

Erica van den Honert  
Director Infrastructure Management  
Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

5 April 2019  
Ref: 170108-ER-DPE-TSE- 19

Dear Erica

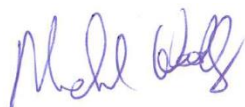
**RE: Sydney Metro City & South West Chatswood to Sydenham CSSI 15\_7400 – ER Monthly Report for March 2019 – TSE Contract and Martin Place USP**

Healthy Buildings International (HBI) submits this report to the Secretary in accordance with:

- Condition A24 (I) of the Sydney Metro City & South West Chatswood to Sydenham CSSI 15\_7400 Approval (9 January 2017) and associated modifications (MOD1\_Victoria Cross and Artarmon (18 October 2017), MOD2\_Central Walk (21 December 2017), MOD4\_Sydenham Station and Metro Facility South (13 December 2017), MOD 3\_ Martin Place Metro Station (22 March 2018), MOD 5\_Blues Point Acoustic Shed (2 November 2018), and MOD Administrative Changes (21 February)); and
- As required by the subsequent appointment as the approved Environmental Representative (17 February 2017);

The attached summary details the key activities undertaken by Environmental Representatives for Sydney Metro – City and South West Chatswood to Sydenham during the month of **March 2019**.

Yours sincerely



Michael Woolley  
Environmental Representative

Cc: Sydney Metro: Fil Cerone, Matt Marrinan, Ben Armstrong, Stuart Hodgson, Adam Koutsamanis, Pam Tummers, Margarita Ognjanovic, Rob Muir (JHCPBG), Jason Ambler (LL)  
DPE: Kate Moore, Elizabeth Williamson, Alice Pryke  
CC IEA: Larry Weiss, Julie Dickson



Summary of Contract Packages	Environmental Representative/s
Tunnel and Station Excavation (TSE)	Michael Woolley/ Alberto Paludetto
Martin Place Unsolicited Proposal USP/ISD Macquarie Bank/Lendlease	Michael Woolley/Jo Robertson
Key Construction Activities	
TSE	<p><b>Chatswood:</b></p> <ul style="list-style-type: none"> <li>▪ Tunnelling with both TBMs; spoil handling; segment storage and handling; tunnelling support activities.</li> <li>▪ Intersection works on Mowbray and Hamden Road operating with both left and right hand turn out.</li> </ul> <p><b>Artarmon Substation:</b></p> <ul style="list-style-type: none"> <li>▪ Liner installation.</li> </ul> <p><b>Chatswood NCW:</b></p> <ul style="list-style-type: none"> <li>▪ Works along Frank Channon walk comprised completion of piling; capping beam construction, stockpiling of materials in the Gordon Street and Nelson Compounds.</li> <li>▪ Brand Street works included benching; installation of for soil nails, stockpiling and loading out spoil.</li> </ul> <p><b>Crows Nest Station:</b></p> <ul style="list-style-type: none"> <li>▪ Ongoing excavation under the acoustic cover; spoil removal off site; water treatment and various other works. Noise housing for ventilation pipework under construction.</li> </ul> <p><b>Victoria Cross North site:</b></p> <ul style="list-style-type: none"> <li>▪ Excavation by excavators with rock hammers and excavators with saw cutters. Stockpiling spoil in the shed and removal of spoil.</li> </ul> <p><b>Victoria Cross South site:</b></p> <ul style="list-style-type: none"> <li>▪ Excavation by road header and wall support. Removal of spoil. Other support activities.</li> </ul> <p><b>Blues Point Temporary Retrieval Site:</b></p> <ul style="list-style-type: none"> <li>▪ Ongoing construction of the acoustic shed.</li> <li>▪ Gantry crane was delivered and installed.</li> <li>▪ Ongoing excavation using rock hammer, noting excavation is below level of the barge access.</li> <li>▪ Ongoing construction of the barge wharf and wharf access.</li> </ul> <p><b>Barangaroo Station:</b></p> <ul style="list-style-type: none"> <li>▪ TBM is being stored adjacent the loading area and under assembly.</li> <li>▪ Barges being loaded with spoil for transport to Clyde barging facility..</li> <li>▪ Operation of water treatment plant ongoing. Construction of bentonite slurry treatment plants ongoing for treatment of material excavated from under harbour TBM operations</li> <li>▪ spoil stockpiling; processing (removing oversize) and removal offsite ongoing;</li> <li>▪ Ongoing road header operation from the northern shaft in cross over cavern area.</li> <li>▪ Ongoing environmental controls including street sweeper and water cart. Wheel bath now operational which has reduced tracking. Water sprays installed under the bridge girders.</li> <li>▪ Acoustic roof was being installed.</li> <li>▪ Modifications were made to the spoil conveyer to lessen the risk of spills of spoil to waters during barge loading.</li> </ul> <p><b>Martin Place Station:</b></p> <ul style="list-style-type: none"> <li>▪ Excavation of the shopping circle area ongoing with site sheds moved.</li> <li>▪ Ongoing demolition at 39 Martin Place Building and removal of wastes. Works are below ground level.</li> </ul> <p><b>Clyde Barging Facility:</b></p> <ul style="list-style-type: none"> <li>▪ Ongoing unloading of barges form Barangaroo and loading out trucks for offsite disposal.</li> </ul> <p><b>Pitt Street North:</b></p> <ul style="list-style-type: none"> <li>▪ Ongoing excavation using road headers; removal of spoil off site.</li> </ul> <p><b>Pitt Street South:</b></p> <ul style="list-style-type: none"> <li>▪ Ongoing demolition and removal of wastes.</li> <li>▪ Capping beam adjacent pit street under construction.</li> </ul>



	<ul style="list-style-type: none"> <li>▪ Ongoing heritage investigations and clearance.</li> </ul> <p><b>Waterloo Station:</b></p> <ul style="list-style-type: none"> <li>▪ Excavation of the station box using long reach and telescopic excavators and a crane with a kibble.</li> <li>▪ Hammering/cutting of side walls and wall support.</li> <li>▪ Spoil management and loading out.</li> <li>▪ Operation of the water treatment plant.</li> <li>▪ Lining of the southern nozzles</li> <li>▪ Preparation for TBM 1 break through in early April</li> </ul> <p><b>Marrickville precast facility</b></p> <ul style="list-style-type: none"> <li>▪ Pre-cast facility operating.</li> <li>▪ Storage and handling of segments outside shed and in area to north where former buildings have been demolished.</li> </ul> <p><b>Marrickville dive site:</b></p> <ul style="list-style-type: none"> <li>▪ Ongoing tunnelling by TBM 1 with TBM 2 stopped for a period due to high groundwater levels under Shea’s Creek area and to reduce water required for treatment in the water treatment plant (WTP).</li> <li>▪ Spoil movement to night time shed for storage by conveyor.</li> <li>▪ Trucks accessing from Murray Street and exiting to Edinburgh Rd. Hardstand repairs carried out.</li> <li>▪ Wheel wash has been worked on to improve timing of wash and reduce water usage.</li> <li>▪ Operation of water treatment plant with plans to implement actions from recent incident investigations to reduce the risk of further incidents.</li> </ul>
MP – USP/ISD	<ul style="list-style-type: none"> <li>▪ Hard demolition ongoing during the period with demolition of 9-19 Elizabeth Street completed</li> </ul> <p>Storage of building rubble on site for use as ramps and piling pads; Waste segregation and off site transport of wastes and recyclables</p>
<b>ER Inspections</b>	
TSE	<p>Weekly inspections continued of the sites under the management of the TSE contractor. There were four inspections carried out during the month. Actions identified during the inspections comprised:</p> <ul style="list-style-type: none"> <li>▪ Waterloo – dust management; trucks parking on Botany Road</li> <li>▪ Barangaroo – dust management</li> <li>▪ Marrickville Dive – stormwater, erosion and sediment controls, spoil, and secondary containment of hydrocarbons and chemicals</li> <li>▪ Chatswood NCW – various issues relating to erosion and sediment controls</li> <li>▪ Victoria Cross North – dust management from the acoustic shed, secondary containment of hydrocarbons</li> <li>▪ Clyde Barging Facility – no new issues identified</li> <li>▪ Blues Point– blocked open drains</li> </ul> <p>Various notes were made in the inspection reports reflecting commitments made by the TSE Contractors and risks identified during inspections. ER Inspection reports have been prepared and issued to Sydney Metro and the TSE Contractor.</p>
MP – USP/ISD	<p>There was one inspection carried out in March 2019 of the demolition of 9-19 Elizabeth Street. No new issue were identified during the inspection.</p>
<b>Endorsed Document/s</b>	
Sydney Metro	<ul style="list-style-type: none"> <li>▪ n/a</li> </ul>
TSE	<ul style="list-style-type: none"> <li>▪ Out of hours works (OOHW) approvals <ul style="list-style-type: none"> <li>○ Crane Hook change MPS030</li> <li>○ External Shotcrete MPS031</li> <li>○ OOHV VCS Application - Monitoring Bore</li> </ul> </li> <li>▪ Construction Noise and Vibration Impact Statement (CNVIS) <ul style="list-style-type: none"> <li>○ Waterloo Nozzle - extended hours</li> <li>○ Barangaroo Rev 13</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>○ Barge Loading Addendum (Barangaroo)</li> </ul>
USP/ ISD- Martin Place	<ul style="list-style-type: none"> <li>▪ Out of hours works (OOHW) approvals               <ul style="list-style-type: none"> <li>○ OOH7 Application - Pedestrian Camera Installation</li> </ul> </li> <li>▪ Construction Spoil Management Plan, Sydney Metro Martin Place Station – Integrated Station Development, Rev 3, 14 March 2019</li> <li>▪ Visual Amenity Management Plan, Sydney Metro Martin Place Station – Integrated Station Development, Rev 3, 14 March 2019</li> </ul>
<b>Complaints / Incidents / Non-compliance</b>	
TSE	<p>It is understood that Sydney Metro has been providing summaries of complaints to DPE daily. Responses to each complaint have been noted in each complaint report, with follow up actions often defined in revised reports. One complaint related to dust emissions at the Pitt Street South site was raised on behalf of a complainant to the EPA. The complaint was responded to by JHCPBG and copied to DPE Compliance. The specific demolition works that led to the complaint have ceased.</p> <p>The following events/incidents related to TSE works were reported to the ER for the period:</p> <ul style="list-style-type: none"> <li>▪ Sediment laden discharge to the culvert at Marrickville on 4 March 2019. This incident was reported to the EPA and the ER on 4 March and a report dated 15 March 2019 providing details of the incident was issued to the ER on 20 March 2019 (issued to the EPA on 15 March). This report was issued to DPE by Sydney Metro on 21 March 2019.</li> <li>▪ High noise activities undertaken in the TBM tunnel (TBM 1 from Marrickville) after 10pm near cross passage 3 were reported in Complaint Report 1004. JHCPBG issued an email with further details on 4 April 2019 and indicated that a detailed investigation report is to be issued related to this event. Based on the details as already presented it would appear that mitigation measures (restricted hours for hammering) defined in the Tunnelling CNVIS were not implemented.</li> </ul>
USP/ ISD- Martin Place	There were no complaints reported by Sydney Metro or Lend lease to have been received in relation to works undertaken directly by Lend Lease. There were no incidents reported by Lend Lease.
Sydney Metro	<p>Complaints received for Sydney Metro works are included in complaint summaries provided to DPE daily.</p> <p>There were no incidents reported by Sydney Metro for Sydney Metro conducted works as defined by the project approval definition for incidents reported to DPE under condition A41.</p>
<b>Audits (specific to TSE and MP ISD only)</b>	
<p>Audit Related activities conducted during the period:</p> <ul style="list-style-type: none"> <li>▪ Review of Independent Audit Report Business Management Plan (BMP)</li> </ul>	
<b>Looking Forward – Core Focus Areas</b>	
TSE	<ul style="list-style-type: none"> <li>▪ Dust management at Barangaroo</li> <li>▪ Works in the Northern Corridor Area</li> <li>▪ Tracking of dust onto roads at key excavation sites</li> <li>▪ Heritage investigations at Pitt Street South</li> <li>▪ Cladding installation on the acoustic shed at Blues Point (anticipating this may represent a higher visual impact)</li> <li>▪ Ramp up of TSE works, including excavation respite periods and activities being undertaken as a part of 24/7 tunnelling works</li> </ul>
MP – USP/ ISD	<ul style="list-style-type: none"> <li>▪ Out of Hours works</li> </ul>