

Appendix 4A

PME Inventory for the Construction of the STW and Outfalls (Unmitigated)

| Activities | | Equipment Used | Number Used | On time | Reference | SWL (dB(A)) | Subtotal SWL dB(A) |
|--|--|---|-------------|---------|-----------|-------------|--------------------|
| Extension of inlet pumping mains (X1 and X2) | Breaking Concrete Surface (X2) | Breaker, excavator mounted (pneumatic) | 1 | 100% | CNP 027 | 122 | 122.0 |
| | | Air compressor, air flow > 10m ³ /min and <= 30m ³ /min | 1 | 100% | CNP 002 | 102 | |
| | Excavation (X2) | Excavator/loader, wheeled/tracked | 1 | 100% | CNP 081 | 112 | |
| | | Water pump, submersible (electric) | 1 | 100% | CNP 283 | 85 | |
| | Pipelaying (X2) | Compactor, vibratory | 1 | 100% | CNP 050 | 105 | |
| Surfacing (X2) | Concrete mixer pump Poker, vibratory, hand-held | 1 | 100% | CNP 047 | 109 | | |
| | | 2 | 100% | CNP 170 | 113 | | |
| Mainlaying (X1) | Drill, percussive, hand-held (electric) | 1 | 100% | CNP 064 | 103 | 116.8 | |
| | | | | | | | 103.0 |

Note: * Concrete surface breaking, excavation, pipelaying and surfacing construction activities at X2 would be carried out in sequence.

The highest SWL of these four, 122dB(A) is adopted for assessment.

| Activities | | Equipment Used | Number Used | On time | Reference | SWL (dB(A)) | Subtotal SWL dB(A) | |
|---|---|---|--------------------------------------|---------|------------------------|-------------|--------------------|-----|
| STW Construction (notional source at Y) | Site Formation, Earthworks, Boulder/Rock Breaking | Excavator/loader, wheeled/tracked | 1 | 100% | CNP 081 | 112 | 124.0 | |
| | | Breaker, excavator mounted (pneumatic) | 1 | 100% | CNP 027 | 122 | | |
| | | Bulldozer | 1 | 100% | CNP 030 | 115 | | |
| | | Generator, silenced, 75 dB(A) at 7 m | 1 | 100% | CNP 102 | 100 | | |
| | | Rock drill, hand-held (pneumatic) | 1 | 100% | CNP 183 | 116 | | |
| | | Air compressor, air flow > 10m ³ /min and <= 30m ³ /min | 1 | 100% | CNP 002 | 102 | | |
| | | Sheet Piling Plant | 1 | 100% | BS 5228 ⁽¹⁾ | 106 | | |
| | | Mini-piling | Crane, mobile/barge mounted (diesel) | 1 | 100% | CNP 048 | | 112 |
| | | | Generator, silenced, 75 dB(A) at 7 m | 1 | 100% | CNP 102 | | 100 |
| | Piling, large diameter bored, reverse circulation drill | | 1 | 100% | CNP 166 | 100 | | |
| | Welding Machine | | 1 | 100% | BS 5228 ⁽²⁾ | 108 | | |
| | Water pump (petrol) | | 1 | 100% | CNP 282 | 103 | | |
| | Concrete pump, stationary/lorry mounted | | 1 | 100% | CNP 047 | 109 | | |
| | Concreting/Roadwork | Crane, mobile/barge mounted (diesel) | 1 | 100% | CNP 048 | 112 | | |
| | | Concrete mixer pump | 1 | 100% | CNP 047 | 109 | | |
| | | Generator, silenced, 75 dB(A) at 7 m | 1 | 100% | CNP 102 | 100 | | |
| | | Poker, vibratory, hand-held | 2 | 100% | CNP 170 | 113 | | |
| | | Road roller | 2 | 100% | CNP 185 | 108 | | |
| | | Grader | 1 | 100% | CNP 104 | 113 | | |

Note: BS 5228(1) refers to Table C4 Item No 13

BS 5228(2) refers to Table C7 Item No 60

| Activities | | Equipment Used | Number Used | On time | Reference | SWL (dB(A)) | Subtotal SWL dB(A) |
|--|--|---|-------------|---------|-----------|-------------|--------------------|
| Modification and demolition of the existing facilities (Y) | | Breaker, hand-held, mass <= 10kg | 1 | 100% | CNP 023 | 108 | 117.3 |
| | | Rock drill, hand-held (pneumatic) | 1 | 100% | CNP 183 | 116 | |
| | | Breaker, hand-held, mass > 10kg and <20 kg | 1 | 100% | CNP 024 | 108 | |
| | | Air compressor, air flow > 10m ³ /min and <= 30m ³ /min | 1 | 100% | CNP 002 | 102 | |

| Activities | | Equipment Used | Number Used | On time | Reference | SWL (dB(A)) | Subtotal SWL dB(A) |
|--|--|---|-------------|---------|-----------|-------------|--------------------|
| Construction of new submarine outfall & emergency overflow (Z) | | Derrick barge | 1 | 100% | CNP 061 | 104 | 119.7 |
| | | Dredger, grab | 1 | 100% | CNP 063 | 112 | |
| | | Bulldozer | 1 | 100% | CNP 030 | 115 | |
| | | Generator, silenced, 75 dB(A) at 7 m | 1 | 100% | CNP 102 | 100 | |
| | | Rock drill, hand-held (pneumatic) | 1 | 100% | CNP 183 | 116 | |
| | | Air compressor, air flow > 10m ³ /min and <= 30m ³ /min | 1 | 100% | CNP 002 | 102 | |