**Restricted Zone**

**Hart Ash Deposit**

**Location**
On a relatively featureless slope between the Goodspeed and Hart Glaciers, Wright Valley, at an elevation of ~400 m:

77° 29.76' S, 162° 22.35' E

**Purpose**
To avoid damage to an *in situ* deposit of volcanic ash airfall tephra that is of high scientific value.

**Description**

The Hart Ash deposit is an *in situ* preserved deposit of volcanic ash airfall tephra protected by a surface layer of gravel. The surface gravel protecting the ash layer has a wide spatial extent and the Hart Ash is not immediately visible unless the surface gravel is removed, making field identification difficult. The full extent of the Hart Ash deposit is thus unknown, although its maximum extent has been estimated as ~100 x 100 m (Map 21). The Hart Ash deposit, dated 3.9 ± 0.3 million years old, is of high scientific importance for interpreting the paleoclimate of the McMurdo Dry Valleys.

**Boundaries**

Owing to a lack of prominent surface landmarks, the boundary of the Restricted Zone is defined as an area of 150 m x 120 m following lines of latitude and longitude (Map 21) extending from the coordinates:

Upper Left: 77° 29.72' S, 162° 22.2' E
Lower Right: 77° 29.8' S, 162° 22.5' E

**Impacts**

- **KNOWN IMPACTS**
  - The deposit is covered by a thin gravel desert pavement which is easily disturbed by walking. Wind erosion of the ash deposits would be rapid if the desert pavement is disturbed.

- **POTENTIAL IMPACTS**
  - None.

**Access requirements**

- **HELICOPTER ACCESS**
  - Helicopters should avoid landings and overflight below 50 m above ground level within the Restricted Zone. Helicopter landings should be made at least 100 m from the boundary.

- **SURFACE ACCESS**
  - Access to and movement within the Restricted Zone should be on foot.

**Special site guidance**

- Avoid walking on the desert pavement overlying the ash deposits unless necessary for essential scientific or management purposes, and then walk carefully to minimize disturbance.
- Should the desert pavement be removed for essential scientific purposes, ensure the material is replaced to protect the feature.
- Camping is not permitted within the Restricted Zone.

**Key references**


**Site Map** – Map 21