

## Environmental Permit

Environment Protection Act (CAP. 549)

Permit number:

**EP 1014/20**

Approved documents

**EP 1014/20/19A/19C**

The Environment and Resources Authority (hereinafter the Authority; the Competent Authority or ERA) in exercise of its powers under the Environment Protection Act (CAP. 549), hereby authorises:

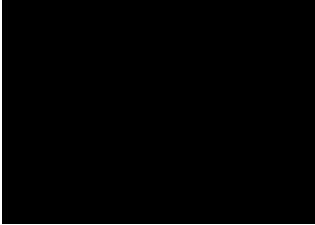
**Mr Arthur Lamoliere obo The University of Malta** (hereinafter "the Permit Holder"), Of / Whose Registered Office (or principal place of business) is at

**Tal-Qroqq,  
Msida, MSD2080**

Removal of invasive alien species of flora and monitoring for any re-growth

**At Wied Babu, Żurrieq**

The validity of this permit is for a period of **one (1) year** from the date of this permit. An application for renewal of this permit is to be submitted at least one (1) month prior to expiry of this permit.

| Signed   | Date                                |
|--|-------------------------------------|
|  <p>Dr Aimee Brincat<br/>Deputy Director,<br/>Environment and Resources<br/>F/ Director Environment and Resources</p> | <p>Permit Granted: 12/ 11/ 2020</p> |

**Authorised to sign on behalf of the Competent Authority**

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## Conditions

### Introductory Note

The permit is granted in accordance with the provisions of the Environment Protection Act and Regulation 18(2) of the Flora, Fauna and Natural Habitats Protection Regulations, 2006 (S.L. 549.44), hereinafter referred to as the Regulations, for the purpose of the activities that shall be carried out at Żurrieq located within the Special Area of Conservation (SAC) of Rđumijiet ta' Malta: Ir-Ramla tac-Ċirkewwa sal-Ponta ta' Bengħisa (MT0000024) and the Special Protection Area (SPA) of Rđumijiet ta' Malta: Wied Moqbol sal-Ponta ta' Bengħisa (MT0000033).

The works shall, subject to the conditions of this Permit, be managed, controlled and carried out as described in the NP Application, approved documents, and/or as otherwise previously agreed in writing by the Authority.

### Status Log

| Detail                | Date       |
|-----------------------|------------|
| Application EP1014/20 | 05/10/2020 |
| Permit Issued         | 12/11/2020 |

### Pre-Commencement of activities/ work

1. The permit holder shall advise of the dates of works at least seven (7) days prior to the commencement on [ced.nature@era.org.mt](mailto:ced.nature@era.org.mt). In the case of change of date, the permit holder is to inform ERA of such a change at least two (2) days in advance. In the case of short-term cancellation of the works (especially outside office hours), the Authority should be contacted on 9921 0404.

### Permitted Activities

2. The Permit Holder is authorised to carry out the works and the associated works specified in Table 1.

| Works   | Description of specified works | Limits of specified works  |
|---|--------------------------------|--|
| Removal of invasive alien species in a protected site | As per approved document 19A   | (i) Removal of invasive alien species of flora namely: <i>Agave americana</i> , <i>Acacia saligna</i> , <i>Leucaena leucocephala</i> and <i>Opuntia ficus-indica</i> ;<br>(ii) Monitoring for any re-growth. |

### Site

3. The activities authorised under condition 2 shall be affected in the location as marked on the approved site plan in approved document 19C.

### Conditions of Activity/Work

4. Activities are to be held according to the Project Description Statement 19A.

5. The permit holder shall ensure that disturbance of any specimen of any species is kept to a minimum. It is the responsibility of the permit holder to ensure that no harm is caused to the environment either intentionally or accidentally. Attention must also be afforded to the whole of the environment of the SAC in view of the protection status of SAC.
6. This permit covers the removal of alien species of flora namely: *Agave americana*, *Acacia saligna*, *Leucaena leucocephala* and *Opuntia ficus-indica* from the area marked in red in the approved site plan 19C, and for monitoring of any re-sprouting of the alien species.
7. No equipment other than hand held tools are to be used to remove the alien specimens and all measures are to be taken to prevent any accidental damage to existing flora and fauna.
8. Removal of alien species of flora shall be carried out in accordance with the methodology described in the approved method statement 19A and in accordance with the methodology on the "Guidelines on managing non-native plant invaders and restoring native plant communities in terrestrial settings in the Maltese Islands" found at <https://era.org.mt/en/Documents/PlantInvaders-RestorationGuidelines-MEPA-2013.pdf>.

Removed alien species shall be shredded (either on site or in a permitted waste disposal facility) in a contained manner and carted away with securely covered waste carriers registered in accordance with the requirements of the Waste Management (Activity Registration) Regulations 2007 (S.L.549.45) and Waste Regulations 2011 (S.L.549.63) , including where necessary through the Consignment Permit procedure.

Otherwise, debris from AIS shall be destroyed on site through incineration through controlled fires. No open fires are allowed and controlled fires are only being permitted for the incineration of any plant and tree debris within an appropriate enclosed skip.

Fires are prohibited in wind forecasts of Force 4 or stronger, and are to be entirely spent before sunset.

The Permit Holder is to inform ERA on the chosen process concerning disposal of the removed alien species seven (7) days prior to the carrying out of the procedure as well as provide details on this in the report of the activities held that is to be submitted in line with condition 23.

Certificates of destruction at the waste facility are also to be provided to ERA along with the report of the activities held.

9. Removal of alien species shall be followed up accordingly throughout the lifetime of the permit and as stated in project description 19A in order to address any re-sprouting accordingly.
10. The use of chemicals to control, remove or eradicate any alien species is strictly forbidden.
11. Access to the site shall be solely on foot.
12. Access to motor vehicles shall be restricted to asphalted roads and any off-roading is prohibited.

13. All activities shall take place within existing paths and clearings void of vegetation, whether dead or alive.
14. Any waste generated during the activity is to be collected immediately and disposed of accordingly in accordance with the Waste Management (Activity Registration) Regulations 2007 (S.L. 549.45) and the Waste Regulations, 2011, (S.L. 549.63), including where necessary through the Consignment Permit procedure.

Any skips which are left on site overnight shall be closed. Care shall be taken not to allow fragments to fall and disperse to the surroundings.

15. All activities shall take place between sunrise and sunset.

### **General Conditions**

16. The 'Permit Holder', is responsible to ensure that all reasonable precautions are taken so that the activity conforms to the conditions in this Permit and the procedures outlined within the Permit application.
17. The activities covered by this permit are restricted to the Permit Holder, employees and/or volunteers and contracted parties commissioned for such activities/works under his supervision and direction, who shall all be made aware of this Permit and the contents within.
18. The following activities are strictly prohibited:
  - a. the deliberate picking, collection, taking, cutting, uprooting, harming, destroying or damaging deliberately destroying, keeping, transporting, selling, buying exchanging, offering for sale or for exchange, importing or exporting in any way of any specimen of wild flora;
  - b. the deliberate hunting, killing, capturing, taking, harming, disturbance particularly during periods of breeding, rearing, hibernation and migration, destruction and deterioration of breeding sites or resting places, pursuing, taking or attempting to take, deliberately killing or attempting to kill, deliberately destroying, keeping, transporting, selling, buying exchanging, offering for sale or for exchange, importing or exporting any specimen of any specimen of wild fauna;
  - c. planting of vegetation, shrubs and/or trees or the introduction of any flora or fauna into the site or its environs, except as permitted;
  - d. introduction, removal, significant movement and re-engineering, and/or collection of sand, shingle, stone, soil and/or sediment;
  - e. excavation works and any physical modification of the vegetation cover, the ground and landform of the site and its surroundings;
19. ERA may request updates and/or further information on the activity in question as deemed necessary.
20. The conditions imposed shall be adhered to throughout all the activities. Failure to do so may result in enforcement action and cessation of any related works or activities.
21. ERA may impose other additional rules or conditions, or may amend one or more of the listed rules or conditions, as it deems necessary for the proper conservation of a protected site or area, biodiversity and the environment in general, and to ensure public safety.

22. The Permit Holder may apply for a variation of the Permit and shall seek the Authority's written agreement prior to any operational changes, by sending to the Authority:
  - a. Written notice of the details of the proposed change, including an assessment of its possible effects or risks to the environment from the approved activity;
  - b. Any relevant supporting information;
  - c. Any relevant supporting assessments and drawings, and;
  - d. The proposed implementation date.

Any such change shall only be implemented following the issue of a variation of the permit by the Authority.

23. In accordance with Regulation 46(4) of S.L. 549.44, a brief report with photos of the activities held, including any publications as a result of the activity, is to be provided to ERA by the Permit Holder within one month of the expiry of the permit, and is to be submitted to [nature.permitting@era.org.mt](mailto:nature.permitting@era.org.mt). Information that should be treated as confidential as outlined in Regulation 48(4) of S.L. 549.44 shall be specified.

A template for the report is available at <http://era.org.mt/en/Documents/Activity%20Report%20template.doc>

A copy of any resulting publications, scientific papers, dissertations, theses, articles and/or videos resulting from any study carried out in relation to the specimens and activities for which this Permit is being issued shall reach ERA within three months from the date of publication/finalisation as the case may be. Such studies shall clearly indicate that they were possible following Permit/s issued by the ERA.

24. This permit is granted saving third party rights. The Permit holder is not exempt from any other legislation or regulations, codes of practice, conditions or requirements imposed by any other competent authorities, including the obtaining of permits, licenses, or clearances including from site owners.
25. Any accidental handling, capture or collection of specimens or part thereof, whether dead or alive, of species listed within Schedule V and VI, and endemic species not listed in Schedule X of the Flora, Fauna and Natural Habitats Protection Regulations (S.L. 549.44) shall be reported on [nature.permitting@era.org.mt](mailto:nature.permitting@era.org.mt) within seven (7) days of sampling of the specimen provided that the permit holder may only keep such specimen or part thereof for scientific research purposes. The Authority may request additional information from the permit holder, including but not limited to, an application for authorisation for the keeping of such specimens or samples.
26. The Authority may suspend or revoke this Environmental Permit in line with the provisions of CAP 549.
27. The Permit Holder shall notify the following matters to the Authority in writing at least 10 working days prior to their occurrence:
  - a. Any change in the Permit Holder's trading name, registered name or registered office address;
  - b. Any change to particulars of the Permit Holder's corporate identity.
28. Upon the joint application of a Permit Holder and a proposed transferee, the Permit Holder may request to transfer an environment permit. The permit shall not be transferred from the Permit Holder without prior approval from the Authority. Upon the Authority's decision to transfer the permit to the transferee, all rights, obligations, liabilities shall subsist onto the transferee.
29. In accordance with Regulation 47 of S.L. 549.44, details of the Permit Holder together with the details of conditions imposed in this Permit shall be maintained by the Authority in a register available for public inspection or maintained in electronic form.

30. The Authority may carry out regular pre-set or unannounced compliance or monitoring checks that vary in frequency according to the site's compliance with the permit conditions and safeguarding of natural assets. Any checks or audits carried out by the Authority may be made at the Permit Holder's financial expense at rate and arrangement communicated by ERA's Compliance and Enforcement Directorate. ERA may also appoint other on-site monitors at the expense of the Permit Holder to act as an on-site liaison between the Permit Holder and ERA if the case arises.
31. The Authority's representatives may inspect and photograph any part of the site/activity and ask for any closed or locked areas to be opened and may demand to be provided with any proof, documentation, plans, receipts or any other records.
32. This Permit including any Variation Notices or amendments to it shall be made available for any inspection by ERA officials at all times, or any legally recognised compliance and enforcement officials, when requested.
33. Whenever there is a conflict between the conditions of this Permit and approved documents, the conditions of the Permit shall prevail.
34. ERA shall not be held liable for any accidents or injuries which may occur during the activities being permitted through this Permit. It is the responsibility of the Permit Holder to ensure that all safety measures are taken.
35. This permit is without prejudice to any liability of the Permit Holder under the Act and to any punitive measures the Authority may wish to take with respect to works already carried out without permit.
36. The validity of this permit is for **one (1) year** from the granting date of this permit. The Permit Holder may apply for a renewal to this Permit expressing his/her intention at least four (4) weeks prior to the expiry of this permit. Request for renewals shall only be considered upon confirmation of compliance with Permit conditions and fulfilment of documentation as requested by this Permit.
37. Any aggrieved party may appeal from this decision to the Environment and Planning Review Tribunal in accordance with Article 63 of the Environment Protection Act and with the provisions of the Environment and Planning Review Tribunal Act.

### 3.3 Project Description

#### 1. Aim of Project

This project aims at initiating the removal of three Invasive Alien Plant Species (IAPs) *namely Agave americana, Acacia saligna and Leucaena leucocephala* on the north slopes of Wied Babu and their replacement with indigenous flora of the site

#### 2. Justification for project

Removal and destruction of the targeted invasive alien plants (IAPs) aim to limit their dispersion and detrimental impact on the sensitive habitats present in Wied Babu. This valley is of important conservation interest and is part of N2K sites as well as an SAC Rđumijiet ta'Malta: Mix-Xaqqa sal-Ponta ta' Benghisa. All the species described for removal are known for their invasiveness and detrimental effect by competition on the native species and habitats. This project also investigates the management practice for control of the invasive species. Specifically, the limitation of the dispersal and the long term efficiency of the practice after the first removal. This project involves students and staff from from the SiMaSeed Project at the University of Malta, with the educational target of practical conservation project management. Assistance for removal may also be obtained from Baldacchino group. There are two dominant IAPs in the area that need to be tackled.

*Agave sp.* can reproduce by tillering, and by plantlets via their totem pole which serves to disperse the asexually produced propagules. Flowers produce seed capsules but these do not seem to be effective at germination. Their presence on the upper slopes of Wied Babu threatens the downside of the valley with potential dispersion of the plantlets.

*Acacia sp.* seed germination is regulated by hormonal control from the mother plant via ethylene. A high density of seedlings may sprout after removal of the mother plant and requires monitoring and eventually uprooting of all sprouted seedlings within the first year.



### **3. Brief project outline**

This project aims the removal of Invasive Alien Plant Species (IAPs) in part of the catchment area of Wied Babu, namely the area around the belvedere. The target species are *Leucaena leucocephala*, *Opuntia ficus-indica*, *Agave* spp. and *Acacia saligna*. (See pictures below). The targeted area is the coastal road verge around the belvedere ( see map in Attachment 3). Further details are found in section 8 below.

### **4. Starting date and estimated duration of the project**

October 2020. Project times 1 week. 1 Year monitoring

### **5. The site/geographic area of the activity.**

The area concerned is outlined in red as seen in the map attached.

Image 5,6 and 7 below shows the extent of the intervention site from the east side of Wied Babu.

### **6. How many persons are involved per visit?**

At least three persons will be involved. One cutting, one handling material and one hauling using high-up.

### **7. How will be the site be accessed?**

Vehicles ( cars/small vans) will be parked on the belvedere parking site (Blue polygon on the site map). The site will be accessed by staff by walking on the pavement and using stairs by the car park, and a large ladder from the road on the north part of the site (picture below, green circle on the map). Circulation within the site (outline in red) can be done by walk.

### **8. Description of the method to be used for the project**

The reproductive parts of the target species will first be removed. Seed pods collection will be systematically carried out by hand prior felling to limit dispersion in the case of *Leucaena leucocephala* and *Acacia saligna*. In the case of *Agave sisalana*, the stem of the inflorescence shall be felled before plantlet collection. Ideally, the felling of *Agave* spp inflorescence be done on a heavy-duty tarp to avoid material dispersion.

The next stage is that specimens be felled and/or uprooted when possible. Felling of specimens will be done using a chainsaw. When felling specimens close by the cliff, a set of cords shall be employed to avoid dispersion of material downhill.

Plant material will be fragmented and chipped on-site, collected in a skip parked on the pavement on the side of the coastal road. An alternative would be to use heavy-duty bags.

Monitoring of the offspring from felled specimens should be undertaken for one year from the date of felling, especially after the first rain of the season after summer.

**9. Safety equipment available, in case of emergency**

Using the chainsaw requires the need for personal protection equipment. User(s) must wear a chainsaw helmet, ear protection gears, safety shoes and appropriate clothing. Harness and rope must be employed when working within the proximity of the cliff. Handling of plant material will be undertaken using leather gloves. First aid kit to be taken on-site.

**10. Any additional information deemed necessary**

None.

# Intervention site : Wied Babu Belveder

14°27'25"E

14°27'30"E



35°49'25"N

35°49'20"N

## Legend

-  Site Access
-  Intervention site Outline
-  Parking

