## Annex 11C

**Construction Monitoring Protocol** 

# Protocol for: Dust & Air Quality Monitoring

Document produced by: Buro Happold

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#### **AUTHORISATION**

Rev.	Reviewed by:	Accepted for use by Project Manager / nominee	Accepted by Employer ( if required )	Date
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Note:- This Protocol shall be reviewed again if there is any significant change that might affect the activity and, in any case, before

(This next review date must be no later than 6 months hence)

The result of every review must be recorded, signed, dated and attached hereto.

All work must comply fully with the conditions of the contract and relevant legislation.

#### 1.0 Introduction

This document sets out dust and air quality monitoring protocol for the construction and demolition works associated with the Hayle Harbour redevelopment.

#### 2.0 Dust Monitoring

Dust suppression techniques should be in place during periods of work likely to result in increased dust emissions. The assessment and control of dust emissions from construction and associated works will be subject to on-going visual observation by supervisory staff. Observed excessive emissions should be subject to an immediate response without recourse to measurement as detailed below.

Real time dust monitoring will be undertaken using a hand-held pump which is capable of giving a direct read-out of TSP (Total Suspended Particulate) and PM10 (particulate matter less than 10 microns in diameter). All equipment is to be fully calibrated and in good working order at all times.

A suitable number of dust monitoring locations have established at the site boundary and have been agreed with the local authority. The chosen locations for monitoring are at two locations along Penpol Terrace, at the cricket ground in the Towans region, and at the Hayle swimming pool and are illustrated in Annex 1. The sites were chosen because of their proximity to the site and the prevailing wind direction (south, south west) which could potentially blow construction dust towards these receptors.

Adequate background dust level data shall be obtained at all monitoring locations prior to the commencement of construction works.

Dust monitoring shall be undertaken at each specified monitoring location once a week for the duration of the programme. The results will be recorded and made available to the local authority. Weather conditions will be taken into account before monitoring commences, for example the monitoring will be carried out when possible on dry days. Monitoring shall be carried out to assess activities with the highest potential dust generating impact and also the levels of dust during general site works.

Daily visual inspections of site activities, dust controls and site conditions will be carried out by an appointed member of the construction team with observations kept in a daily dust log. Further details of reporting requirements can be found in Section 5.0 below. Observed excessive emissions should be subject to an immediate response.

#### 3.0 Site action levels

The 'Action Level' for  $PM_{10}$  is (i): 250  $\mu$ g/m³ for a 15 minute average.

If this is exceeded at any monitoring location then the appropriate staff will be notified in order to examine the dust control measures in place on the site, to confirm that best practicable means are being employed to control dust, and to examine whether any further dust control measures can be introduced. If further control measures are introduced, subsequent monitoring will then be undertaken to understand the effectiveness of these control measures.

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#### Contract:

#### 4.0 General Information

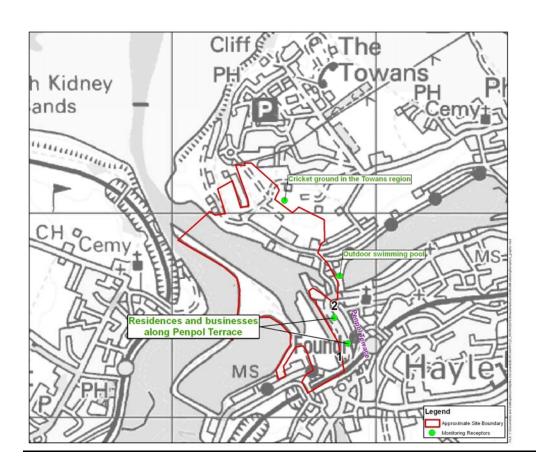
Prevailing weather conditions, including; wind direction and speed, air temperature, incidence of precipitation and degree of cloud cover shall be recorded with each set of monitoring results. Wind speed and direction shall be recorded on each monitoring day.

#### 5.0 Reporting Requirements for Dust Monitoring

All results will be recorded on log sheets; this must include time of monitoring, duration of measurements together with site activities at the time of monitoring and need to be signed by the operative. Full details of any remedial actions must also be recorded. Where measurements are not taken, this will be recorded and reasons given.

The log sheets will be faxed to the local authority on a weekly basis, with a copy of the log sheets also being held on site for inspection.

## **DUST & AIR QUALITY MONITORING LOCATIONS FOR THE HAYLE AREA**



**Appendix II: Daily Dust Log** 

**Project Location:** 

Name of person keeping record:

Please answer either a YES, NO, or N/A for each question. If the answer is NO, please explain in the space provided.

Both Appendix II and III must be faxed to Penwith District Council on a weekly basis.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Are measures effectively controlling excessive dust on unpaved parking lots?						
Is dust being effectively controlled on haul roads and access roads?						
Is dust being controlled on inactive portions of construction site?						
Are workers maintaining at least 3" of free space on haul trucks to prevent spillage?						
Are haul trucks that transfer loads being covered?						
Are the measures effectively preventing dirt from spilling onto paved public roadways?						
Is water being used to control dust on active portions of site?						

### **Appendix III: Weekly Monitoring Results Sheet**

Date	Time	Monitoring Location <sup>(a)</sup>	Particulate Measurement (µgm <sup>-3</sup> )	Wind Speed and Direction	General Weather Conditions <sup>(b)</sup>	Comments

<sup>(</sup>a) Specify which location either Penpol 1, Penpol 2, swimming pool, or cricket ground.(b) Wind direction and speed, air temperature, incidence of precipitation and degree of cloud cover.