

# Environment Impact Assessment (EIA) Report

## PA 00085/04: Erection of rabbit breeding units

---

### 1 INTRODUCTION

The Malta Environment and Planning Authority (MEPA) requested an Environmental Planning Statement (EPS) for the proposed development as per Schedule I, Category II, Section 6.2.2.2(ii), of the former EIA Regulations, 2001. The application is for outline development permission.

The EPS included a description of the project and its surroundings, relevant legislation and policies, an assessment of impacts and a description of mitigation measures, as required by the Terms of Reference. The EPS was coordinated by Dr. Paul Gauci and Elizabeth Conrad (ERSLI Consultants).

### 2. THE PROPOSED DEVELOPMENT

The applicant seeks to relocate an existing rabbit farm to a site at Wied is-Sewda, Qormi. The applicant currently rears approximately 50 does and their offspring at a site within the industrial zone at tal-Handaq and is proposing to relocate the existing farm, primarily due to the lack of infrastructural facilities.

The proposed rabbit breeding area will consist of the following:

- A cluster of 6 sheds adjacent to each other;
- A six metre wide service passage;
- A slaughter house;
- A disinfection pit;
- A store to hold forages, feeds and ancillary equipment;
- A restroom with toilets and showers; and,
- A quarantine area.

### 3. EIA CONSULTATION

As part of the EIA process, consultation with various consultees was carried out during the reviewing stage. Consultation with the public took place following EPS certification.

#### **Consultation during Scoping**

During scoping stage the PDS was circulated to the following consultees and made available for public consultation on 3<sup>rd</sup> August 2006:

- Malta Resources Authority;
- Nature Group;
- Department of Agriculture;
- Kummissjoni Ambjent; and,
- Qormi Local Council.

Comments were received from:

#### *Malta Resources Authority*

- Description of the physical characteristics of the project – water resource requirements during operation;
- Description of the operational features – waste water management systems and rainwater runoff management;
- Hydrology – details of the site's hydrological conditions; and,
- Effects on hydrology and hydrogeology.

#### **Consultation during Review**

The first draft EPS was submitted to MEPA on 12<sup>th</sup> February 2007 and circulated for review to the following consultees:

- Malta Resources Authority;
- Nature Group;
- Department of Agriculture;
- Department of Public Health
- Kummissjoni Ambjent; and,
- Qormi Local Council.

The EPS was also circulated for internal review within MEPA. Within the stipulated consultation period, the following comments were received:

#### *Malta Resources Authority*

- Issues related to sources of water, including runoff and contaminated runoff;
- The use of plastic/geo-membrane portable bunded systems; and,
- Hazardous waste containers.

#### *Department of Public Health*

- Adherence to all building and sanitary laws and regulations;
- No nuisance to neighbours should be caused;
- A manure clamp should be provided if manure is kept on site; and,
- All waters falling on the roofs should be drained to a well.

The comments made by MEPA and its consultees during the review stage were forwarded to the EIA Coordinator, the developer and the architect on 20<sup>th</sup> March 2007. These comments were addressed by the EIA Coordinator and responses were submitted to MEPA. Further comments were sent to the EIA Coordinator on 1<sup>st</sup> October 2007 and responses by the EIA Coordinator were submitted to MEPA.

#### **Consultation following Certification**

The EPS was certified on 6<sup>th</sup> February 2008 and published for public consultation on 5<sup>th</sup> April 2008. The deadline for submissions was 26<sup>th</sup> April 2008. No comments were received within the stipulated timeframes.

#### **4. THE SITE AND SURROUNDINGS, ASSESSMENT OF IMPACTS AND MITIGATION MEASURES**

The following characteristics of the site, assessment of impacts and mitigation measures were identified in the EPS.

<b>Land Use</b>		
<p>The site is located within an area which is predominantly agricultural, with a number of livestock farming units clustered in the area around the site (Figure 12 in the EPS Technical Report). The Wied is-Sewda watercourse is approximately 200m away from the site. A number of buildings in the area function as either farms or residences, or as both. There are, however, no major residential settlements in the direct vicinity of the site.</p>		
<b>Geology, Geomorphology and Hydrology</b>		
<u>Geology and geomorphology</u>		
<p>The rock formations preserved in the study area are:</p> <ul style="list-style-type: none"> <li>- Lower Globigerina Limestone Formation; and,</li> <li>- Middle Globigerina Limestone.</li> </ul> <p>At the site, the exposed rock formation is the Globigerina Limestone formation. The Lower Coralline Limestone Formation occurs at about 25m below ground level – this is of hydrogeological importance given that it is the host for the mean sea level aquifer. No quaternary deposits have been identified.</p> <p>A fault traverses the study area at about 400m north-west of the site, striking NE-SW, traversing the watercourse of Wied is-Sewda with a throw of about 10 – 15m.</p>		
<u>Hydrology</u>		
<p>Important hydrological/hydrogeological features in the area include:</p> <ul style="list-style-type: none"> <li>- The Wied is-Sewda drainage system;</li> <li>- The catchment of the site;</li> <li>- The mean sea level aquifer, lying 30m below ground level; and,</li> <li>- The Tal-Flas pumping station, situated 290m from the proposed site.</li> </ul>		
<b>Impact</b>	<b>Significance of Impact</b>	<b>Mitigation Measures</b>
Contamination of the watercourse downstream of the site during both construction and operation	Possibly very significant, adverse.	Construction Management Plan (CMP); Waste Management Plan (WMP).
Contamination of the Mean Sea Level Aquifer during both construction and operation	Possibly very significant, adverse.	CMP; WMP.
Contamination of the Tal-Flas pumping station during both construction and operation.	Possibly very significant, adverse.	CMP; WMP.
Changes to the hydrological regime	Moderate	Harvesting of rainwater.
Removal of soil	Moderate	Soil re-utilised to a limited extent on site for landscaping purposes.
<b>Agriculture</b>		
<p>The agricultural survey included a field-by-field study (Figure 21 in the EPS Technical Report). Of the 24 land units surveyed, 21 were agricultural land parcels, one was a bird trapping site, one</p>		

was a livestock farm and the other stables. All fields were cultivated, none were abandoned. The site itself was fallow at the time of the survey. The main agricultural systems were characterised by low-to-moderate intensity traditional farming. The main crops grown were mainly vegetables (Figure 24 in the EPS Technical Report). The rubble walls surrounding the agricultural parcels in the area under study were generally in good to fairly good condition.

Soil consists of the San Biagio Soil Series of the Xerorendzina soils. The soil depth within the development site measured 95cm, whereas the average soil depth in the study area would be of 75cm.

As a result of the moderate size of most of the fields, good soil cover, as well as generally good accessibility, the study area, including the project site itself, consists of agricultural land of moderate value.

<b>Impact</b>	<b>Significance of Impact</b>	<b>Mitigation Measures</b>
Disturbance of soil and agricultural land during construction	Moderate to low; adverse.	CMP
Change in land use	Moderate; adverse.	None
Loss of rural value of site	Low; adverse.	None
Destruction of landscape features	Low; adverse.	None; rubble can be utilised for the re-construction of rubble walls elsewhere.
Intensification of production	Moderate	WMP
Change of agricultural system and farming activity.	High; beneficial.	None
Increased agricultural productivity and profitability	High; beneficial.	None
Loss of financial support	Moderate; adverse	None
Soil erosion	Moderate; adverse	Rainwater harvesting within the site
Soil disturbance	Moderate; adverse	Good construction management e.g. storing to prevent inversion and mixing of topsoil and deeper layers.
Soil nutrient loading	Moderate; adverse	Distribution of manure over large areas and on soils where it is likely to have least adverse impacts
Odour	Moderate; adverse	Good waste management practices, e.g use of dry waste management system; WMP

Vermin	Moderate; adverse	Good waste management practices e.g. disinfection pits, quarantine area; WMP
--------	-------------------	--

### **Landscape, Topography and Visual Assessment**

The key landscape elements include the Wied is-Sewda watercourse (the only dominant natural element) and the agricultural terraces, together with the retaining rubble walls. The area is rural in character in view that the key characteristics of the area are related to the agricultural land uses and activities including crop cultivation, animal husbandry, dumping in the area and poor management of several farm buildings. In this regard, the landscape in the vicinity of the site is considered to be of moderate value.

The sensitivity of the landscape in relation to the proposed development is considered to be low whilst the magnitude of the impacts of the proposed development on the landscape is considered to be moderate both during both construction and operation.

The Zone of Visual Influence of the proposed development (Figure 26 of the EPS Technical Report) is mostly limited to agricultural areas surrounding the site, together with the western urban fringe of Qormi and parts of the north-eastern urban fringe of Zebbug. The development is not expected to be visible throughout, mainly due to undulations in topography and other constructions obscuring the site. Five viewpoints and respective photomontages were submitted (photomontages can be found in the Addendum to the EPS) with the significance of visual impacts being of moderate to low significance.

<b>Impact</b>	<b>Significance of Impact</b>	<b>Mitigation Measures</b>
Change in landscape character	Low; adverse	Appropriate design
Change in visual scene	Moderate; adverse	Implementation of the proposed landscaping scheme.

### **Impacts on surrounding land uses**

Potential impacts include:

- Impacts on the Wied is-Sewda watercourse (as outlined in the other sections of the EPS);
- Impacts due to unpleasant odours and vermin – such impacts are expected to be minimal in view of the implementation of proper waste management practices; and,
- Increase in run-off.

<b>Impact</b>	<b>Significance of Impact</b>	<b>Mitigation Measures</b>
Increased traffic flow through the area	Moderate; adverse	CMP

### **Other Environmental Impacts**

<b>Impact</b>	<b>Significance of Impact</b>	<b>Mitigation Measures</b>
Inbreeding with wild species of rabbit	Moderate; adverse	Security around rabbit cages and sheds

### **Secondary, Indirect and Cumulative Impacts**

The following secondary and indirect impacts were identified:

- Impacts resulting from the quarrying of stone to be used in construction;
- Impacts resulting from increased demand for electricity and water; including pollution from

- power stations and negative impacts on freshwater resources;
- Impacts resulting from the demand for raw materials; and,
- Impact from increased traffic to and from site.

The following cumulative impacts were identified:

- Decline in landscape and visual quality of the area in conjunction with the existing livestock farms in the area; and,
- Traffic generation.

### **Residual Impacts**

The following residual impacts were identified:

- Impacts on hydrology due to the probably inevitable spillages of minor quantities of manure and liquid wastes;
- Impacts on hydrology due to changes in the hydrological system;
- Loss of minor quantities of soil;
- Loss of agricultural land, rural features and soil disturbance; and,
- Changes in landscape character and visual scene.

### **Monitoring**

The following monitoring plan was suggested:

A monitoring programme and reporting activities to prevent or minimise breakdowns resulting in environmental, health or welfare problems. Key parameters should include feeding regimes; shed cleaning patterns, rabbit turnover, sickness, deaths, local complaints, etc. The monitoring plan will address the potential impact of waste disposal on soils. The plan will describe what is to be monitored and the frequency. One of the main aspects of the monitoring plan is to yearly monitor the nitrogen and phosphorus levels of soils on which rabbit manure is being applied

## **5 PLANNING, POLICIES AND LEGISLATION**

### **5.1 Maltese Legislative and Regulatory Framework**

- Development Planning Act, 1992;
  - Legal Notice 114 of 2007 – Environmental Impact Assessment Regulations;
- Environment Protection Act, 2001;
- Malta Resources Authority Act, 2000;
- Malta Standards Authority Act, 2000;
- Animal Welfare Act, 2001;
- Food Safety Act, 2002;
- Veterinary Services Act, 2002;
- Waste management:
  - Legal Notice 337 of 2001: Waste Management (Permit and Control) Regulations; and,
  - Legal Notice 168 of 2002: Waste Management (Landfill) Regulations;
- Water:
  - Legal Notice 343 of 2001: Protection of Waters against Pollution caused by Nitrates from Agriculture Sources Regulations;
  - Legal Notice 203 of 2002: Regulations for the Protection of Groundwater Against Pollution Caused by Certain Dangerous Substances;
  - Legal Notice 139 of 2002: Sewer Discharge Control Regulation; and,
  - Legal Notice 194 of 2004: Water Policy Framework Regulations;
- Rubble Walls:

- Legal Notice 160 of 1997: Rubble Walls and Rural Structures (Conservation and Maintenance) Regulations;
- Other Legislation:
  - Legal Notice 371 of 2002: Personal Protective Equipment Regulations;
  - Legal Notice 369 of 2002: Machinery Regulations;
  - Legal Notice 270 of 2001: Construction Products Regulations; and,
  - Legal Notice 64 of 2002: Noise Emission in the Environment by Equipment for Use Outdoors.
- Guidance documents:
  - - Guidelines on Trees, Shrubs and Plants for Planting and Landscaping in the Maltese Islands;
  - - The Maltese Code of Good Agricultural Practice (CoGAP);
  - - The Rural Development Plan for Malta 2004 – 2006;
  - - The Rural Strategy Topic Paper; and,
  - - Draft National Rural Development Strategy for the Programming Period 2007 – 2013.

## **5.2 Local Planning Policy**

- Structure Plan Policies applicable to this project fall within the following policy areas:
  - Built Environment: BEN 1, BEN 2, BEN 3, BEN 5, BEN 7, BEN 12, BEN 15 and BEN 17;
  - Agriculture, Horticulture and Fisheries: AHF 1, AHF 3, AHF 4, AHF 5 and AHF 9;
  - Conservation: RCO 1, RCO 4, RCO 28 and RCO 29; and,
  - Public Utilities: PUT 7.
- Central Malta Local Plan: CG 24.

## **6. CONCLUSIONS**

The EPS has predicted a number of potential impacts on the environment as a result of the proposed development. The mitigation measures proposed in the EPS are aimed at minimising the predicted impacts of the proposal.

---