# Dust Management Plan: Illawarra International Health Precinct (MP 08\_0156)

**Prepared for** 

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#### 1. Introduction

## 1.1 Background

This Dust Management Plan has been produced to accompany an application made under S75W of the *Environmental Planning and Assessment Act, 1979* (the Act) to modify the approval to project application No 08\_0156 (Illawarra International Health Precinct) determined by the Minister on 31 January 2010 in relation to the relocation of stockpiled material on the site.

### 1.2 Site Location

The project approval relates to Lot 200, 201 and 202 DP 1156078 (previously Lot 22 in DP6077550, Avondale Road, Penrose.

# 1.3 Proposed Development

The works proposed to be undertaken by the proponent are as follows:

- 1. Dry Rock Retaining Wall The dry rock retaining wall and the fill material behind the retaining wall are to be removed from their present position. The surface will be restored generally to pre-existing site levels in the south eastern part of the site for a distance of approximately 120 metres from the western side boundary of Nos 36 and 40 Goolagong Street and the removal of the fill from this area. The project approval envisages some fill in this area. The return of any fill required for the construction of buildings, access roads and pedestrian pathways as approved under the concept plan approval would be now determined as part of the project application.
- 2. Reshaping the stockpile by removing material from the top of the stockpile to return views of the escarpment. The amount of fill to be removed to restore some escarpment views has been determined by detailed analysis of site levels and heights from view points taken at the kerb level in front of a number of key properties identified during the mediation and including No 37 Goolagong Street. The analysis indicated the future stockpile levels necessary to retain some view of the escarpment.

The removal of the stockpile also sought to reduce the dominance of the stockpile adjacent to No 36 and 40 Goolagong Street and provide the opportunity for effective stormwater management for the stockpiled material and to improve pre-existing drainage problems experienced by the adjoining landowners.

- 3. The removed material will be relocated to the western and north western edge of the stockpile in the following manner:
  - The dry rock retaining wall will be relocated partly along the south western side and partly along the north western side of the stockpile to act as a retaining wall for excavated material.



This retaining wall would be parallel to and adjacent to the gas easement shown on the drawings and to the south of the existing excavation.

- The fill to be removed and the material to be removed from reshaping the top of the stockpile will be relocated a short distance to behind the new retaining walls and on the western side of the stockpile. In essence, the southern part of the stockpile and the fill adjacent to no 36 and 40 Goolagong will be removed and the top of the stockpile relocated to a position away from residents and out of view on the western side of the stockpile.
- Approximately 1,700 cubic metres of excavated material will be removed and relocated within the existing excavated area off Avondale Road. This is in addition to 8,800 cubic metres currently stored in this area.
- 4. Approximately 10,500 cubic metres of material stored within the existing excavated area for the approved Stage 1 building and its construction will be removed from the site by truck. This will occur as required prior to the construction of Stage 1 of the development.

#### 1.4 Work Methods and Duration

It is proposed that the relocation of the material will occur in stages in order to minimise disturbed surfaces.

Equipment to be used includes an excavator and dump truck similar to the machinery used on site for the construction of the material. A water cart will also be present to spray disturbed areas to control dust. Activities will not include rock breaking or similar activities to break the substrata and the material is already in a form suitable for ready removal. The excavator will load material into the dump truck that will use existing access paths on the western side of the stockpile to access the new storage areas to the north west and south west of the existing stockpile. Where appropriate the excavator will push material from the top of the stockpile directly into the new position.

All vehicles will access the work area from within the site. There will be no access from Goolagong Street or Huntley Road.

The rock retaining wall will be removed one row at a time allowing the material to be removed from behind the retaining wall in sections to maintain the structural stability of the wall.

It is proposed that the work would be undertaken during regular construction hours.

Based on discussions with a contractor, it is estimated that the material relocation would take between 3 to 4 months. Allowing for stoppages during adverse wind conditions and undertaking the work in stages to minimise disturbed surfaces, an allowance has been made for a 6 month construction timeframe.

The precise details of the extraction sequence will be a matter for the contractor to determine. However, it is anticipated that the rock retaining walls and associated fill will be



removed early in the process and relocated to the new position to accommodate the remainder of the stockpile to be relocated.

## 1.5 Purpose

- Provide the best management strategies for dust control and provide an approved monitoring program;
- Identify key issues and implement appropriate controls;
- Minimise exhaust emissions from equipment and vehicles.

# 1.6 Objectives

- Minimise dust emissions within the project area;
- Ensure dust emission do not cause environmental problems;
- Prevent adverse impacts on the neighbouring community.

#### 1.7 Sources of Dust Emissions

- Earthworks;
- Movement of vehicles across unsealed areas.

# 1.8 Key Issues

The potential for the works to create dust during unfavourable weather conditions when westerly winds are present. These conditions could result in dust affecting adjoining and adjacent residences in Goolagong Street.



## 2. Construction Dust Control Measures

#### 2.1 Limit Cleared Area

 The amount of disturbed surfaces will be restricted as much as possible to maintain vegetation cover for as long as possible and enable new grass seeding to re-establish.

#### 2.2 Site Traffic Control

- A maximum speed limit will be enforced on the site;
- Dump truck routes will be watered during operations.

## 2.3 Earth Moving Management

- The works will involve the use of a excavator to relocate the material on the top of the stockpile thus minimising loading into tucks and the associated dust generation;
- Dump trucks will be used to relocate the rock wall, the fill material and the stockpile as required to the new location;
- Weather conditions will be observed and work will not commence or continue if the wind conditions are unsuitable and result in dust deposition over adjoining or adjacent residents.

# 2.4 Watering Sprays

Water carts, hoses and sprinklers to will be used to wet disturbed areas.

# 2.5 Soil Compaction

 It is proposed that the pre-existing ground levels will be achieved in the south east corner of the site thus not requiring any compaction. Top soil and grass seeding will be applied.

# 2.6 Vegetative Stabilisation

 Disturbed areas will be stabilised and grass seeded as soon as possible after completion of works.



#### 2.7 Adverse Weather

- Ceasing work that generates dust if winds are strong and from the west causing visible dust emissions over adjoining residential areas.
- Restricting works to periods outside the winter months when westerly winds prevail.

#### 2.8 Communications

Effective dust management involves good communications with adjoining owners. Communications will include:

- Distribution of a notification to residents of Goolagong Street prior to works commencing advising of:
  - o when works will commence;
  - o the order and duration of works when determined by the appointed contractor;
  - o renotifying the contact number for complaints and enquiries.
- Distribution of notices or contacting residents on a regular basis when works are near residential areas;
- Providing a mobile telephone number of the head contractor on site all times to residents so that information on current or proposed construction activity can be obtained on request;
- Establishing a complaints register where all complaints are noted and follow up action is documented.



#### **Performance Indicators** 3.

- The level of complaints received and registered;
- Action in response to complaints;
- Daily visual surveillance of dust emissions.