SECTION 12: LAND

12.1 OBJECTIVE
To ensure that the activities of Helidon Resources is operated in a way that protects the environmental values of LAND including soils, sub-soils, landforms and associated flora and fauna.

12.2 REFERENCES
Environmental Protection Act 1994 – Application requirements for activities with impacts to LAND.
Lockyer Valley Regional Council DA Conditions
Helidon Resources Site Based Management Plan
EMP Section 3 – Process Flow Chart
EMP Section 3.1- General Description of Operations
EMP Section 4 – Aspects Procedure
EMP Section 4.1 – Aspects and Impacts register
EMP Section 8 - Communication
HR-2-003 - Aspects and Impacts Assessment Register

12.3 ENVIRONMENTAL VALUES

12.3.1 Sensitive Places and Surrounding Land
The Helidon Resources Site is located approximately 40km north-east of Gatton and access to the quarry site is via a long driveway from Seventeen Mile road which is lined by natural vegetation. An aerial photograph of the site forms part of this section and can be found in 10.3.2 of this document. There is a natural vegetation barrier to the road and it is planned to leave this buffer in place. The Helidon Resources Extraction / Mining area (Lot 2) is surrounded by treed natural vegetation and it is also surrounded by other Sandstone Quarries on neighboring properties. Refer to scaled drawings HR-SMP-008 and HR-SMP-006 for vegetation buffers.

12.3.2 Aerial Photograph
12.3.3 Site Topography / Description
As indicated from the aerial photograph in 10.3.2 the Helidon Resources Site is surrounded by dense natural vegetation and adjacent to Wrights Creek which runs through the Helidon Resources Property. This creek is usually dry and only runs when large rain events occur. It is located in a steep valley approximately 25m below the existing quarry face and 40m below the proposed mining area for dimensional stone. While the process at Helidon Resources is styled to minimize noise, the dense natural vegetation which surrounds the site is a vital tool for excellent containment of any noise to neighboring properties. The location of the actual mine area is surrounded by this vegetation.

12.3.4 Wind Direction
Prevailing winds across the site are from the east in the summer months and changing to the west in the winter months.

12.3.5 Environmental Values of the Site
To further understand the environmental values of the site, please refer to Appendix 10 of the site based management plan.
This section covers the following items
- Further descriptions of the site,
- Site Water Supply
- Site infrastructure
- Further Environmental Issues for both Land and Water
- Disruption of Habitats
- Weed Management
- Bushfire Management
- Sites of Cultural Significance
- Soils Requiring Specific Management
- Slope Stability Management
- Site Remediation
- Flora and Fauna Assessment
- Buffer Zones

12.4 Possible Impacts to Identified Environmental Values
Besides the information supplied in Appendix 10 of the Site Based Management Plan, a process flow diagram of operations can be found in the section 3 of this EMP and a general description of Operations in section 3.1.
Section 4 details the procedure in place for used to identify and classify the impacts on the environment and section 4.1 identifies and classifies the significance of those identified from the process and this includes noise and how it impacts the community.
The Aspects and Impacts Assessment Register HR-2-003 takes the identified items in section 4.1 and provides a risk score to each item, thus providing the site management with a clear list of priorities to focus on in order to protect the environment of the site.

12.4.1 Proposed Management Practices
Management practices for the site can be referenced from the Site Based Management plan. Further practices and actions are detailed in the Aspects and Impacts Assessment Register HR-2-003.

12.5 Complaints about Land
With the present management practices in place, any issues in relation to land should not cause community complaints. Should any complaints be received, the reason for the complaints will be investigated and documented. If the problem is likely to occur again, investigation into modification of process or introduction of pollution control devices or other equipment will be necessary.
Community complaints will be handled in accordance to the Communications section of this EMP.

12.6 RESPONSIBILITIES
The Site Manager and Safety / Environmental Representative will be responsible for ensuring all control measures regarding the land are carried out and maintained on site.
All employees are responsible for conducting regular housekeeping in their work area. The Site Manager is responsible for handling / responding to environmental complaints.

**12.7 DOCUMENTATION**
Helidon Resources Site Based Management Plan – Appendix 10
Helidon Resources Site Based Management Plan – Weed Management Plan
Helidon Resources Site Based Management Plan – Bushfire Management
HR-3-013 SWP-Controlling of Weeds on Site