

16 April 2021

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Department of Planning, Industry and Environment 4 Parramatta Square, 2 Darcy Street, Parramatta NSW 2150

Attention: Secretary, Department of Planning, Industry and Environment

Dear Sir

New Sydney Fish Market Modification 4 - Sediment Redistribution Air Quality

Multiplex Constructions Pty Ltd (Multiplex) are currently undertaking construction activities for the new Sydney Fish Market in Blackwattle Bay, Sydney. As part of the ongoing refinement of the design of the new Sydney Fish Market, and in response to new information regarding site conditions, Multiplex are proposing to modify the design of the basement area and associated construction activities from that currently approved. This includes a change in the volume of marine sediment that has been identified as requiring re-distribution to level the seabed.

DPIE has requested that an assessment of the potential implications of the proposed increase in sediment redistribution on off-site air quality be provided. This letter has been prepared by SLR Consulting Pty Ltd (SLR) at the request of Multiplex Constructions Pty Ltd (Multiplex), to address this request.

1 Background

SLR was commissioned by UrbanGrowth NSW Development Corporation (UrbanGrowth NSW) to perform an Air Quality Impact Assessment (AQIA) for the proposed development (SLR refence, 610.17553-R02-v3.0). SLR also prepared a *Construction Air Quality and Dust Management Plan – SSD 8925* for the works (SLR reference, 610.30264-R01-v0.1.docx, February 2021), commissioned by Multiplex.

The main potential sources of air emissions associated with the construction works were identified as:

- Dust impacts during the demolition works; and
- Odour impacts due to the decomposition of marine growth on the underwater structures should they be stored on-site for an extended period.

The potential for off-site dust impacts was assessed using a qualitative risk-based approach prescribed by the Institute of Air Quality Management (IAQM). The results of this assessment indicated that dust impacts due to the Stage 1 works could be adequately managed with the implementation of site-specific mitigation measures, and that the risk of residual impacts was *low* for demolition and earthworks activities and *negligible* for trackout.

The potential for off-site odour impacts due to decomposition of marine growth was also assessed using a qualitative risk-based approach. The results of this assessment concluded that these odour impacts could be managed by either removing the marine growth before the materials are stored or stockpiled on-site, or by ensuring they are transported off-site without delay. Assuming these measures are implemented, the risk of residual off-site odour impacts was concluded to be of *neutral* significance.

The mitigation measures listed in Section 8 of the *Construction Air Quality and Dust Management Plan* to minimise the potential for off-site nuisance odour impacts associated with exposure of seabed materials are as follows:

- Excavated seabed material is to be returned underwater or removed from site within 24-hours of excavation in order inhibit odour impacts due to prolonged exposure to atmosphere.
- Excavated seabed material is to be kept covered where possible to limit odour emissions.

2 Main Works SSDA Modification 4

During the Development Consent process for the new Sydney Fish Markets, the quantity of marine sediment under the Hansen Concrete Batching Plant area was not able to be fully assessed because of inaccessibility to the relevant areas. Now that demolition of the Hansen batching plant and wharf has been completed, the subsurface conditions have revealed a larger than unexpected quantity of material that will require redistribution to level the seabed.

Approximately 12,000 m³ of sediment requires redistribution within the site, whereas previous reports prepared as part of the SSD submission referred to less than 1,000 m³ requiring redistribution.

3 Implications of Modification 4 for Air Quality Impacts

In order to reprofile the seabed, sediment may be temporarily lifted out of the water column, stored in a bin, and then redistributed back under the water within 24 hours. This is consistent with the mitigation measures listed above from the *Construction Air Quality and Dust Management Plan* to limit the potential for any off-site odour impacts.

There would also be no dust created from the sediment leaving the water column because it would remain saturated at all times.

Based on the above, no changes to the conclusions of the Air Quality Impact assessment, or to the mitigation measures included in the *Construction Air Quality and Dust Management Plan* are identified as being required as a result of proposed SSDA Modification 4. The additional activities associated with the redistribution of the sediment are not expected to lead to a significant change in air quality impacts for the Project.

Yours sincerely

ALI NAGHIZADEH Associate - Air Quality

Checked/ Authorised by: KL

