

## **APPENDIX 9.2-D**

## **Sound Power Levels of Project Operation Equipment**

Table D1: Sound Power Levels of Project Operation Equipment (continued)

Table D1: Sound Power Levels of Project Operation Equipment

Source	Source Type	Description	A-Weighted Sound Power [dBA] <sup>a</sup>	Octave Band Centre Frequency [Hz]									Overall
				31.5	63	125	250	500	1000	2000	4000	8000	
Clamshell Dredge	Point Source	One clamshell dredge on floating deck	108.3	84.1	91.2	88.9	97.9	104.3	101.5	100.4	96.4	94.4	108.3
Grizzly Screen	Point Source	One primary grizzly screen on floating deck	109.9	92.2	98.4	94.4	99.4	105.9	102.5	101.4	97.3	94.0	109.9
Falling Gravels from Grizzly Screen	Point Source	One point source of falling gravels for each screen	120.0	58.6	73.5	86.0	99.2	107.8	111.5	116.3	114.5	108.6	120.0
Screen Motor for Grizzly Screen	Point Source	Two motors for the grizzly screen on floating deck	93.4	77.4	86.6	80.8	83.4	86.5	85.3	84.5	82.4	80.2	93.4
Jaw Crusher	Point Source	Primary crusher on floating deck	112.0	76.6	89.6	96.2	102.2	107.1	107.5	103.7	95.8	88.9	112.0
Falling Gravels from the Crusher	Point Source	One point source of falling gravels for each Crusher	108.2	50.1	64.0	79.5	92.5	99.0	103.3	103.6	98.9	96.4	108.2
Crusher Motor for Jaw Crusher	Point Source	One motor for crusher on floating deck	91.2	65.0	75.1	75.3	81.3	84.9	85.1	83.8	81.7	79.2	91.2
Dry Screen 1 and associated motor	Point Source	Two dry screens and associated motors in crush plant	121.7	78.7	85.4	94.7	102.1	110.3	114.2	116.7	116.3	113.0	121.7
Falling Gravels from Dry Screen 1	Point Source	One point source of falling gravels for each screen	114.4	56.5	73.5	85.3	91.4	98.2	106.5	109.3	109.2	107.2	114.4
Dry Screen 2 and associated motor	Point Source	Two dry screens and associated motors in crush plant	121.7	78.7	85.4	94.7	102.1	110.3	114.2	116.7	116.3	113.0	121.7
Falling Gravels from Dry Screen 2	Point Source	One point source of falling gravels for each screen	114.4	56.5	73.5	85.3	91.4	98.2	106.5	109.3	109.2	107.2	114.4
Crusher in Crush Plant	Point Source	One crusher in crush plant	119.0	75.2	90.4	103.6	108.7	109.0	113.0	113.1	111.6	108.9	119.0
Falling Gravels from Crusher in Crush Plant	Point Source	One point source of falling gravels for each Crusher	108.2	50.1	64.0	79.5	92.5	99.0	103.3	103.6	98.9	96.4	108.2
Crusher Motor for Crusher in Crush Plant	Point Source	Two motors for the crusher in crush plant	114.4	61.4	73.1	88.3	98.6	105.1	110.0	110.0	104.2	100.1	114.4
Washer Unit in Wash Plant	Point Source	One screen washer unit in Wash Plant	109.3	70.1	81.0	97.6	101.6	93.1	106.4	91.2	101.8	93.6	109.3



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Source	Source Type	Description	A-Weighted Sound Power [dBA] <sup>a</sup>	Octave Band Centre Frequency [Hz]									Overall
				31.5	63	125	250	500	1000	2000	4000	8000	
Washer Pump with Motor	Point Source	One washer pump and its motor in wash plant	98.5	51.0	64.0	79.3	86.1	88.4	90.1	92.0	92.9	91.5	98.5
Conveyor System in Clamshell Dredge Operation	Line Source	One conveyor system in clamshell dredge operation	77.4	47.8	50.9	59.8	69.2	71.8	70.4	69.7	68.6	64.2	77.4
Conveyor System in Crush Plant	Line Source	One conveyor system in Crush Plant	90.8	45.9	64.0	82.7	81.6	88.1	80.2	77.3	77.0	74.1	90.8
Conveyor System in Wash Plant	Line Source	One conveyor systems in Wash Plant	78.0	42.5	53.3	65.5	67.8	71.8	72.7	71.4	66.6	61.4	78.0
Conveyor System in Barge Loading Area	Line Source	One conveyor system barge loading area	82.1	31.4	52.3	65.3	70.0	76.7	78.5	73.2	69.2	64.2	82.1
Conveyor Motors in Clamshell Dredge Operation	Point Source	Each conveyor belt has one conveyor motor on one end	91.1	66.1	70.7	73.4	80.4	88.6	83.5	81.1	76.3	73.5	91.1
Conveyor Motors in Crush Plant	Point Source	Each conveyor belt has one conveyor motor on one end	100.9	49.1	60.2	72.4	84.6	91.0	95.4	96.8	92.9	86.3	100.9
Conveyor Motors in Wash Plant	Point Source	Each conveyor belt has one conveyor motor on one end	95.0	51.3	66.9	76.5	84.5	89.1	90.3	87.5	85.3	76.5	95.0
Conveyor Motors in Barge Loading Area	Point Source	Each conveyor belt has one conveyor motor on one end	96.2	41.5	57.0	74.3	78.8	83.0	88.7	90.8	91.0	88.2	96.2
Falling Sand	Point Source	Falling sand from conveyor to barges	108.2	50.1	64.0	79.5	92.5	99.0	103.3	103.6	98.9	96.4	108.2
Front End Loader Filling Wash Plant Hopper	Point Source	Front End Loader loading gravels to hopper in wash plant	106.7	63.5	95.7	101.6	94.7	99.8	99.5	96.5	93.0	87.4	106.7
Loading Equipment	Point Source	backhoe, FEL and dump truck besides the stockpiles	112.1	68.4	86.2	95.7	96.3	104.0	108.6	105.2	100.8	100.0	112.1
Moving Equipment	Moving Source	backhoe, FEL and dump truck on the transportation	112.1	68.4	86.2	95.7	96.3	104.0	108.6	105.2	100.8	100.0	112.1

