AW EDWARDS

Air Quality and Dust Management Procedure

PROJECT	Sydney City & Southwest Metro – Crows Nest Station	**REVISION**	03
DOCUMENT NUMBER	SMCSWSCN-AWE-SCN-EM-PLN-0000018	**DATE**	25.01.2024
CLIENT	Sydney Metro	**STATUS**	For Construction

DOCUMENT INFORMATION

	PREPARED BY	REVIEWED BY	APPROVED BY
Name			
Company	Element Environment	Element Environment	A W Edwards Pty Ltd
Project Role	Lead Author	Technical Reviewer	Project Director
Signature			
Date	25 January 2024	25 January 2024	25 January 2024

DOCUMENT APPROVAL

A W EDWARDS PTY LIMITED

A W EDWARDS HEAD OFFICE 131 SAILORS BAY ROAD | PO BOX 99 | NORTHBRIDGE NSW 1560 AUSTRALIA | P 02 8036 7200 | E nsw@awedwards.com.au
MID NORTH COAST OFFICE UNIT 6/35 MERRIGAL RD PORT MACQUARIE NSW 2444 AUSTRALIA | P 02 6581 5755 | www.awedwards.com.au
| ABN 76 000 045 849 | ACN 000 045 849

REVISION	DATE	STATUS	AUTHOR	APPROVED BY	COMMENTS
A	30-Oct-20	Draft	Element Environment		
B	30-Oct-20	For Review	Element Environment		Revision and status updated
C	4-Dec-20	For Review	Element Environment		Revised in response to Sydney Metro review*
00	08-Jun-21	For Construction			Update Contacts
01	23-Sep-22	For Construction			Update to include for Site C OSD
02	09-Nov-2022	For Construction			Update to address ER comments
03	25-Jan-2024	For Construction			Update Contacts

*Note Management Plan number has changed from SMCSWSCN-AWE-SCN-AN-PLN-0000016 to SMCSWSCN-AWE-SCN-EM-PLN-000018 to align with TeamBinder document numbering, at Rev C.

AW EDWARDS acknowledges the Traditional Owners of Country throughout Australia and recognises the continuing connection to lands, waters and communities.
We pay our respect to Aboriginal and Torres Strait Islander people and culture, and to their Elders past and present.

"COMMUNITY"
Artwork by Raechel Saunders

CONTACTS

STAKEHOLDER	NAME	CONTACT DETAILS
Project Director	[redacted]	
Health and Safety Manager		
Completions Manager		
Construction Manager		
Project Manager		
Senior Site Manager		
Community Engagement Manager		
Training & Competency Coordinator		
Planning & Environment Manager		
Environment Coordinator		
Occupational Health & Hygiene Coordinator		
Sydney Metro Delivery Director		
Sydney Metro Environment Manager		
Sydney Metro Senior H&S Manager		
Sydney Metro Senior Communications Manager		
Independent Environmental Representative		
Sydney Metro Engineering Assurance Manager		
ISA Coordinator		
ISA Lead		
North Sydney Council		
EPA pollution hotline		
SafeWork NSW		
NSW Health		
Fire and Rescue NSW		
WIRES Wildlife Rescue		
Crown Certifier		

CONTENTS

1 BACKGROUND

The Sydney Metro City & Southwest is a 30 kilometre metro rail between Chatswood and Bankstown, including; 17 kilometres of new tunnel from Chatswood, under the harbour to Sydenham connecting seven new underground stations at Crows Nest, Victoria Cross (North Sydney), Barangaroo, Pitt Street, Martin Place, Central and Waterloo. Upgrading 13 kilometres of the Bankstown line, including 11 existing stations; Sydenham, Marrickville, Dulwich Hill, Hurlstone Park, Canterbury, Campsie, Belmore, Lakemba, Wiley Park, Punchbowl and Bankstown plus southern service facilities.

1.1 SYDNEY METRO CITY & SOUTHWEST – CHATSWOOD TO SYDENHAM

The application for Sydney Metro City & Southwest – Chatswood to Sydenham was lodged by Sydney Metro as a Critical State Significant Infrastructure project (reference CSSI-7400) and was approved by the Minister in January 2017. The project is described in the approval (hereafter referred to as the CSSI Approval) as:

Construction and operation of a metro rail line, approximately 16.5 kilometres long (of which approximately 15.5 kilometres is located in underground rail tunnels) between Chatswood and Sydenham.

The new metro stations identified in the CSSI Approval are at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo. In addition to this, new metro platforms are proposed at Central Station and Sydenham Station.

Several separate environmental impact assessments of the project were progressed by Transport for NSW (TfNSW). In May 2016, an environmental impact statement (EIS) for the Chatswood to Sydenham section of the project (the EIS) was placed on public exhibition for 48 days. A preferred infrastructure report on the Chatswood to Sydenham component (the PIR) was prepared and publicly released in October 2016. The project was approved on 9 January 2017 (SSI 15_7400) (project planning approval). Following approval, six modifications have been approved by NSW Department of Planning, Infrastructure and Environment (DPIE).A W Edwards has been awarded the tender to construct Crows Nest Metro Integrated Station Development (the ISD project).

1.2 SYDNEY METRO CROWS NEST OVER STATION DEVELOPMENT – SITE C

The application for the Sydney Metro Crows Nest Over Station Development for Site C, on the north-western corner of Hume Street and Clarke Street, was lodged by Sydney Metro as a State Significant Development on 10 June 2021 (reference SSD- 13852803) and was approved by the Minister in December 2021. The project is described in the approval (hereafter referred to as the SSD Approval) as:

Construction of an eight (8) storey commercial office building above the metro station.

A W Edwards has been awarded the tender to construct Crows Nest Metro Over Station Development Site C (the OSD project).

2 DOCUMENT PURPOSE

The purpose of this air quality and dust management procedure is to minimise potential air quality and dust related impacts from the ISD and OSD project, on receivers adjacent to and near the construction site.

3 CONSTRUCTION OVERVIEW

Construction activities which have the potential to generate dust of the station broadly includes:

- Structure;
- Fit out;
- Services;
- External works;
- Landscaping;
- Over station development enabling works;
- Over station works; and
- Testing and commissioning.

4 POTENTIAL IMPACTS

The following adverse impacts may arise in the event of dust generation during construction activities:

- Dust and vehicle emissions can have health impacts to residents, commuters and people working in the vicinity of the construction site.
- Dust can cause damage to personal and public property and may lead to extensive cleaning requirements and community complaints.
- Dust and vehicle emissions can result in odours that some people may be sensitive to.

5 AIR QUALITY ENVIRONMENTAL PERFORMANCE OUTCOMES AND MANAGEMENT OBJECTIVES

The Chatswood to Sydenham Submissions and Preferred Infrastructure Report identified the following environmental performance outcomes for construction:

- Dust and exhaust emissions during construction would be minimised.

The Chatswood to Sydenham Construction Environmental Management Framework identifies the following air quality management objectives for construction:

- Minimise gaseous and particulate pollutant emissions from construction activities as far as feasible and reasonable.
- Identify and control potential dust and air pollutant sources.

These air quality environmental performance outcomes and management objectives will be adopted for the OSD.

6 ROLES AND RESPONSIBILITIES

A summary of the specific responsibilities for air quality management specific to each role are specified in Table 5.1.

*Table 6**Error! No text of specified style in document.**.1 Summary of roles and responsibilities*

ACTION	RESPONSIBILITY
▪ Performance and compliance with the CEMP and air quality and dust management procedure.	Construction Manager Planning & Environment Manager
▪ Daily weather monitoring ▪ Visual inspections to determine if mitigation measures are needed or successful ▪ Implementation of environmental mitigation measures ▪ Recording implementation of mitigation measures	Site Supervisor
▪ Environmental monitoring and visual inspections ▪ Recording and reporting on effectiveness of mitigation measures	Environmental Coordinator
▪ Deal with complaints in a responsive manner so that stakeholders' concerns are managed effectively and promptly. ▪ A verbal response will be provided to the complainant as soon as possible and within a maximum of two hours from the time of the complaint. ▪ A detailed written response will then be provided, if required, to the complainant within one week.	Community Engagement Manager

7 MITIGATION AND MANAGEMENT MEASURES

The following mitigation and management measures would be implemented during construction of the ISD and OSD to minimise the potential for dust generation and adverse air quality impacts:

- Regularly dampen unsurfaced haul routes and work areas in dry and windy conditions.
- Fully cover all vehicles carrying loose or potentially dusty material to or from the site to prevent the escape of dust or other material.
- All materials shall be stored or stockpiled at suitable locations and stockpiles shall be maintained at manageable sizes which allow them to be covered, if necessary, to control emissions of dust and/or VOCs/odour.
- Manage stockpiles to minimise dust generation, adopting measures such as covering or stabilising this material.
- Switch off the engines of all on-site vehicles and plant when not in use for an extended period.
- Regularly maintain and servicing plant to minimise emissions, considering emissions from plant as part of pre-acceptance checks.
- Consider air quality impacts to neighbouring receivers when planning for and constructing the site layout and placement of plant.
- Minimise the tracking of dirt / dust onto public roads by stabilising site access and egress point, using street sweepers where required.
- Construction hoardings and scaffolding will be regularly inspected and kept clean and free of dust build up.
- Physical barriers shall be erected at right angles to the prevailing wind direction or shall be placed around or over dust sources to prevent wind or activity from generating dust emissions.
- Water suppression will be used for active earthwork areas, stockpiles, unsurfaced haul roads and loads of soil being transported to reduce wind-blown dust emissions;
- Wheel-wash facilities or rumble grids will be provided and used near the site exit points, as appropriate.
- Use hoses, water guns and sprinklers as required to aid in dust suppression.
- Implement use of water during saw cutting activities to minimise the potential for dust generation.
- No fires or burning of materials on site is permitted.
- Maintain gaseous plant and equipment (e.g. refrigeration systems, fire suppression systems regularly to prevent the inadvertent release of gases to the atmosphere.
- Earthworks and scheduling activities shall be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed.
- Gates shall be closed between vehicle movements and shall be fitted with shade cloth.
- Cleaning of footpaths and roadways shall be carried out regularly.

8 INSPECTION AND RECORDS

The following monitoring activities would be implemented during construction to monitor the effectiveness of mitigation and management measures and minimise the potential for adverse impacts to occur:

- Daily visual inspections for airborne dust leaving the site and dust deposition will be undertaken to assess the effectiveness of air quality controls.
- The Site supervisor will record daily weather conditions, specifically those conditions which may exacerbate air quality, for example hot, dry and windy conditions. Daily weather conditions will be included in the daily pre-start.
- The Environmental Coordinator will visually monitor daily construction activities (including dust generating activities, emissions from plant equipment and any excessive odours) to ensure air quality controls are effective.
- The Environmental Coordinator will distribute a weekly weather forecast to the project team, identifying any unfavourable conditions or additional air quality controls.

The following compliance records will be maintained by the Environmental Coordinator:

- Records of any meteorological condition monitoring.
- Records of any management measures implemented as a result of adverse, windy weather conditions.
- Records of air quality and dust inspections undertaken.

APPENDIX A: AIR QUALITY MANAGEMENT DIAGRAM