



Humber Low Carbon Pipelines

Preliminary Environmental Information Report
Volume III Appendix 12.3 Noise and Vibration
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nationalgrid

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Appendix 12.3: Construction Phase Plant Lists

| Pipelines - Setting out and erection of temporary fencing | | | | | | | |
|---|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Tractor (towing equipment) | C4.74 | 80 | 2 | 50 | 0 | 0 | 80 |
| Lump hammer | C1.19 | 69 | 2 | 20 | 0 | -4 | 65 |
| Handheld cordless nail gun | C4.95 | 73 | 2 | 20 | 0 | -4 | 69 |
| Total | | | | | | | 80 |

| Pipelines - Haul Road Construction | | | | | | | |
|------------------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Tracked excavator | C5.18 | 80 | 1 | 80 | 0 | -1 | 79 |
| Tracked excavator | C2.2 | 77 | 1 | 80 | 0 | -1 | 76 |
| Dump truck (tipping fill) | C2.30 | 79 | 2 | 30 | 0 | -2 | 77 |
| Dozer | C2.10 | 80 | 2 | 50 | 0 | 0 | 80 |
| Dozer | C2.11 | 79 | 2 | 80 | 0 | 2 | 81 |
| Dozer (towing roller) | C2.36 | 81 | 2 | 50 | 0 | 0 | 81 |
| Total | | | | | | | 87 |

| Pipelines - Topsoil Strip / Site Prep. | | | | | | | |
|--|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Tracked excavator | C2.2 | 77 | 2 | 80 | 0 | 2 | 79 |
| Dozer | C2.10 | 80 | 1 | 80 | 0 | -1 | 79 |
| Dozer | C2.11 | 79 | 1 | 80 | 0 | -1 | 78 |
| Total | | | | | | | 83 |

| Pipelines - Excavation of trenches | | | | | | | |
|------------------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Tracked excavator | C4.63 | 77 | 1 | 80 | 0 | -1 | 76 |
| Tracked excavator | C2.2 | 77 | 2 | 80 | 0 | 2 | 79 |
| Dump truck (tipping fill) | C2.30 | 79 | 2 | 30 | 0 | -2 | 77 |
| Tracked excavator | C2.14 | 79 | 1 | 80 | 0 | -1 | 78 |
| Dozer | C2.11 | 79 | 1 | 80 | 0 | -1 | 78 |
| Compressor | C3.19 | 75 | 2 | 100 | 0 | 3 | 78 |
| Total | | | | | | | 86 |

| Pipelines - HDD (Daytime) | | | | | | | |
|---------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| HDD Power unit & drill | HDD_01 | 83 | 1 | 100 | 0 | 0 | 83 |
| HDD Generator | HDD_02 | 70 | 1 | 100 | 0 | 0 | 70 |
| Bentonite pump | HDD_03 | 76 | 1 | 100 | 0 | 0 | 76 |
| Bentonite mixer | HDD_04 | 70 | 1 | 100 | 0 | 0 | 70 |
| Diesel generator | C4.78 | 66 | 1 | 100 | 0 | 0 | 66 |
| Tracked excavator | C2.2 | 77 | 2 | 50 | 0 | 0 | 77 |
| Wheeled mobile crane | C4.43 | 70 | 1 | 50 | 0 | -3 | 67 |
| Lorry | C2.34 | 80 | 1 | 20 | 0 | -7 | 73 |
| Total | | | | | | | 85 |

| Pipelines - HDD (Night) | | | | | | | |
|-------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| HDD Power unit & drill | HDD_01 | 83 | 1 | 100 | 0 | 0 | 83 |
| HDD Generator | HDD_02 | 70 | 1 | 100 | 0 | 0 | 70 |
| Bentonite pump | HDD_03 | 76 | 1 | 100 | 0 | 0 | 76 |
| Bentonite mixer | HDD_04 | 70 | 1 | 100 | 0 | 0 | 70 |
| Diesel generator | C4.86 | 65 | 1 | 100 | 0 | 0 | 65 |
| Total | | | | | | | 84 |

| Pipelines - Micro tunnel/auger boring (Daytime) | | | | | | | |
|---|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Tracked excavator | C2.2 | 77 | 2 | 80 | 0 | 2 | 79 |
| Tracked mobile crane | C4.52 | 75 | 2 | 30 | 0 | -2 | 73 |
| Vibratory piling rig | C3.8 | 88 | 1 | 50 | 0 | -3 | 85 |
| Power pack | C3.10 | 68 | 2 | 80 | 0 | 2 | 70 |
| Dump truck (tipping fill) | C2.30 | 79 | 2 | 30 | 0 | -2 | 77 |
| Lorry | C2.34 | 80 | 1 | 20 | 0 | -7 | 73 |
| Crawler mounted rig | C3.22 | 80 | 1 | 100 | -10 | -10 | 70 |
| Total | | | | | | | 87 |

| Pipelines - Micro tunnel/auger boring (Night) | | | | | | | |
|---|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Tracked mobile crane | C4.52 | 75 | 1 | 50 | 0 | -3 | 72 |
| Crawler mounted rig | C3.22 | 80 | 1 | 100 | -10 | -10 | 70 |
| Diesel generator | C4.86 | 65 | 1 | 100 | 0 | 0 | 65 |
| Tracked excavator | C2.2 | 77 | 1 | 50 | 0 | -3 | 74 |
| Total | | | | | | | 77 |

| Pipelines - Pipe fabrication | | | | | | | |
|----------------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Mobile telescopic crane | C4.45 | 82 | 2 | 30 | 0 | -2 | 80 |
| Tracked excavator | C2.14 | 79 | 2 | 80 | 0 | 2 | 81 |
| Hand-held welder | C3.31 | 73 | 5 | 80 | 0 | 6 | 79 |
| Generator for welding | C3.32 | 73 | 5 | 80 | 0 | 6 | 79 |
| Angle grinder (grinding steel) | C4.93 | 80 | 2 | 30 | 0 | -2 | 78 |
| Gas cutter (cutting top of pile) | C3.34 | 68 | 2 | 30 | 0 | -2 | 66 |
| Total | | | | | | | 86 |

| Pipelines - Pipeline Installation | | | | | | | |
|-----------------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Mobile telescopic crane | C4.45 | 82 | 4 | 30 | 0 | 1 | 83 |
| Tracked excavator | C2.14 | 79 | 1 | 80 | 0 | -1 | 78 |
| Dump truck (tipping fill) | C2.30 | 79 | 1 | 50 | 0 | -3 | 76 |
| Total | | | | | | | 85 |

| Pipelines - Backfilling/Reinstatement | | | | | | | |
|---------------------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Tracked excavator | C2.14 | 79 | 2 | 80 | 0 | 2 | 81 |
| Dozer | C2.10 | 80 | 1 | 80 | 0 | -1 | 79 |
| Dozer | C2.11 | 79 | 1 | 80 | 0 | -1 | 78 |
| Dozer (towing roller) | C2.36 | 81 | 1 | 80 | 0 | -1 | 80 |
| Tractor (towing equipment) | C4.74 | 80 | 2 | 50 | 0 | 0 | 80 |
| Lorry | C2.34 | 80 | 1 | 20 | 0 | -7 | 73 |
| Total | | | | | | | 87 |

| Pipelines - Hydrotesting and pipeline cleaning | | | | | | | |
|--|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Mobile telescopic crane | C4.45 | 82 | 1 | 50 | 0 | -3 | 79 |
| Tracked excavator | C2.14 | 79 | 2 | 80 | 0 | 2 | 81 |
| Dozer | C2.10 | 80 | 1 | 50 | 0 | -3 | 77 |
| Tracked mobile crane | C4.52 | 75 | 2 | 30 | 0 | -2 | 73 |
| Compressor | C3.19 | 75 | 8 | 100 | -10 | -1 | 74 |
| Water tanker extracting water (vacuum pump) | C4.89 | 79 | 1 | 100 | 0 | 0 | 79 |
| Total | | | | | | | 86 |

| AGIs - Setting out and erection of temporary fencing | | | | | | | |
|--|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Tractor (towing equipment) | C4.74 | 80 | 2 | 50 | 0 | 0 | 80 |
| Lump hammer | C1.19 | 69 | 2 | 20 | 0 | -4 | 65 |
| Handheld cordless nail gun | C4.95 | 73 | 2 | 20 | 0 | -4 | 69 |
| Total | | | | | | | 80 |

| AGIs - Site Preparation & Earthworks | | | | | | | |
|--------------------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Tracked excavator | C2.14 | 79 | 4 | 80 | 0 | 5 | 84 |
| Lorry | C2.34 | 80 | 1 | 20 | 0 | -7 | 73 |
| Dozer | C2.10 | 80 | 2 | 80 | 0 | 2 | 82 |
| Rolling (rolling fill) | C2.37 | 79 | 2 | 80 | 0 | 2 | 81 |
| Total | | | | | | | 87 |

AGIs - Building & equipment substructure

| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
|----------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Tracked excavator | C2.19 | 77 | 2 | 80 | 0 | 2 | 79 |
| Dumper | C4.4 | 76 | 3 | 80 | 0 | 4 | 80 |
| Concrete mixer truck | C4.28 | 75 | 1 | 50 | 0 | -3 | 72 |
| Lorry | C2.34 | 80 | 1 | 20 | 0 | -7 | 73 |
| Total | | | | | | | 83 |

| AGIs - Erection of building/structures | | | | | | | |
|--|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Telescopic handler | C4.54 | 79 | 4 | 50 | 0 | 3 | 82 |
| Site forklift trucks | D.7.93 | 76 | 2 | 50 | 0 | 0 | 76 |
| Lifting platform | C4.57 | 67 | 6 | 30 | 0 | 3 | 70 |
| Lorry | C2.34 | 80 | 1 | 20 | 0 | -7 | 73 |
| Lorry with lifting boom | C4.53 | 77 | 1 | 20 | 0 | -7 | 70 |
| Total | | | | | | | 84 |

| AGIs - Equipment Installations | | | | | | | |
|--------------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Wheeled mobile crane | C4.43 | 70 | 2 | 80 | 0 | 2 | 72 |
| Telescopic handler | C4.54 | 79 | 2 | 80 | 0 | 2 | 81 |
| Hand-held welder | C3.31 | 73 | 2 | 20 | 0 | -4 | 69 |
| Generator for welding | C3.32 | 73 | 2 | 20 | 0 | -4 | 69 |
| Lorry with lifting boom | C4.53 | 77 | 2 | 20 | 0 | -4 | 73 |
| Electric percussion drill | D.6.54 | 76 | 2 | 20 | 0 | -4 | 72 |
| Total | | | | | | | 83 |

AGIs - Hardstanding and access roads

| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
|---------------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Tracked excavator | C5.18 | 80 | 2 | 80 | 0 | 2 | 82 |
| Dozer | C5.13 | 82 | 2 | 50 | 0 | 0 | 82 |
| Vibratory roller | C5.20 | 75 | 2 | 50 | 0 | 0 | 75 |
| Telescopic handler | C4.54 | 79 | 2 | 50 | 0 | 0 | 79 |
| Hand-held circular saw (petrol) | C5.36 | 87 | 1 | 30 | 0 | -5 | 82 |
| Asphalt paver (+ tipper lorry) | C5.31 | 77 | 2 | 80 | 0 | 2 | 79 |
| Dump truck (tipping fill) | C2.30 | 79 | 1 | 20 | 0 | -7 | 72 |
| Total | | | | | | | 88 |

| Use of Temporary Compound | | | | | | | |
|---------------------------|-----------|--------------------------------|--------------------|-----------|----------------|-----------------------|--------------------------------------|
| Plant | Plant Ref | L _p (at 10 m) dB(A) | No. of Plant Items | On-Time % | Screening (dB) | Total Correction (dB) | Total L _p (at 10 m) dB(A) |
| Lorry with lifting boom | C4.53 | 77 | 2 | 50 | 0 | 0 | 77 |
| Telescopic handler | C2.35 | 71 | 2 | 50 | 0 | 0 | 71 |
| Lorry | C2.34 | 80 | 1 | 20 | 0 | -7 | 73 |
| Diesel generator | C4.78 | 66 | 4 | 100 | 0 | 6 | 72 |
| Total | | | | | | | 80 |

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