

EXAMPLE – CRUSHER OPERATOR

Sound Level Meter (SLM) Noise Exposure Documentation Form

Person Conducting Survey _____ SLM Manf & Model _____ SLM S/N _____

SLM Pre-Calibration _____ (If pre-calibration fails, do not continue survey)

SLM Post-Calibration _____ (If post-calibration fails, survey results are invalid)

Person Being Surveyed SLM EXAMPLE 2 Crusher Operator Occupation/Work Activity _____

Equipment Used _____ Hearing Protection Y / N Manf & Model _____

Date _____ Wind/Weather/Other Conditions _____

- INSTRUCTIONS:**
1. Take several SLM readings for each work activity, and whenever noise exposure changes, throughout the entire work shift.
 2. Record time at which SLM reading is taken on Table A below.
 3. When reading noise level, round up to nearest full dBA, add 2 dBA, then record on Table A below. (2 dBA added for SLM errors)
 4. Measure or estimate the TOTAL exposure time at each noise level and record on Table B on Form 1.2
 5. The levels and durations of ALL exposures must be recorded, including brief, intermittent noise.

EXAMPLE 1: Front-end loader operator spends entire 9-hr (540 min) shift in enclosed cab. SLM readings taken in cab at high RPM (91 dBA), medium RPM (84 dBA), and low RPM (78 dBA). Based on observation of loader operations, estimate 20% of shift at high RPM, 60% of shift at medium RPM, and 20% of shift at low RPM. Thus, SLM readings and observation of operations result in estimate of full-shift noise exposure of 108 minutes @ 91 + 2 = 93 dBA, 324 minutes @ 84 + 2 = 86 dBA, and 108 minutes @ 78 + 2 = 80 dBA

EXAMPLE 2: Crusher operator primarily works in enclosed booth, but occasionally needs to remove debris from feed conveyor. SLM readings taken in booth (82 dBA), and adjacent to conveyor (93 dBA). Based on observations of crusher operations over full 10-hr shift, estimate 50 minutes per hour inside booth, and 10 minutes per hour outside booth. Thus, SLM readings and observation of operations result in estimate of full-shift noise exposure of 500 minutes @ 82 + 2 = 84 dBA, and 100 minutes @ 93 + 2 = 95 dBA.

CAUTION: *If noise levels change too quickly or over too large a range to accurately document using an SLM and this form, do not use an SLM to determine noise exposure. Use a noise dosimeter.*

TABLE A - Sound Level Meter (SLM) Readings

| Location/Work Activity/Equipment Operated/Source of Noise (Include Equipment ID) | Time of Reading | Noise Level (Round SLM Reading Up To Nearest Full dBA, Then Add 2 dBA) |
|--|-----------------|---|
| generator trailer, getting generator started – inside trailer for about 30 seconds | 6:30am | 109.5 rounds up to 110 + 2 = 112 |
| yard, loading customer trucks, Cat #4 | 6:59 | 80.5 rounds up to 81 + 2 = 83 |
| yard, loading customer trucks, Cat #4 | 7:35 | 81.0 rounds up to 81 + 2 = 83 |
| generator trailer, had to check breaker panel – inside trailer less than 30 seconds | 7:37 | 109.5 rounds up to 110 + 2 = 112 |
| went to pickup to call office – went at 8:45am | 8:55 | 84.6 rounds up to 85 + 2 = 87 |
| crusher booth, operating crusher – went back to crusher booth at 11:00 | 9:14 | 81.9 rounds up to 82 + 2 = 84 |
| crusher booth, operating crusher | 10:01 | 81.1 rounds up to 82 + 2 = 84 |
| fixed guard on belt drive – started work at 10:15 | 10:39 | 89.7 rounds up to 90 + 2 = 92 |
| crusher booth, operating crusher – went back to crusher booth at 11:00 | 11:10 | 81.3 rounds up to 82 + 2 = 84 |
| crusher booth, operating crusher – went to generator trailer for about 30 sec at 11:30 | 11:55 | 82.0 rounds up to 82 + 2 = 84 |
| crusher booth, operating crusher | 12:20 | 81.8 rounds up to 82 + 2 = 84 |

Continue On Next Page (Form 5.2)

EXAMPLE – CRUSHER OPERATOR – CONTINUED
CONTINUATION OF TABLE A (Form 5.1)

Form 5.2

| Location/Work Activity/Equipment Operated/Source of Noise (Include Equipment ID) | Time of Reading | Noise Level (Round SLM Reading Up To Nearest Full dBA, Then Add 2 dBA) |
|--|-----------------|---|
| crusher booth, operating crusher – in and out of booth from time to time to pick debris: estimate 10 | 12:40 | 81.2 rounds to 82 + 2 = 84 |
| minutes per hour out of booth at 92 dBA | 12:51 | |
| crusher booth, operating crusher – went to generator trailer for about 30 sec at about 1:30 | 1:44 | 81.3 rounds to 82 + 2 = 84 |
| crusher booth, operating crusher | 2:17 | 81.6 rounds to 82 + 2 = 84 |
| crusher booth, operating crusher – went to generator trailer for about 30 sec at about 3:00 | 3:10 | 82.0 rounds to 82 + 2 = 84 |
| crusher booth, operating crusher | 3:53 | 82.3 rounds to 83 + 2 = 85 |
| crusher booth, operating crusher | 4:16 | 81.3 rounds to 82 + 2 = 84 |
| went to generator trailer for about 30 sec at about 4:30 to shut down generator – quit work at 4:30 | 4:28 | 81.8 rounds to 82 + 2 = 84 |
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TABLE B - Exposure Times

| Noise Level in decibels | Estimate Of Total Shift Time Exposed At This Noise Level (Rounded Up To 15 Min., 30 Min., Or Nearest Full Hour) | Noise Level in decibels | Estimate Of Total Shift Time Exposed At This Noise Level (Rounded Up To 15 Min., 30 Min., Or Nearest Full Hour) | Noise Level in decibels | Estimate Of Total Shift Time Exposed At This Noise Level (Rounded Up To 15 Min., 30 Min., Or Nearest Full Hour) |
|-------------------------|---|-------------------------|---|-------------------------|---|
| Less Than 80 | Not Applicable | 92 | 1 hour, 25 minutes | 105 | |
| 80 | | 93 | | 106 | |
| 81 | | 94 | | 107 | |
| 82 | | 95 | | 108 | |
| 83 | 2 hours, 15 minutes | 96 | | 109 | |
| 84 | 4 hour, 5 minutes | 97 | | 110 | |
| 85 | | 98 | | 111 | |
| 86 | | 99 | | 112 | 3 minutes |
| 87 | 15 minutes | 100 | | 113 | |
| 88 | | 101 | | 114 | |
| 89 | | 102 | | 115 | |
| 90 | | 103 | | More Than 115 | Not Applicable |
| 91 | | 104 | | | |