Appendix 4.11 Proposed Operational Fixed Plant Inventory with Mitigation Measures

Proposed SPS Building

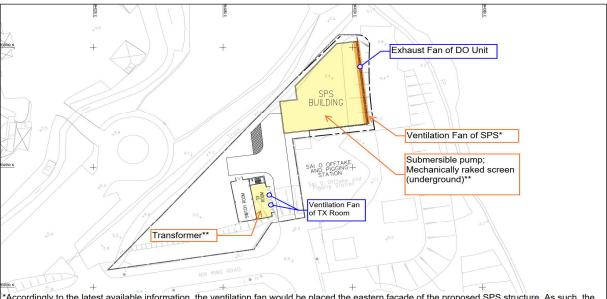
Fixed Plant	SWL per Item, dB(A) ^[1]	Reference [1]	No. of Items ^[2]	Mitigation Measures, dB(A) ^[3]	Sub-total SWL, dB(A)
Submersible pump	88	Ref 1	2	0	91
Mechanically raked screen	89	Ref 2	1	0	89
Exhaust fan of deodorising unit (8,600 m³/hr)	83	Ref 3	1	-10	73
Ventilation fan (34000 m³/hr)	89	Ref 4	1	-10	79

Proposed Transformer Room and Switch Room

Fixed Plant	SWL per Item, dB(A) ^[1]	Reference [1]	No. of Items	Mitigation Measures, dB(A) ^[3]	Sub-total SWL, dB(A)
Transformer	85	Ref 1	1	0	85
Ventilation fan (1700 m³/hr)	79	Ref 5	2	-10	72

Notes:

- [1] Ref 1 The SWL was made reference to the approved EIA Report of Tuen Mun Area 54 Sewage Pumping Station (register no. AEIAR-122/2008).
 - Ref 2 The SWL was made reference to the approved EIA Report for Port Shelter Sewerage, Stage 3 Sewerage Works at Po Toi O (register no. AEIAR-206/2017).
 - Ref 3 The SWL was made reference to the EPD's Good Practices on Ventilation System Noise Control based on the flow rate of 8600m³/hr and 125 Pa.
 - Ref 4 The SWL was made reference to the EPD's Good Practices on Ventilation System Noise Control based on the flow rate of 34000m³/hr and 125 Pa. Ref 5 The SWL was made reference to the EPD's Good Practices on Ventilation System Noise Control based on the flow rate of 1700m³/hr and 125 Pa.
- [2] Standby items are not included in noise assessment.
- [3] Noise reduction of 10 dB(A) is assumed for ventilation fan with silencer with reference to "Good Practices on Ventilation System Noise Control" published by EPD.



*Accordingly to the latest available information, the ventilation fan would be placed the eastern façade of the proposed SPS structure. As such, the minimum distances of the NSRs to the eastern facade of the SPS structure were adopted for the assessment as the worst-case scenario.

**The minimum distances of the NSRs to the SPS structure / TX Room were adopted for fixed plants housed within the reinforced structure for the assessment as the worst-case scenario.