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O&M PROCEDURES VEGETATION CONTROL	

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1 INTRODUCTION

Control vegetation within the facility is very important in order to avoid erosion of the terrain and, on the other hand, in order to avoid dirtiness on the PV modules at pollination periods, shadowing on the modules due to excessive vegetation growth or even to prevent fire hazard.

Additionally, clearance of the site is important for access to anywhere easily and properly to develop O & M activities.

2 PROCEDURE

2.1 Compliance with applicable environmental requirements

Tasks regarding vegetation control shall be always performed in compliance with the applicable legal requirements.

- Protected species

Protected or endangered species of plants shall not be removed. If it's the case that any protected species have to be removed, the necessary permits shall be obtained from the authorities.

All protected species that must not to be removed shall be clearly marked and such areas shall be fenced off, if required.

- Alien species

Alien invasive plant species shall not be allowed to be introduced in the areas to be restored or perimeter green areas.

Invasive plants should be removed while young. Seedlings should not be allowed to grow to a size where they have reached seed bearing age or requiring expensive mechanical controls.

2.2 Previous works

Before performing any vegetation control activity, verify compliance with all applicable environmental requirements, specially requirements about protected species, unapproved fertilizers, required authorisations or permits, and also requirements about establishment of vegetation where feasible.

2.3 Description

There are two main objectives regarding vegetation control within a PV plant:

- Prevent excessive vegetation growth
- Minimise possibility of erosion due to removal of vegetation

2.3.1. Prevent excessive vegetation growth

This maintenance activity will include prevention of excessive vegetation growth which may reach a height that could put the modules in shade (especially during spring season), dirty the modules at pollination periods or cause fire hazard. Additionally, the transit areas shall be kept clean so the staff circulate properly, free of obstacles, stones, and other objects that would prevent the free passage between the photovoltaic module lines.

For this purpose, vegetation cutting shall be made with lawn mowers and/or hedge trimmers (preferably electric type) depending on site conditions and extension. . Trimming frequency shall depend on weather conditions of the location of the plant.

Herbicides shall not be used to remove vegetation. Sheep inside the plant are acceptable for vegetation control.

In order to keep the height of perimeter trees and hedges within the level allowed by regulations and avoid potential shadowing on the modules, pruning of tall trees and trimming of hedges shall be made with mechanical tools, as well as trimming of edges and space around green areas and removal of invasive plants and growths at the base of the trees.

Vegetation waste shall be temporally stored within the facility, preferably into biodegradable sacks.

Dispose of all vegetation waste shall be developed no longer than 3 days after completion of the planned cutting activity. As far as possible, vegetation waste shall be delivered to any waste handler/collection point where organic waste is properly treated to be reused as compost. If it is not possible, it shall be disposed at the nearest municipal waste collection point.

The amount of the vegetation waste generated shall be recorded and quarterly reported in the corporative tool SIS (Sustainability Information System).

2.3.2. Minimise erosion due to removal of vegetation

Minimise the possibility of erosion due to removal of vegetation implies (i) minimise damage of the existing vegetation and (ii) the establishment of vegetation in the areas previously disturbed by construction.

Vegetation clearing at the site must be kept to a minimum.

Establishment of vegetation in the areas disturbed by construction will serve to stabilise the areas and will also reduce the potential for dust generation. Focus of rehabilitation planning should be on disturbed areas around the panel frame bases, cable trenches and access roads.

Only native plant species shall be reintroduced to site although fast germinating grasses that are not persistent in the soil for longer than 2 years may be used for initial stabilisation while slower growing species establish.

When fertilisation is required during establishment, only organic fertilizers shall be used.

Fertilizers shall be applied at rates not exceeding those prescribed by the manufacturer.

Irrigation is only to be considered for short terms when it is required to assist with germination and initial seedling establishment. Wherever possible, seeding shall coincide with the months receiving the most natural rainfall.

3 H&S PRECAUTIONS

Appropriate risk assessment shall be performed prior to developing such operations and control measures are to be taken in accordance with risk assessment and with respect to hierarchy of control measures. Risk assessment shall consider hazards generated by the tools, equipment or substances used and the work being developed near live electrical installation. Appropriate Personal Protective Equipment (PPE) and safe work instructions shall be considered as control measures in vegetation control operations.

As regarding emissions, the following are expected to occur:

- Noise – generated by powered tools and equipment; in order to reduce the risk of noise emissions, electric powered equipment and tools can be considered.
- Accidental spills of chemicals – fertilisers, fuels.