# Appendix 4-7C

Calculation of Industrial Noise Levels (Operational Noise Due to Warehouse and Godown During Nighttime Period)

**Appendix 4-7C - Sensitivity Test on Fixed Noise Sources (Worst Case Scenario) (Nighttime)**

| Floor | NSR | Noise Source ID | Industrial Activities | Sound Power Level (SWL), dB(A) # | No. of Equipment | Total SWL, dB(A) | Horizontal Distance from Source to Receiver (m) | Slant Dist. from Source to Receiver, m | Dist. Corr., dB(A) | Façade Corr. dB(A) | Un-mitigated Noise level, dB(A) | Noise Criteria | Comply with Noise Criteria or not |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/F | N-ind1 | S1-1 | Operating noise | 94 | 1 | 94 | 252 | 252 | -56 | 3 | 41 | 45 | Yes |
| | N-ind1 | S10-1 | Loading and unloading using forklift | 91 | 2 | 94 | 321 | 321 | -58 | 3 | 39 | 45 | Yes |
| | **Total** | | | | | | | | **Cumulative Total @:** | | **43** | 45 | Yes |

**Note:**

Only NSR locations that are within 300m radius from the identified industrial noise sources are included in the noise assessment as per Project Study Brief requirements.

# Sound Power Level is based on site measurement during the operation of the concerned industrial plant.

@ The cumulative noise level at the receiver point. Calculation is based on general acoustic principle using the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respective noise level at the recevier due to individual noise source.

**Appendix 4-7C - Sensitivity Test on Fixed Noise Sources (Worst Case Scenario) (Nighttime)**

| Floor | NSR | Noise Source ID | Industrial Activities | Sound Power Level (SWL), dB(A) # | No. of Equipment | Total SWL, dB(A) | Horizontal Distance from Source to Receiver (m) | Slant Dist. from Source to Receiver, m | Dist. Corr., dB(A) | Façade Corr. dB(A) | Un-mitigated Noise level, dB(A) | Noise Criteria | Comply with Noise Criteria or not |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/F | N-ind2 | S1-1 | Operating noise | 94 | 1 | 94 | 261 | 261 | -56 | 3 | 41 | 45 | Yes |
| | N-ind2 | S10-1 | Loading and unloading using forklift | 91 | 2 | 94 | 316 | 316 | -58 | 3 | 39 | 45 | Yes |
| | **Total** | | | | | | | | **Cumulative Total @:** | | **43** | 45 | Yes |

**Note:**

Only NSR locations that are within 300m radius from the identified industrial noise sources are included in the noise assessment as per Project Study Brief requirements.

# Sound Power Level is based on site measurement during the operation of the concerned industrial plant.

@ The cumulative noise level at the receiver point. Calculation is based on general acoustic principle using the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respective noise level at the recevier due to individual noise source.

**Appendix 4-7C - Sensitivity Test on Fixed Noise Sources (Worst Case Scenario) (Nighttime)**

| Floor | NSR | Noise Source ID | Industrial Activities | Sound Power Level (SWL), dB(A) # | No. of Equipment | Total SWL, dB(A) | Horizontal Distance from Source to Receiver (m) | Slant Dist. from Source to Receiver, m | Dist. Corr., dB(A) | Façade Corr. dB(A) | Un-mitigated Noise level, dB(A) | Noise Criteria | Comply with Noise Criteria or not |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/F | N-ind2A | S1-1 | Operating noise | 94 | 1 | 94 | 285 | 285 | -57 | 3 | 40 | 45 | Yes |
| | N-ind2A | S10-1 | Loading and unloading using forklift | 91 | 2 | 94 | 343 | 343 | -59 | 3 | 38 | 45 | Yes |
| | **Total** | | | | | | | | **Cumulative Total @:** | | **42** | 45 | Yes |

**Note:**

Only NSR locations that are within 300m radius from the identified industrial noise sources are included in the noise assessment as per Project Study Brief requirements.

# Sound Power Level is based on site measurement during the operation of the concerned industrial plant.

@ The cumulative noise level at the receiver point. Calculation is based on general acoustic principle using the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respective noise level at the recevier due to individual noise source.

**Appendix 4-7C - Sensitivity Test on Fixed Noise Sources (Worst Case Scenario) (Nighttime)**

| Floor | NSR | Noise Source ID | Industrial Activities | Sound Power Level (SWL), dB(A) # | No. of Equipment | Total SWL, dB(A) | Horizontal Distance from Source to Receiver (m) | Slant Dist. from Source to Receiver, m | Dist. Corr., dB(A) | Façade Corr. dB(A) | Un-mitigated Noise level, dB(A) | Noise Criteria | Comply with Noise Criteria or not |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/F | N-ind2B | S1-1 | Operating noise | 94 | 1 | 94 | 251 | 251 | -56 | 3 | 41 | 45 | Yes |
| | N-ind2B | S10-1 | Loading and unloading using forklift | 91 | 2 | 94 | 302 | 302 | -58 | 3 | 39 | 45 | Yes |
| | **Total** | | | | | | | | **Cumulative Total @:** | | **43** | 45 | Yes |

**Note:**

Only NSR locations that are within 300m radius from the identified industrial noise sources are included in the noise assessment as per Project Study Brief requirements.

# Sound Power Level is based on site measurement during the operation of the concerned industrial plant.

@ The cumulative noise level at the receiver point. Calculation is based on general acoustic principle using the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respective noise level at the recevier due to individual noise source.

**Appendix 4-7C - Sensitivity Test on Fixed Noise Sources (Worst Case Scenario) (Nighttime)**

| Floor | NSR | Noise Source ID | Industrial Activities | Sound Power Level (SWL), dB(A) # | No. of Equipment | Total SWL, dB(A) | Horizontal Distance from Source to Receiver (m) | Slant Dist. from Source to Receiver, m | Dist. Corr., dB(A) | Façade Corr. dB(A) | Un-mitigated Noise level, dB(A) | Noise Criteria | Comply with Noise Criteria or not |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/F | N-ind3 | S1-1 | Operating noise | 94 | 1 | 94 | 273 | 273 | -57 | 3 | 40 | 45 | Yes |
| | N-ind3 | S10-1 | Loading and unloading using forklift | 91 | 2 | 94 | 308 | 308 | -58 | 3 | 39 | 45 | Yes |
| | **Total** | | | | | | | | **Cumulative Total @:** | | **43** | 45 | Yes |

**Note:**

Only NSR locations that are within 300m radius from the identified industrial noise sources are included in the noise assessment as per Project Study Brief requirements.

# Sound Power Level is based on site measurement during the operation of the concerned industrial plant.

@ The cumulative noise level at the receiver point. Calculation is based on general acoustic principle using the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respective noise level at the recevier due to individual noise source.

**Appendix 4-7C - Sensitivity Test on Fixed Noise Sources (Worst Case Scenario) (Nighttime)**

| Floor | NSR | Noise Source ID | Industrial Activities | Sound Power Level (SWL), dB(A) # | No. of Equipment | Total SWL, dB(A) | Horizontal Distance from Source to Receiver (m) | Slant Dist. from Source to Receiver, m | Dist. Corr., dB(A) | Façade Corr. dB(A) | Un-mitigated Noise level, dB(A) | Noise Criteria | Comply with Noise Criteria or not |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/F | N-ind3A | S1-1 | Operating noise | 94 | 1 | 94 | 331 | 331 | -58 | 3 | 39 | 45 | Yes |
| | N-ind3A | S10-1 | Loading and unloading using forklift | 91 | 2 | 94 | 349 | 349 | -59 | 3 | 38 | 45 | Yes |
| | **Total** | | | | | | | | **Cumulative Total @:** | | **42** | 45 | Yes |

**Note:**

Only NSR locations that are within 300m radius from the identified industrial noise sources are included in the noise assessment as per Project Study Brief requirements.

# Sound Power Level is based on site measurement during the operation of the concerned industrial plant.

@ The cumulative noise level at the receiver point. Calculation is based on general acoustic principle using the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respective noise level at the recevier due to individual noise source.

**Appendix 4-7C - Sensitivity Test on Fixed Noise Sources (Worst Case Scenario) (Nighttime)**

| Floor | NSR | Noise Source ID | Industrial Activities | Sound Power Level (SWL), dB(A) # | No. of Equipment | Total SWL, dB(A) | Horizontal Distance from Source to Receiver (m) | Slant Dist. from Source to Receiver, m | Dist. Corr., dB(A) | Façade Corr. dB(A) | Un-mitigated Noise level, dB(A) | Noise Criteria | Comply with Noise Criteria or not |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/F | N-ind9 | S1-1 | Operating noise | 94 | 1 | 94 | 268 | 268 | -57 | 3 | 40 | 45 | Yes |
| | N-ind9 | S10-1 | Loading and unloading using forklift | 91 | 2 | 94 | 341 | 341 | -59 | 3 | 38 | 45 | Yes |
| | **Total** | | | | | | | | **Cumulative Total @:** | | **42** | 45 | Yes |

**Note:**

Only NSR locations that are within 300m radius from the identified industrial noise sources are included in the noise assessment as per Project Study Brief requirements.

# Sound Power Level is based on site measurement during the operation of the concerned industrial plant.

@ The cumulative noise level at the receiver point. Calculation is based on general acoustic principle using the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respective noise level at the recevier due to individual noise source.