angels
10	NXR2014 - Archaeological Remains
11	SAL2015 (Coast Road) Archaeological Remains
12	SAL2015 (Coast Road) Archaeological Remains
13	QLT1928 - Dolmens
14	QLT1935 - Magalithic remains
15	MTB1935 - Megalithic passageway
16	Ancient Quarry
17	Tomb
18	Tomb
19	Tomb
20	Rock-cut feature

Figure 2: Legend Identifying Cultural Heritage Features in Close Proximity to the Development

The above cultural heritage definitions and considerations are not to be considered as exhaustive. The EIA must consider all other forms of cultural heritage, both known and unknown.

2.3 The Environmental Impact assessment will:

- Describe the Cultural Heritage assets within the study area;
- Analyse the cultural heritage features within the context of the cultural landscape;
- Assess the physical, spatial and visual impacts of the proposed development on the cultural heritage assets;
- Propose corrective measures for the protection of the cultural resources.
- Identify impact of development on the visual value of the environs.
- Assess the impact on the visual values of the environs.
- Propose appropriate mitigation to lessen impact on the visual value of the environs.

3.0 Methodology

In quantifying the cultural heritage assets within the study area, and assessing the impacts of the proposed development, the EIA will undertake:

- Desktop and archival research limited to the study area;
- Consultations with any relevant bodies, including the Superintendence of Cultural Heritage, Heritage Malta, the University of Malta, NGOs and Local Councils;
- Compilation of an inventory of the cultural heritage assets identified within the study area. The applicants are to contact the Superintendence for information on features identified during fieldwalking to be included in this inventory. Fieldwalking will not be required within the area studied already by the Superintendence but may be required within the project's wider area of influence to assist in identifying impacts on cultural heritage features. The features of cultural heritage are to be described and plotted with grid references, on Data Capture Sheets, the design of which should be approved in advance by the Superintendence of Cultural Heritage. The Data Capture Sheets will be presented as an appendix to the EIS. The analysis of the features will be included in the main report. All fieldwork has to be authorised by the Superintendence of Cultural Heritage as defined below under point 4;
- A cultural heritage Risk Assessment Map examining the various impacts of the proposed project is to be included in the EIA.

1. Description and assessment of the cultural heritage features in close proximity to the development.
2. Assessment and correlation of visual impact studies to assess the impact of the proposal on the surrounding cultural landscape is also to be included in this chapter.
3. This chapter is to include information acquired during previous EIAs in the vicinity.
4. The author of the cultural heritage chapter is to contact the Superintendence prior to the beginning of the compilation of the cultural heritage study so that the information gathered by Superintendence during recent fieldwork in the area may be integrated in the EIA. The Superintendence may be contacted on monitoring.sch@gov.mt copying kevin.borda@gov.mt.

4.0 Authorisation by the Superintendence of Cultural Heritage

As per Cultural Heritage Act 2019, any form of investigation or prospection required for the identification of cultural heritage (including excavation, field walking, topographic surveys, remote sensing and underwater surveys) may only be undertaken by the Superintendence of Cultural Heritage or with its written approval.