

Appendix 9.9 Sample Calculation of Construction Noise Levels - Mitigated Scenario

HH9 - Harbourfront Horizon
Mitigated



| Package | Construction Activity | Work Site No. | SWL | Dist ^[2] (m) | SPL ^[3] | Building Screening | 2017 | | | | | | | | | | | | 2018 | | | | | | | | | | | | 2019 | | | | | | | | | | | | | |
|--|---|---------------|-----|-------------------------|--------------------|--------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | | | | | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 15 HUH SAT | Demolition of Freight Building Demolition of Freight Building | 803 | 121 | 248 | 68 | 0 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | | |
| 12 HUH Landfall | HUH Landfall | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Existing Fender Piles Removal, Cofferdam Wall Construction and Shear Piling | 80102 | 118 | 253 | 64 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Soft Ground Excavation | 80102 | 115 | 253 | 62 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Excavation Work | 80102 | 121 | 253 | 67 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Tunnel Box Construction | 80102 | 115 | 253 | 62 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E&M Installation | 80102 | 114 | 253 | 61 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Cofferdam Wall Removal and Fender Piles Reinstatement | 80102 | 115 | 253 | 62 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Backfilling and Reinstatement | 80101 | 116 | 267 | 63 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HUH Freight Pier | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Operation of Barging Point ⁴ | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Demolition of Existing Freight Pier | 804 | 116 | 243 | 64 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Piling Construction | 804 | 123 | 243 | 70 | 0 | | | | | | | | | | | | | 70 | 70 | 70 | | | | | | | | | | | | | | | | | | | | | | | | |
| Concrete Deck Construction and Marine Furniture | 804 | 115 | 243 | 62 | 0 | | | | | | | | | | | | | | | | | 62 | 62 | 62 | 62 | 62 | 62 | | | | | | | | | | | | | | | | | |
| 13 NOV | NOV Construction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Site Clearance, Fencing & Hoarding | 802 | 118 | 258 | 65 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Excavate Soft Material (+4.0mPD to -17.5mPD) | 802 | 120 | 258 | 67 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Construct NOV | 802 | 114 | 258 | 61 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Overall Noise Level (SCL(HUH-ADM), Leq (30min), dB(A)) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Remarks:

- [1] The Works Area with length to width ratio exceeding 5 : 1 is divided into Subareas.
- [2] Noise source at more than 300m from the sensitive receiver are not considered in the noise assessment due to large distance attenuation effect.
- [3] For the calculation of sound pressure levels (SPL), the PMEs are assumed to be placed at the notional source position according to the "Technical Memorandum on Noise from Construction Work other than Percussive Piling" by EPD.
- [4] Barging point and rock crushing plant will be used by SCL(MKK-HUH) and SCL(TAW-HUH) during the same period. Operation of barging point and rock-crushing plant has been assessed in SCL(MKK-HUH) EIA Report and will not be assessed in this assessment.

