APPENDIX N

NOISE

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Residential Property: Approx. 600 Feet West of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	1620	960	0		**62.2**	73.0	69.5	67.3	63.8	59.5	55.8	53.7	46.7	30.9
						33.6	43.3	51.2	55.2	56.3	55.8	54.9	47.7	29.8
Summary														
Stack Exit, SPL				746.2	54.4	61.7	57.6	61.5	59.3	52.9	44.3	34.2	20.9	-8.3
Combustion Turbine (CT) Inlet SPL				560.0	33.5	44.2	48.2	41.1	39.9	28.6	14.2	9.3	13.9	1.5
CT Compartment SPL				605.3	52.2	54.6	56.5	51.4	49.2	45.9	43.4	48.5	40.9	26.7
CT Generator SPL				583.0	52.4	51.9	51.8	50.7	49.5	49.2	47.8	45.9	38.4	20.6
CT Exhaust Duct SPL				619.7	47.6	58.4	55.3	53.2	46.0	44.6	42.2	39.2	35.6	23.2
HRSG Transition, SPL				640.3	56.9	71.1	67.0	62.9	58.7	54.3	50.8	46.9	38.1	15.5
HRSG Boiler, SPL				696.9	51.8	66.3	61.3	58.1	53.9	48.5	46.0	41.9	32.9	8.4
CT Transformer (GSUT), SPL				506.1	47.7	45.1	51.1	53.0	47.8	47.6	41.2	35.4	28.2	13.6
ST Package, SPL				691.5	43.8	47.4	53.3	51.2	46.0	41.6	37.1	33.0	22.0	5.6
Generator Package, SPL				672.7	44.1	47.6	53.6	51.4	46.2	41.9	37.4	33.3	22.4	6.3
Boiler Feed Pumps, SPL				734.7	50.4	45.9	51.8	49.6	48.4	47.0	45.5	43.3	39.2	24.1
Other Pumps, SPL				729.3	37.5	32.9	38.9	36.7	35.5	34.1	32.5	30.4	26.3	11.3
Gas Compressor SPL				900.6	44.4	38.0	34.0	38.8	37.5	35.0	37.3	41.0	34.1	13.5
High Total Cooling Tower (6 cells)				988.8	50.1	52.2	55.1	54.9	51.6	48.1	44.3	39.8	34.5	17.7
Low Total Cooling Tower (6 cells)				987.6	43.1	45.2	48.1	47.9	44.6	41.1	37.3	32.8	27.6	10.7
Distance to acoustic center				**691.1**										
Stack Exit	1134	1506	150	746.2										
Standard Lw						119	116	121	120	115	108	100	92	76
Distance Correction				746.2		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	6	17
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**746.2**	**54.4**	**62**	**58**	**61**	**59**	**53**	**44**	**34**	**21**	**-8**
Combustion Turbine (CT) Inlet	1134	1236	35	560.0										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						0	0	0	0	0	0	0	0	0
Upgraded Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Distance Correction				560.0		53	53	53	53	53	53	53	53	53
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	13
Directivity				n		0	0	0	0	0	5	5	5	5
Sheilding						5	5	5	5	5	5	5	5	5
Combustion Turbine (CT) Inlet SPL				**560.0**	**33.5**	**44**	**48**	**41**	**40**	**29**	**14**	**9**	**14**	**1**
CT Compartment	1134	1320	25	605.3										
Lw					**112.8**	113	115	110	108	105	103	109	104	99
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.8**	113	115	110	108	105	103	109	104	99
Distance Correction				605.3		53	53	53	53	53	53	53	53	53
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	5	14
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
CT Compartment SPL				**605.3**	**52.2**	**55**	**57**	**51**	**49**	**46**	**43**	**48**	**41**	**27**
CT Generator	1134	1281	25	583.0										
Lw					**112.1**	110	110	109	108	108	107	106	101	92
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.1**	110	110	109	108	108	107	106	101	92
Distance Correction				583.0		53	53	53	53	53	53	53	53	53
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	5	13
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
CT Generator SPL				**583.0**	**52.4**	**52**	**52**	**51**	**50**	**49**	**48**	**46**	**38**	**21**
CT Exhaust Duct	1134	1344	18	619.7										
Lw					**108.0**	117	114	112	105	104	102	100	99	96
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**108.0**	117	114	112	105	104	102	100	99	96
Distance Correction				619.7		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	14
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Residential Property: Approx. 600 Feet West of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
CT Exhaust Duct SPL				**619.7**	**47.6**	**58**	**55**	**53**	**46**	**45**	**42**	**39**	**36**	**23**
HRSG Transition	1134	1375	40	640.3										
Lw					**111.9**	125	121	117	113	109	106	103	97	84
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**111.9**	125	121	117	113	109	106	103	97	84
Distance Correction				640.3		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	15
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						0	0	0	0	0	0	0	0	0
HRSG Transition, SPL				**640.3**	**56.9**	**71**	**67**	**63**	**59**	**54**	**51**	**47**	**38**	**15**
HRSG Boiler	1134	1453	80	696.9										
Lw					**107.6**	121	116	113	109	104	102	99	93	79
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**107.6**	121	116	113	109	104	102	99	93	79
Distance Correction				696.9		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	3	6	16
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Boiler, SPL				**696.9**	**51.8**	**66**	**61**	**58**	**54**	**49**	**46**	**42**	**33**	**8**
CT Transformer (GSUT)	1188	1187	16	506.1										
Lw					**105.4**	102	108	110	105	105	99	94	89	82
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**105.4**	102	108	110	105	105	99	94	89	82
Distance Correction				506.1		52	52	52	52	52	52	52	52	52
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	12
Sheilding						5	5	5	5	5	5	5	5	5
CT Transformer (GSUT), SPL				**506.1**	**47.7**	**45**	**51**	**53**	**48**	**48**	**41**	**35**	**28**	**14**
ST Package	1034	1325	40	691.5										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation - Building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				691.5		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	3	6	16
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
ST Package, SPL				**691.5**	**43.8**	**47**	**53**	**51**	**46**	**42**	**37**	**33**	**22**	**6**
Generator Package	1034	1288	40	672.7										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				672.7		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	16
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Generator Package, SPL				**672.7**	**44.1**	**48**	**54**	**51**	**46**	**42**	**37**	**33**	**22**	**6**
Boiler Feed Pumps	1091	1469	30	734.7										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Total Lw					**112.9**	106	112	110	109	108	107	106	105	101
Distance Correction				734.7		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	6	17
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
Boiler Feed Pumps, SPL				**734.7**	**50.4**	**46**	**52**	**50**	**48**	**47**	**45**	**43**	**39**	**24**
Other Major Pumps	1021	1375	30	729.3										
Lw					**109.9**	103	109	107	106	105	104	103	102	98

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Residential Property: Approx. 600 Feet West of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Total Lw					99.9	93	99	97	96	95	94	93	92	88
Distance Correction				729.3		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	6	17
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
Other Pumps, SPL				**729.3**	**37.5**	**33**	**39**	**37**	**35**	**34**	**33**	**30**	**26**	**11**
Gas Compressor	934	1543	25	900.6										
Lw					**122.9**	113	109	114	113	111	114	119	116	109
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**109.9**	100	96	101	100	98	101	106	103	96
Distance Correction				900.6		57	57	57	57	57	57	57	57	57
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	7	21
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
Gas Compressor SPL				**900.6**	**44.4**	**38**	**34**	**39**	**38**	**35**	**37**	**41**	**34**	**13**
High Cooling Tower (6 cells)	788	1492	50	988.8										
Lw					**114.5**	114	117	117	114	111	108	106	105	103
Mitigation						2	2	2	2	2	2	2	2	2
Mitigated Lw					**112.5**	112	115	115	112	109	106	104	103	101
Distance Correction				988.8		58	58	58	58	58	58	58	58	58
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	1	2	4	8	23
Directivity				n		2	2	2	2	2	2	3	3	3
Barrier						0	0	0	0	0	0	0	0	0
High Total Cooling Tower (6 cells)				**988.8**	**50.1**	**52**	**55**	**55**	**52**	**48**	**44**	**40**	**35**	**18**
Low Cooling Tower (6 cells)	788	1492	10	987.6										
Lw					**114.5**	114	117	117	114	111	108	106	105	103
Mitigation						4	4	4	4	4	4	4	4	4
Mitigated Lw					**110.5**	110	113	113	110	107	104	102	101	99
Distance Correction				987.6		58	58	58	58	58	58	58	58	58
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	1	2	4	8	23
Directivity				n		2	2	2	2	2	2	3	3	3
Sheilding						5	5	5	5	5	5	5	5	5
Low Total Cooling Tower (6 cells)				**987.6**	**43.1**	**45**	**48**	**48**	**45**	**41**	**37**	**33**	**28**	**11**

ATMOSPHERIC ABSORPTION (dB/100 meters - 75% of EEI Values)	0.08	0.11	0.17	0.27	0.45	0.70	1.20	2.62	7.56

Magnolia Power Plant Expansion Project
Sound Level Calculation
Second Nearest Residential Area: Approx. 1300 Feet Southwest of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	1300	15	0		**50.4**	60.1	56.6	56.8	53.9	48.3	42.8	39.4	29.7	3.5
						20.7	30.4	40.7	45.3	45.1	42.8	40.6	30.7	2.4
Summary														
Stack Exit, SPL				1507.7	47.5	55.4	51.3	55.0	52.5	45.7	36.6	25.3	8.7	-32.0
Combustion Turbine (CT) Inlet SPL				1232.7	21.0	32.2	36.1	28.9	27.5	15.8	0.9	-5.0	-3.3	-25.9
CT Compartment SPL				1315.8	38.2	42.7	44.5	39.3	36.9	33.1	30.2	34.1	23.5	-1.4
CT Generator SPL				1277.1	39.0	39.9	39.8	38.5	37.2	36.5	34.5	31.5	21.0	-7.2
CT Exhaust Duct SPL				1339.4	34.4	46.5	43.4	41.1	33.7	32.0	29.0	24.9	18.1	-5.1
HRSG Transition, SPL				1370.7	39.1	54.3	50.2	45.9	41.5	36.7	32.7	27.6	15.7	-18.0
HRSG Boiler, SPL				1449.8	39.2	54.8	49.6	46.3	41.9	36.1	33.0	27.8	15.5	-20.3
CT Transformer (GSUT), SPL				1179.5	34.3	32.6	38.5	40.3	34.9	34.3	27.4	20.6	10.5	-14.3
ST Package, SPL				1337.3	27.1	31.5	37.4	35.1	29.7	25.0	20.0	14.9	1.1	-25.0
Generator Package, SPL				1301.1	27.4	31.8	37.6	35.4	30.0	25.3	20.3	15.3	1.7	-23.9
Boiler Feed Pumps, SPL				1469.3	37.6	34.7	40.5	38.2	36.8	35.0	32.9	29.6	22.3	-3.8
Other Pumps, SPL				1388.6	25.3	22.2	28.1	25.8	24.4	22.6	20.5	17.4	10.4	-14.5
Gas Compressor SPL				1571.4	32.3	28.1	23.9	28.6	27.1	24.3	26.1	28.7	18.9	-11.8
High Total Cooling Tower (6 cells)				1564.0	39.9	42.1	45.0	44.6	41.2	38.3	34.1	29.7	22.0	-3.6
Low Total Cooling Tower (6 cells)				1563.3	35.9	38.1	41.0	40.6	37.2	34.3	30.1	25.7	18.0	-7.6
Distance to acoustic center				**1378.9**										
Stack Exit	1134	1506	150	1507.7										
Standard Lw						119	116	121	120	115	108	100	92	76
Distance Correction				1507.7		61	61	61	61	61	61	61	61	61
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	6	12	35
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**1507.7**	**47.5**	**55**	**51**	**55**	**53**	**46**	**37**	**25**	**9**	**-32**
Combustion Turbine (CT) Inlet	1134	1236	35	1232.7										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						0	0	0	0	0	0	0	0	0
Upgraded Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Distance Correction				1232.7		59	59	59	59	59	59	59	59	59
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	10	28
Directivity				n		0	0	0	0	0	5	5	5	5
Sheilding						10	10	10	10	10	10	10	10	10
Combustion Turbine (CT) Inlet SPL				**1232.7**	**21.0**	**32**	**36**	**29**	**28**	**16**	**1**	**-5**	**-3**	**-26**
CT Compartment	1134	1320	25	1315.8										
Lw					**112.8**	113	115	110	108	105	103	109	104	99
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.8**	113	115	110	108	105	103	109	104	99
Distance Correction				1315.8		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	10	30
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
CT Compartment SPL				**1315.8**	**38.2**	**43**	**45**	**39**	**37**	**33**	**30**	**34**	**23**	**-1**
CT Generator	1134	1281	25	1277.1										
Lw					**112.1**	110	110	109	108	108	107	106	101	92
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.1**	110	110	109	108	108	107	106	101	92
Distance Correction				1277.1		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	10	29
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
CT Generator SPL				**1277.1**	**39.0**	**40**	**40**	**39**	**37**	**36**	**34**	**32**	**21**	**-7**
CT Exhaust Duct	1134	1344	18	1339.4										
Lw					**108.0**	117	114	112	105	104	102	100	99	96
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**108.0**	117	114	112	105	104	102	100	99	96
Distance Correction				1339.4		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	11	31
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
CT Exhaust Duct SPL				**1339.4**	**34.4**	**46**	**43**	**41**	**34**	**32**	**29**	**25**	**18**	**-5**

Magnolia Power Plant Expansion Project
Sound Level Calculation
Second Nearest Residential Area: Approx. 1300 Feet Southwest of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
HRSG Transition	1134	1375	40	1370.7										
Lw					111.9	125	121	117	113	109	106	103	97	84
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					111.9	125	121	117	113	109	106	103	97	84
Distance Correction				1370.7		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	11	32
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
HRSG Transition, SPL				**1370.7**	**39.1**	**54**	**50**	**46**	**41**	**37**	**33**	**28**	**16**	**-18**
HRSG Boiler	1134	1453	80	1449.8										
Lw					107.6	121	116	113	109	104	102	99	93	79
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					107.6	121	116	113	109	104	102	99	93	79
Distance Correction				1449.8		61	61	61	61	61	61	61	61	61
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	12	33
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
HRSG Boiler, SPL				**1449.8**	**39.2**	**55**	**50**	**46**	**42**	**36**	**33**	**28**	**16**	**-20**
CT Transformer (GSUT)	1168	1187	16	1179.5										
Lw					105.4	102	108	110	105	105	99	94	89	82
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					105.4	102	108	110	105	105	99	94	89	82
Distance Correction				1179.5		59	59	59	59	59	59	59	59	59
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	4	9	27
Sheilding						10	10	10	10	10	10	10	10	10
CT Transformer (GSUT), SPL				**1179.5**	**34.3**	**33**	**39**	**40**	**35**	**34**	**27**	**21**	**10**	**-14**
ST Package	1034	1325	40	1337.3										
Lw					112.5	115	121	119	114	110	106	103	96	89
Mitigation - Building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					99.5	102	108	106	101	97	93	90	82	76
Distance Correction				1337.3		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	11	31
Directivity						0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
ST Package, SPL				**1337.3**	**27.1**	**32**	**37**	**35**	**30**	**25**	**20**	**15**	**1**	**-25**
Generator Package	1034	1288	40	1301.1										
Lw					112.5	115	121	119	114	110	106	103	96	89
Mitigation						13	13	13	13	13	13	13	13	13
Mitigated Lw					99.5	102	108	106	101	97	93	90	82	76
Distance Correction				1301.1		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	10	30
Directivity						0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
Generator Package, SPL				**1301.1**	**27.4**	**32**	**38**	**35**	**30**	**25**	**20**	**15**	**2**	**-24**
Boiler Feed Pumps	1091	1469	30	1469.3										
Lw					109.9	103	109	107	106	105	104	103	102	98
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Total Lw					112.9	106	112	110	109	108	107	106	105	101
Distance Correction				1469.3		61	61	61	61	61	61	61	61	61
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	12	34
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
Boiler Feed Pumps, SPL				**1469.3**	**37.6**	**35**	**41**	**38**	**37**	**35**	**33**	**30**	**22**	**-4**
Other Major Pumps	1021	1375	30	1388.6										
Lw					109.9	103	109	107	106	105	104	103	102	98
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Total Lw					99.9	93	99	97	96	95	94	93	92	88
Distance Correction				1388.6		61	61	61	61	61	61	61	61	61
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	11	32

Magnolia Power Plant Expansion Project
Sound Level Calculation
Second Nearest Residential Area: Approx. 1300 Feet Southwest of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
Other Pumps, SPL				**1388.6**	**25.3**	**22**	**28**	**26**	**24**	**23**	**21**	**17**	**10**	**-15**
Gas Compressor	934	1543	25	1571.4										
Lw					**122.9**	113	109	114	113	111	114	119	116	109
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**109.9**	100	96	101	100	98	101	106	103	96
Distance Correction				1571.4		62	62	62	62	62	62	62	62	62
Atmospheric Absorption (59 deg F, 70% R.H.)						0	1	1	1	2	3	6	13	36
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
Gas Compressor SPL				**1571.4**	**32.3**	**28**	**24**	**29**	**27**	**24**	**26**	**29**	**19**	**-12**
High Cooling Tower (6 cells)	788	1492	50	1564.0										
Lw					**114.5**	114	117	117	114	111	109	106	105	103
Mitigation						2	2	2	2	2	2	2	2	2
Mitigated Lw					**112.5**	112	115	115	112	109	106	104	103	101
Distance Correction				1564.0		62	62	62	62	62	62	62	62	62
Atmospheric Absorption (59 deg F, 70% R.H.)						0	1	1	1	2	3	6	12	36
Directivity				n		0	0	0	0	-1	-1	-1	-1	-1
Sheilding						8	8	8	8	8	8	8	8	8
High Total Cooling Tower (6 cells)				**1564.0**	**39.9**	**42**	**45**	**45**	**41**	**38**	**34**	**30**	**22**	**-4**
Low Cooling Tower (6 cells)	788	1492	10	1563.3										
Lw					**114.5**	114	117	117	114	111	109	106	105	103
Mitigation						4	4	4	4	4	4	4	4	4
Mitigated Lw					**110.5**	110	113	113	110	107	104	102	101	99
Distance Correction				1563.3		62	62	62	62	62	62	62	62	62
Atmospheric Absorption (59 deg F, 70% R.H.)						0	1	1	1	2	3	6	12	36
Directivity				n		0	0	0	0	-1	-1	-1	-1	-1
Sheilding						10	10	10	10	10	10	10	10	10
Low Total Cooling Tower (6 cells)				**1563.3**	**35.9**	**38**	**41**	**41**	**37**	**34**	**30**	**26**	**18**	**-8**

ATMOSPHERIC ABSORPTION (dB/100 meters - 75% of EEI Values)	0.08	0.11	0.17	0.27	0.45	0.70	1.20	2.62	7.56

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Commercial Property: Approx. 400 Feet Northwest of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	1450	1350	0		70.9	79.6	76.5	74.1	70.8	67.4	64.5	64.1	58.7	48.2
						40.2	50.3	58.0	62.2	64.2	64.5	65.3	59.7	47.1
Summary														
Stack Exit, SPL				383.0	60.6	67.6	63.6	67.5	65.4	59.1	50.9	41.3	29.6	5.8
Combustion Turbine (CT) Inlet SPL				337.8	43.1	53.7	57.7	50.6	49.5	38.3	24.0	19.5	25.1	16.0
CT Compartment SPL				318.4	63.8	65.2	67.2	62.1	60.0	56.8	54.6	60.1	53.7	43.9
CT Generator SPL				324.4	63.2	62.0	62.0	60.9	59.8	59.7	58.4	56.9	50.5	36.6
CT Exhaust Duct SPL				316.6	59.2	69.3	66.2	64.2	57.1	55.9	53.7	51.2	48.8	41.0
HRSG Transition, SPL				319.5	63.5	77.2	73.1	69.1	65.0	60.8	57.6	54.1	46.7	28.9
HRSG Boiler, SPL				341.9	58.6	72.6	67.6	64.5	60.4	55.2	52.9	49.4	41.9	22.8
CT Transformer (GSUT), SPL				326.1	56.9	54.0	60.0	61.9	56.8	56.6	50.4	44.9	38.5	26.6
ST Package, SPL				418.7	48.6	51.8	57.8	55.7	50.6	46.3	42.0	38.4	28.6	16.3
Generator Package, SPL				422.5	48.5	51.7	57.7	55.6	50.5	46.2	41.9	38.3	28.5	16.1
Boiler Feed Pumps, SPL				379.4	62.2	56.7	62.6	60.6	59.5	58.2	57.0	55.4	52.7	43.0
Other Pumps, SPL				430.8	48.0	42.6	48.5	46.4	45.3	44.1	42.7	41.1	38.2	27.7
Gas Compressor SPL				551.5	55.0	47.4	43.3	48.2	47.1	44.8	47.3	51.5	46.1	30.8
Total Cooling Tower (6 cells)				678.6	51.0	52.6	55.5	55.3	52.1	48.8	45.3	41.2	36.3	23.1
Distance to acoustic center				**396.4**										
Stack Exit	1134	1506	50	383.0										
Standard Lw						119	116	124	120	115	108	100	92	76
Distance Correction				383.0		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**383.0**	**60.6**	**68**	**64**	**67**	**65**	**59**	**51**	**41**	**30**	**6**
Combustion Turbine (CT) Inlet	1134	1236	35	337.8										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						0	0	0	0	0	0	0	0	0
Upgraded Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Distance Correction				337.8		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Directivity				n		0	0	0	0	0	5	5	5	5
Barrier						0	0	0	0	0	0	0	0	0
Combustion Turbine (CT) Inlet SPL				**337.8**	**43.1**	**54**	**58**	**51**	**49**	**38**	**24**	**20**	**25**	**16**
CT Compartment	1134	1320	25	318.4										
Lw					**112.8**	113	115	110	108	105	103	109	104	99
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.8**	113	115	110	108	105	103	109	104	99
Distance Correction				318.4		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Compartment SPL				**318.4**	**63.8**	**65**	**67**	**62**	**60**	**57**	**55**	**60**	**54**	**44**
CT Generator	1134	1281	25	324.4										
Lw					**112.1**	110	110	109	108	108	107	106	101	92
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.1**	110	110	109	108	108	107	106	101	92
Distance Correction				324.4		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Generator SPL				**324.4**	**63.2**	**62**	**62**	**61**	**60**	**60**	**58**	**57**	**51**	**37**
CT Exhaust Duct	1134	1344	18	316.6										
Lw					**108.0**	117	114	112	105	104	102	100	99	96
Mitigation						0	0	0	0	0	0	0	0	0

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Commercial Property: Approx. 400 Feet Northwest of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Mitigated Lw					**108.0**	117	114	112	105	104	102	100	99	96
Distance Correction				316.6		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Exhaust Duct SPL				**316.6**	**59.2**	**69**	**66**	**64**	**57**	**56**	**54**	**51**	**49**	**41**
HRSG Transition	1134	1375	40	319.5										
Lw					**111.9**	125	121	117	113	109	106	103	97	84
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**111.9**	125	121	117	113	109	106	103	97	84
Distance Correction				319.5		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Transition, SPL				**319.5**	**63.5**	**77**	**73**	**69**	**65**	**61**	**58**	**54**	**47**	**29**
HRSG Boiler	1134	1453	80	341.9										
Lw					**107.6**	121	116	113	109	104	102	99	93	79
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**107.6**	121	116	113	109	104	102	99	93	79
Distance Correction				341.9		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Boiler, SPL				**341.9**	**58.6**	**73**	**68**	**64**	**60**	**55**	**53**	**49**	**42**	**23**
CT Transformer (GSUT)	1168	1187	19	326.1										
Lw					**105.4**	102	108	110	105	105	99	94	89	82
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**105.4**	102	108	110	105	105	99	94	89	82
Distance Correction				326.1		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Barrier						0	0	0	0	0	0	0	0	0
CT Transformer (GSUT), SPL				**326.1**	**56.9**	**54**	**60**	**62**	**57**	**57**	**50**	**45**	**38**	**27**
ST Package	1034	1325	40	418.7										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation - Building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				418.7		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	3	10
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
ST Package, SPL				**418.7**	**48.6**	**52**	**58**	**56**	**51**	**46**	**42**	**38**	**29**	**16**
Generator Package	1034	1288	40	422.5										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				422.5		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	3	10
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Generator Package, SPL				**422.5**	**48.5**	**52**	**58**	**56**	**50**	**46**	**42**	**38**	**28**	**16**
Boiler Feed Pumps	1091	1469	30	379.4										
Lw					**109.9**	103	109	107	106	105	104	103	102	98

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Commercial Property: Approx. 400 Feet Northwest of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Total Lw					**112.9**	106	112	110	109	108	107	106	105	101
Distance Correction				379.4		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Boiler Feed Pumps, SPL				**379.4**	**62.2**	**57**	**63**	**61**	**59**	**58**	**57**	**55**	**53**	**43**
Other Major Pumps	1021	1375	30	430.8										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Total Lw					**99.9**	93	99	97	96	95	94	93	92	88
Distance Correction				430.8		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	3	10
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Other Pumps, SPL				**430.8**	**48.0**	**43**	**49**	**46**	**45**	**44**	**43**	**41**	**38**	**28**
Gas Compressor	934	1543	25	551.5										
Lw					**122.9**	113	109	114	113	111	114	119	116	109
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**109.9**	100	96	101	100	98	101	106	103	96
Distance Correction				551.5		52	52	52	52	52	52	52	52	52
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	13
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Gas Compressor SPL				**551.5**	**55.0**	**47**	**43**	**48**	**47**	**45**	**47**	**51**	**46**	**31**
Total Cooling Tower (6 cells)	788	1492	45	678.6										
Lw					**110.5**	110	113	113	110	107	104	102	101	99
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**110.5**	110	113	113	110	107	104	102	101	99
Distance Correction				678.6		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	16
Directivity				n		3	3	3	3	3	3	4	5	6
Barrier						0	0	0	0	0	0	0	0	0
Total Cooling Tower (6 cells)				**678.6**	**51.0**	**53**	**55**	**55**	**52**	**49**	**45**	**41**	**36**	**23**

ATMOSPHERIC ABSORPTION (dB/100 meters - 75% of EEI Values)	0.08	0.11	0.17	0.27	0.45	0.70	1.20	2.62	7.56

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Industrial Property: Approx. 300 Feet Northeast of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	1140	1650	0		74.1	81.9	78.7	77.2	74.4	70.5	67.7	67.0	63.2	55.0
						42.5	52.5	61.1	65.8	67.3	67.7	68.2	64.2	53.9
Summary														
Stack Exit, SPL				208.0	66.1	72.9	68.9	72.9	70.8	64.7	56.5	47.2	36.3	15.2
Combustion Turbine (CT) Inlet SPL				415.5	41.2	51.9	55.8	48.7	47.6	36.4	22.1	17.4	22.7	12.4
CT Compartment SPL				331.0	63.4	64.9	66.8	61.8	59.7	56.5	54.2	59.7	53.3	43.3
CT Generator SPL				369.9	62.0	60.9	60.9	59.8	58.7	58.5	57.2	55.6	49.0	34.5
CT Exhaust Duct SPL				306.6	59.6	69.5	66.5	64.4	57.4	56.2	54.0	51.5	49.2	41.5
HRSG Transition, SPL				278.0	64.8	78.4	74.4	70.3	66.2	62.1	58.9	55.4	48.2	31.1
HRSG Boiler, SPL				212.7	63.0	76.7	71.7	68.7	64.6	59.5	57.3	54.0	47.1	29.9
CT Transformer (GSUT), SPL				464.1	53.6	50.9	56.9	58.8	53.6	53.4	47.0	41.3	34.3	20.3
ST Package, SPL				344.2	50.4	53.5	59.5	57.4	52.3	48.1	43.9	40.3	30.9	19.7
Generator Package, SPL				379.3	49.5	52.7	58.6	56.6	51.4	47.2	43.0	39.4	29.7	18.0
Boiler Feed Pumps, SPL				189.9	68.9	62.7	68.7	66.7	65.6	64.5	63.4	62.1	60.3	53.4
Other Pumps, SPL				301.1	51.5	45.7	51.7	49.6	48.5	47.4	46.1	44.7	42.4	33.8
Gas Compressor SPL				233.5	63.8	54.9	50.9	55.9	54.8	52.7	55.5	60.1	56.1	45.6
Total Cooling Tower (6 cells)				388.4	61.5	62.5	65.4	65.3	62.2	59.0	55.7	52.1	49.5	41.6
Distance to acoustic center				**315.9**										
Stack Exit	1134	1500	150	208.0										
Standard Lw						119	118	121	120	115	106	100	92	76
Distance Correction				208.0		44	44	44	44	44	44	44	44	44
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	1	2	5
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**208.0**	**66.1**	**73**	**69**	**73**	**71**	**65**	**57**	**47**	**36**	**15**
Combustion Turbine (CT) Inlet	1134	1236	35	415.5										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						0	0	0	0	0	0	0	0	0
Upgraded Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Distance Correction				415.5		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	3	10
Directivity				n		0	0	0	0	0	5	5	5	5
Barrier						0	0	0	0	0	0	0	0	0
Combustion Turbine (CT) Inlet SPL				**415.5**	**41.2**	**52**	**56**	**49**	**48**	**36**	**22**	**17**	**23**	**12**
CT Compartment	1134	1320	26	331.0										
Lw					**112.8**	113	115	110	108	105	103	109	104	99
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.8**	113	115	110	108	105	103	109	104	99
Distance Correction				331.0		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Compartment SPL				**331.0**	**63.4**	**65**	**67**	**62**	**60**	**56**	**54**	**60**	**53**	**43**
CT Generator	1134	1281	25	369.9										
Lw					**112.1**	110	110	109	108	108	107	106	101	92
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.1**	110	110	109	108	108	107	106	101	92
Distance Correction				369.9		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Generator SPL				**369.9**	**62.0**	**61**	**61**	**60**	**59**	**58**	**57**	**56**	**49**	**34**
CT Exhaust Duct	1134	1344	18	306.6										
Lw					**108.0**	117	114	112	105	104	102	100	99	96
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**108.0**	117	114	112	105	104	102	100	99	96
Distance Correction				306.6		47	47	47	47	47	47	47	47	47
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	2	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Exhaust Duct SPL				**306.6**	**59.6**	**70**	**67**	**64**	**57**	**56**	**54**	**51**	**49**	**42**

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Industrial Property: Approx. 300 Feet Northeast of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
HRSG Transition	1134	1375	40	278.0										
Lw					111.9	125	121	117	113	109	106	103	97	84
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					111.9	125	121	117	113	109	106	103	97	84
Distance Correction				278.0		47	47	47	47	47	47	47	47	47
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	2	6
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Transition, SPL				**278.0**	**64.8**	**78**	**74**	**70**	**66**	**62**	**59**	**55**	**48**	**31**
HRSG Boiler	1134	1453	80	212.7										
Lw					107.6	121	116	113	109	104	102	99	93	79
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					107.6	121	116	113	109	104	102	99	93	79
Distance Correction				212.7		44	44	44	44	44	44	44	44	44
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	1	2	5
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Boiler, SPL				**212.7**	**63.0**	**77**	**72**	**69**	**65**	**59**	**57**	**54**	**47**	**30**
CT Transformer (GSUT)	1168	1187	16	464.1										
Lw					105.4	102	108	110	105	105	99	94	89	82
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					105.4	102	108	110	105	105	99	94	89	82
Distance Correction				464.1		51	51	51	51	51	51	51	51	51
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	11
Barrier						0	0	0	0	0	0	0	0	0
CT Transformer (GSUT), SPL				**464.1**	**53.6**	**51**	**57**	**59**	**54**	**53**	**47**	**41**	**34**	**20**
ST Package	1034	1325	40	344.2										
Lw					112.5	116	121	119	114	110	106	103	95	89
Mitigation - Building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					99.5	102	108	106	101	97	93	90	82	76
Distance Correction				344.2		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
ST Package, SPL				**344.2**	**50.4**	**54**	**59**	**57**	**52**	**48**	**44**	**40**	**31**	**20**
Generator Package	1034	1288	40	379.3										
Lw					112.5	116	121	119	114	110	106	103	95	89
Mitigation						13	13	13	13	13	13	13	13	13
Mitigated Lw					99.5	102	108	106	101	97	93	90	82	76
Distance Correction				379.3		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Generator Package, SPL				**379.3**	**49.5**	**53**	**59**	**57**	**51**	**47**	**43**	**39**	**30**	**18**
Boiler Feed Pumps	1091	1469	30	189.9										
Lw					109.9	103	109	107	106	105	104	103	102	98
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Total Lw					112.9	106	112	110	109	108	107	106	105	101
Distance Correction				189.9		43	43	43	43	43	43	43	43	43
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	1	2	4
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Boiler Feed Pumps, SPL				**189.9**	**68.9**	**63**	**69**	**67**	**66**	**65**	**63**	**62**	**60**	**53**
Other Major Pumps	1021	1375	30	301.1										
Lw					109.9	103	109	107	106	105	104	103	102	98
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Total Lw					99.9	93	99	97	96	95	94	93	92	88

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Industrial Property: Approx. 300 Feet Northeast of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Distance Correction				301.1		47	47	47	47	47	47	47	47	47
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	2	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Other Pumps, SPL				**301.1**	**51.5**	**46**	**52**	**50**	**49**	**47**	**46**	**45**	**42**	**34**
Gas Compressor	934	1543	25	233.5										
Lw					**122.9**	113	109	114	113	111	114	115	116	109
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**109.9**	100	96	101	100	98	101	106	103	96
Distance Correction				233.5		45	45	45	45	45	45	45	45	45
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	1	2	5
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Gas Compressor SPL				**233.5**	**63.8**	**55**	**51**	**56**	**55**	**53**	**55**	**60**	**56**	**46**
Total Cooling Tower (6 cells)	788	1492	45	388.4										
Lw					**114.5**	114	117	117	114	111	108	106	105	103
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**114.5**	114	117	117	114	111	108	106	105	103
Distance Correction				388.4		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity 63 degrees				n		2	2	2	2	2	2	3	3	3
Barrier						0	0	0	0	0	0	0	0	0
Total Cooling Tower (6 cells)				**388.4**	**61.5**	**62**	**65**	**65**	**62**	**59**	**56**	**52**	**49**	**42**

ATMOSPHERIC ABSORPTION (dB/100 meters - 75% of EEI Values)	0.08	0.11	0.17	0.27	0.45	0.70	1.20	2.62	7.56

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Industrial Property: Approx. 350 Feet Northeast of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	870	1650	0		**75.3**	79.3	77.8	76.9	73.9	71.1	68.7	68.9	65.8	58.9
						39.9	51.6	60.8	65.3	67.9	68.7	70.1	66.8	57.8
Summary														
Stack Exit, SPL				336.1	61.8	68.7	64.7	68.6	66.5	60.3	52.1	42.6	31.1	8.1
Combustion Turbine (CT) Inlet SPL				492.3	39.7	50.4	54.3	47.2	46.1	34.8	20.4	15.7	20.6	9.2
CT Compartment SPL				423.3	60.9	62.7	64.7	59.6	57.5	54.2	51.9	57.3	50.4	39.0
CT Generator SPL				454.4	59.9	59.1	59.0	58.0	56.8	56.6	55.2	53.5	46.6	30.7
CT Exhaust Duct SPL				404.5	56.9	67.1	64.1	62.0	54.9	53.6	51.3	48.7	46.0	36.9
HRSG Transition, SPL				383.3	61.8	75.6	71.5	67.5	63.4	59.1	55.9	52.3	44.6	25.8
HRSG Boiler, SPL				339.0	58.7	72.7	67.6	64.6	60.5	55.3	53.0	49.5	42.0	22.9
CT Transformer (GSUT), SPL				550.8	51.9	49.4	55.3	57.2	52.1	51.8	45.3	39.5	32.1	16.8
ST Package, SPL				366.2	49.9	53.0	58.9	56.9	51.8	47.6	43.3	39.7	30.1	18.6
Generator Package, SPL				399.4	49.1	52.2	58.2	56.1	51.0	46.8	42.5	38.8	29.1	17.1
Boiler Feed Pumps, SPL				287.2	65.0	59.1	65.1	63.0	61.9	60.8	59.6	58.1	55.9	47.6
Other Pumps, SPL				315.2	51.1	45.3	51.3	49.2	48.1	46.9	45.7	44.2	41.9	33.1
Gas Compressor SPL				127.2	69.5	60.2	56.2	61.2	60.1	58.1	61.0	65.8	62.2	53.3
Total Cooling Tower (6 cells)				183.6	71.7	71.0	74.0	74.0	70.9	68.8	65.7	63.4	61.6	56.8
Distance to acoustic center				**361.6**										
Stack Exit	1134	1506	150	336.1										
Standard Lw						119	119	121	120	115	108	100	92	76
Distance Correction				336.1		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**336.1**	**61.8**	**69**	**65**	**69**	**67**	**60**	**52**	**43**	**31**	**8**
Combustion Turbine (CT) Inlet	1134	1236	35	492.3										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						0	0	0	0	0	0	0	0	0
Upgraded Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Distance Correction				492.3		52	52	52	52	52	52	52	52	52
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	11
Directivity				n		0	0	0	0	0	5	5	5	5
Barrier						0	0	0	0	0	0	0	0	0
Combustion Turbine (CT) Inlet SPL				**492.3**	**39.7**	**50**	**54**	**47**	**46**	**35**	**20**	**16**	**21**	**9**
CT Compartment	1134	1320	26	423.3										
Lw					**112.8**	113	115	110	108	105	103	109	104	99
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.8**	113	115	110	108	105	103	109	104	99
Distance Correction				423.3		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	3	10
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Compartment SPL				**423.3**	**60.9**	**63**	**65**	**60**	**57**	**54**	**52**	**57**	**50**	**39**
CT Generator	1134	1281	25	454.4										
Lw					**112.1**	110	110	109	108	108	107	106	101	92
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.1**	110	110	109	108	108	107	106	101	92
Distance Correction				454.4		51	51	51	51	51	51	51	51	51
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	10
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Generator SPL				**454.4**	**59.9**	**59**	**59**	**58**	**57**	**57**	**55**	**54**	**47**	**31**
CT Exhaust Duct	1134	1344	18	404.5										
Lw					**108.0**	117	114	112	105	104	102	100	99	96
Mitigation						0	0	0	0	0	0	0	0	0

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Industrial Property: Approx. 350 Feet Northeast of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Mitigated Lw					**108.0**	117	114	112	105	104	102	100	99	96
Distance Correction				404.5		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Exhaust Duct SPL				**404.5**	**56.9**	**67**	**64**	**62**	**55**	**54**	**51**	**49**	**46**	**37**
HRSG Transition	1134	1375	40	383.3										
Lw					**111.9**	125	121	117	113	109	106	103	97	84
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**111.9**	125	121	117	113	109	106	103	97	84
Distance Correction				383.3		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Transition, SPL				**383.3**	**61.8**	**76**	**72**	**67**	**63**	**59**	**56**	**52**	**45**	**26**
HRSG Boiler	1134	1453	80	339.0										
Lw					**107.6**	121	116	113	109	104	102	99	93	79
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**107.6**	121	116	113	109	104	102	99	93	79
Distance Correction				339.0		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Boiler, SPL				**339.0**	**58.7**	**73**	**68**	**65**	**60**	**55**	**53**	**49**	**42**	**23**
CT Transformer (GSUT)	1168	1187	10	550.8										
Lw					**105.4**	102	108	110	105	105	99	94	89	82
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**105.4**	102	108	110	105	105	99	94	89	82
Distance Correction				550.8		52	52	52	52	52	52	52	52	52
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	13
Barrier						0	0	0	0	0	0	0	0	0
CT Transformer (GSUT), SPL				**550.8**	**51.9**	**49**	**55**	**57**	**52**	**52**	**45**	**40**	**32**	**17**
ST Package	1034	1325	40	366.2										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation - Building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				366.2		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	8
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
ST Package, SPL				**366.2**	**49.9**	**53**	**59**	**57**	**52**	**48**	**43**	**40**	**30**	**19**
Generator Package	1034	1289	40	399.4										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				399.4		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Generator Package, SPL				**399.4**	**49.1**	**52**	**58**	**56**	**51**	**47**	**42**	**39**	**29**	**17**
Boiler Feed Pumps	1091	1469	30	287.2										
Lw					**109.9**	103	109	107	103	105	104	103	102	98

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Industrial Property: Approx. 350 Feet Northeast of Nominal Acoustic Center

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Total Lw					**112.9**	106	112	110	109	108	107	106	105	101
Distance Correction				287.2		47	47	47	47	47	47	47	47	47
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	2	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Boiler Feed Pumps, SPL				**287.2**	**65.0**	**59**	**65**	**63**	**62**	**61**	**60**	**58**	**56**	**48**
Other Major Pumps	1021	1375	30	315.2										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Total Lw					**99.9**	93	99	97	96	95	94	93	92	88
Distance Correction				315.2		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Other Pumps, SPL				**315.2**	**51.1**	**45**	**51**	**49**	**48**	**47**	**46**	**44**	**42**	**33**
Gas Compressor	934	1543	25	127.2										
Lw					**122.9**	113	109	114	113	111	114	119	116	109
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**109.9**	100	96	101	100	98	101	106	103	96
Distance Correction				127.2		40	40	40	40	40	40	40	40	40
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	0	1	3
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Gas Compressor SPL				**127.2**	**69.5**	**60**	**56**	**61**	**60**	**58**	**61**	**66**	**62**	**53**
Total Cooling Tower (6 cells)	788	1492	45	183.6										
Lw					**114.5**	114	117	117	114	111	108	106	105	103
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**114.5**	114	117	117	114	111	108	106	105	103
Distance Correction				183.6		43	43	43	43	43	43	43	43	43
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	1	1	4
Directivity 20 degrees				n		0	0	0	0	-1	-1	-1	-1	-1
Barrier						0	0	0	0	0	0	0	0	0
Total Cooling Tower (6 cells)				**183.6**	**71.7**	**71**	**74**	**74**	**71**	**69**	**66**	**63**	**62**	**57**

ATMOSPHERIC ABSORPTION (dB/100 meters - 75% of EEI Values)	0.08	0.11	0.17	0.27	0.45	0.70	1.20	2.62	7.56

Magnolia Power Plant Expansion Project
Sound Level Calculation
All equipment at 400 Feet

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	0	0	0		**70.6**	77.9	75.4	73.6	70.4	67.2	64.3	63.5	58.7	48.5
						38.5	49.2	57.5	61.8	64.0	64.3	64.7	59.7	47.4
Summary														
Stack Exit, SPL				427.2	59.6	66.6	62.6	66.5	64.4	58.1	49.8	40.2	28.3	3.9
Combustion Turbine (CT) Inlet SPL				401.5	41.6	52.2	56.1	49.1	47.9	36.7	22.4	17.8	23.1	13.0
CT Compartment SPL				400.8	61.5	63.2	65.2	60.1	57.9	54.7	52.4	57.8	51.1	40.0
CT Generator SPL				400.8	61.2	60.2	60.2	59.1	57.9	57.7	56.4	54.8	48.1	33.0
CT Exhaust Duct SPL				400.4	57.0	67.2	64.2	62.1	55.0	53.7	51.4	48.8	46.1	37.1
HRSG Transition, SPL				402.0	61.3	75.2	71.1	67.0	62.9	58.7	55.4	51.8	44.0	25.0
HRSG Boiler, SPL				407.9	56.9	71.0	66.0	62.9	58.8	53.6	51.3	47.6	39.9	19.7
CT Transformer (GSUT), SPL				400.3	55.0	52.2	58.2	60.1	55.0	54.7	48.4	42.8	36.1	23.1
ST Package, SPL				402.0	49.0	52.2	58.1	56.0	50.9	46.7	42.4	38.8	29.0	17.0
Generator Package, SPL				402.0	49.0	52.2	58.1	56.0	50.9	46.7	42.4	38.8	29.0	17.0
Boiler Feed Pumps, SPL				401.1	61.7	56.2	62.2	60.1	59.0	57.7	56.4	54.8	52.1	42.0
Other Pumps, SPL				401.1	48.7	43.2	49.2	47.1	46.0	44.7	43.4	41.8	39.1	29.0
Gas Compressor SPL				400.8	58.4	50.2	46.2	51.1	49.9	47.7	50.4	54.8	50.1	37.0
Total Cooling Tower (6 cells)				402.5	64.2	64.2	67.1	67.0	63.9	61.7	58.4	55.8	53.0	45.0
Distance to acoustic center				**403.6**										
Stack Exit	400	0	150	427.2										
Standard Lw						119	119	121	120	115	108	100	92	76
Distance Correction				427.2		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	3	10
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**427.2**	**59.6**	**67**	**63**	**67**	**64**	**58**	**50**	**40**	**28**	**4**
Combustion Turbine (CT) Inlet	400	0	35	401.5										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						0	0	0	0	0	0	0	0	0
Upgraded Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Distance Correction				401.5		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	5	5	5	5
Barrier						0	0	0	0	0	0	0	0	0
Combustion Turbine (CT) Inlet SPL				**401.5**	**41.6**	**52**	**56**	**49**	**48**	**37**	**22**	**18**	**23**	**13**
CT Compartment	400	0	25	400.8										
Lw					**112.8**	113	115	110	108	105	103	109	104	99
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.8**	113	115	110	108	105	103	109	104	99
Distance Correction				400.8		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Compartment SPL				**400.8**	**61.5**	**63**	**65**	**60**	**58**	**55**	**52**	**58**	**51**	**40**
CT Generator	400	0	25	400.8										
Lw					**112.1**	110	110	109	108	108	107	106	101	92
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.1**	110	110	109	108	108	107	106	101	92
Distance Correction				400.8		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Generator SPL				**400.8**	**61.2**	**60**	**60**	**59**	**58**	**58**	**56**	**55**	**48**	**33**
CT Exhaust Duct	400	0	18	400.4										
Lw					**108.0**	117	114	112	105	104	102	100	99	96
Mitigation						0	0	0	0	0	0	0	0	0

Magnolia Power Plant Expansion Project
Sound Level Calculation
All equipment at 400 Feet

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Mitigated Lw					**108.0**	117	114	112	105	104	102	100	99	96
Distance Correction				400.4		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Exhaust Duct SPL				**400.4**	**57.0**	**67**	**64**	**62**	**55**	**54**	**51**	**49**	**46**	**37**
HRSG Transition	400	0	40	402.0										
Lw					**111.9**	125	121	117	113	109	106	103	97	84
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**111.9**	125	121	117	113	109	106	103	97	84
Distance Correction				402.0		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Transition, SPL				**402.0**	**61.3**	**75**	**71**	**67**	**63**	**59**	**55**	**52**	**44**	**25**
HRSG Boiler	400	0	80	407.9										
Lw					**107.6**	121	116	113	109	104	102	99	93	79
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**107.6**	121	116	113	109	104	102	99	93	79
Distance Correction				407.9		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Boiler, SPL				**407.9**	**56.9**	**71**	**66**	**63**	**59**	**54**	**51**	**48**	**40**	**20**
CT Transformer (GSUT)	400	0	10	400.3										
Lw					**105.4**	102	108	110	105	105	99	94	89	82
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**105.4**	102	108	110	105	105	99	94	89	82
Distance Correction				400.3		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Barrier						0	0	0	0	0	0	0	0	0
CT Transformer (GSUT), SPL				**400.3**	**55.0**	**52**	**58**	**60**	**55**	**55**	**48**	**43**	**36**	**23**
ST Package	400	0	40	402.0										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation - Building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				402.0		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
ST Package, SPL				**402.0**	**49.0**	**52**	**58**	**56**	**51**	**47**	**42**	**39**	**29**	**17**
Generator Package	400	0	40	402.0										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				402.0		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Generator Package, SPL				**402.0**	**49.0**	**52**	**58**	**56**	**51**	**47**	**42**	**39**	**29**	**17**
Boiler Feed Pumps	400	0	30	401.1										
Lw					**109.9**	103	109	107	106	105	104	103	102	96

Magnolia Power Plant Expansion Project
Sound Level Calculation
All equipment at 400 Feet

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Total Lw					**112.9**	106	112	110	109	108	107	106	105	101
Distance Correction				401.1		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Boiler Feed Pumps, SPL				**401.1**	**61.7**	**56**	**62**	**60**	**59**	**58**	**56**	**55**	**52**	**42**
Other Major Pumps	400	0	30	401.1										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Total Lw					**99.9**	93	99	97	96	95	94	93	92	88
Distance Correction				401.1		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Other Pumps, SPL				**401.1**	**48.7**	**43**	**49**	**47**	**46**	**45**	**43**	**42**	**39**	**29**
Gas Compressor	400	0	25	400.8										
Lw					**122.9**	113	109	114	113	111	114	119	116	109
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**109.9**	100	96	101	100	98	101	106	103	96
Distance Correction				400.8		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Gas Compressor SPL				**400.8**	**58.4**	**50**	**46**	**51**	**50**	**48**	**50**	**55**	**50**	**37**
Total Cooling Tower (6 cells)	400	0	45	402.5										
Lw					**114.5**	114	117	117	114	111	108	106	105	103
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**114.5**	114	117	117	114	111	108	106	105	103
Distance Correction				402.5		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity 20 degrees				n		0	0	0	0	-1	-1	-1	-1	-1
Barrier						0	0	0	0	0	0	0	0	0
Total Cooling Tower (6 cells)				**402.5**	**64.2**	**64**	**67**	**67**	**64**	**62**	**58**	**56**	**53**	**45**

ATMOSPHERIC ABSORPTION (dB/100 meters - 75% of EEI Values)	0.08	0.11	0.17	0.27	0.45	0.70	1.20	2.62	7.56

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Residential Property: Approx. 600 Feet West of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	1620	960	0		47.3	59.0	54.4	53.3	50.1	44.5	40.4	37.8	30.4	11.1
						19.6	28.2	37.2	41.5	41.3	40.4	39.0	31.4	10.0
Summary														
Stack Exit, SPL				746.2	42.4	49.7	45.6	49.5	47.3	40.9	32.3	22.2	8.9	-20.3
Combustion Turbine (CT) Inlet SPL				560.0	3.5	14.2	18.2	11.1	9.9	-1.4	-15.8	-20.7	-16.1	-28.5
CT Compartment SPL				605.3	22.2	24.6	26.5	21.4	19.2	15.9	13.4	18.5	10.9	-3.3
CT Generator SPL				583.0	22.4	21.9	21.8	20.7	19.5	19.2	17.8	15.9	8.4	-9.4
CT Exhaust Duct SPL				619.7	17.6	28.4	25.3	23.2	16.0	14.6	12.2	9.2	5.6	-6.8
HRSG Transition, SPL				640.3	26.9	41.1	37.0	32.9	28.7	24.3	20.8	16.9	8.1	-14.5
HRSG Boiler, SPL				696.9	43.8	58.3	53.3	50.1	45.9	40.5	38.0	33.9	24.9	0.4
CT Transformer (GSUT), SPL				506.1	17.7	15.1	21.1	23.0	17.8	17.6	11.2	5.4	-1.8	-16.4
ST Package, SPL				691.5	26.8	30.4	36.3	34.2	29.0	24.6	20.1	16.0	5.0	-11.4
Generator Package, SPL				672.7	27.1	30.6	36.6	34.4	29.2	24.9	20.4	16.3	5.4	-10.7
Boiler Feed Pumps, SPL				734.7	32.4	27.9	33.8	31.6	30.4	29.0	27.5	25.3	21.2	6.1
Other Pumps, SPL				729.3	20.5	15.9	21.9	19.7	18.5	17.1	15.5	13.4	9.3	-5.7
Gas Compressor SPL				900.6	37.4	31.0	27.0	31.8	30.5	28.0	30.3	34.0	27.1	6.5
High Total Cooling Tower (6 cells)				988.8	35.1	37.2	40.1	39.9	36.6	33.1	29.3	24.8	19.5	2.7
Low Total Cooling Tower (6 cells)				987.6	28.1	30.2	33.1	32.9	29.6	26.1	22.3	17.8	12.6	-4.3
Distance to acoustic center				**691.1**										
Stack Exit	1134	1508	160	746.2										
Standard Lw						119	116	121	120	116	108	100	92	79
Mitigation - silencer						12	12	12	12	12	12	12	12	12
Distance Correction				746.2		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	6	17
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**746.2**	**42.4**	**50**	**46**	**49**	**47**	**41**	**32**	**22**	**9**	**-20**
Combustion Turbine (CT) Inlet	1134	1238	35	560.0										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						30	30	30	30	30	30	30	30	30
Upgraded Silencer Lw					**62.3**	72	76	69	68	57	48	44	51	47
Distance Correction				560.0		53	53	53	53	53	53	53	53	53
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	13
Directivity				n		0	0	0	0	0	5	5	5	5
Sheilding						5	5	5	5	5	5	5	5	5
Combustion Turbine (CT) Inlet SPL				**560.0**	**3.5**	**14**	**18**	**11**	**10**	**-1**	**-16**	**-21**	**-16**	**-29**
CT Compartment	1134	1320	25	605.3										
Lw					**112.8**	113	115	110	108	106	103	109	104	99
Mitigation						30	30	30	30	30	30	30	30	30
Mitigated Lw					**82.8**	83	85	80	78	75	73	79	74	69
Distance Correction				605.3		53	53	53	53	53	53	53	53	53
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	5	14
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
CT Compartment SPL				**605.3**	**22.2**	**25**	**27**	**21**	**19**	**16**	**13**	**18**	**11**	**-3**
CT Generator	1134	1281	25	583.0										
Lw					**112.1**	110	110	109	108	108	107	106	101	92
Mitigation						30	30	30	30	30	30	30	30	30
Mitigated Lw					**82.1**	80	80	79	78	78	77	76	71	62
Distance Correction				583.0		53	53	53	53	53	53	53	53	53
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	5	13
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
CT Generator SPL				**583.0**	**22.4**	**22**	**22**	**21**	**20**	**19**	**18**	**16**	**8**	**-9**
CT Exhaust Duct	1134	1341	18	619.7										
Lw					**108.0**	117	114	112	105	104	102	100	99	96
Mitigation						30	30	30	30	30	30	30	30	30
Mitigated Lw					**78.0**	87	84	82	75	74	72	70	69	66
Distance Correction				619.7		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	14
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Residential Property: Approx. 600 Feet West of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
CT Exhaust Duct SPL				**619.7**	**17.6**	**28**	**25**	**23**	**16**	**15**	**12**	**9**	**6**	**-7**
HRSG Transition	1134	1375	40	640.3										
Lw					**111.9**	125	121	117	113	109	106	103	97	84
Mitigation						30	30	30	30	30	30	30	30	30
Mitigated Lw					**81.9**	95	91	87	83	79	76	73	67	54
Distance Correction				640.3		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	15
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						0	0	0	0	0	0	0	0	0
HRSG Transition, SPL				**640.3**	**26.9**	**41**	**37**	**33**	**29**	**24**	**21**	**17**	**8**	**-15**
HRSG Boiler	1134	1453	80	696.9										
Lw					**107.6**	121	116	113	109	104	102	99	93	79
Mitigation						8	8	8	8	8	8	8	8	8
Mitigated Lw					**99.6**	113	108	105	101	96	94	91	85	71
Distance Correction				696.9		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	3	6	16
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Boiler, SPL				**696.9**	**43.8**	**58**	**53**	**50**	**46**	**41**	**38**	**34**	**25**	**0**
CT Transformer (GSUT)	1168	1387	15	506.1										
Lw					**105.4**	102	108	110	105	105	99	94	89	82
Mitigation						30	30	30	30	30	30	30	30	30
Mitigated Lw					**75.4**	72	78	80	75	75	69	64	59	52
Distance Correction				506.1		52	52	52	52	52	52	52	52	52
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	12
Sheilding						5	5	5	5	5	5	5	5	5
CT Transformer (GSUT), SPL				**506.1**	**17.7**	**15**	**21**	**23**	**18**	**18**	**11**	**5**	**-2**	**-16**
ST Package	1034	1328	40	691.5										
Lw					**112.5**	118	121	119	114	110	106	103	95	89
Mitigation - Building (5% open area)						30	30	30	30	30	30	30	30	30
Mitigated Lw					**82.5**	85	91	89	84	80	76	73	65	59
Distance Correction				691.5		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	3	6	16
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
ST Package, SPL				**691.5**	**26.8**	**30**	**36**	**34**	**29**	**25**	**20**	**16**	**5**	**-11**
Generator Package	1034	1288	40	672.7										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation						30	30	30	30	30	30	30	30	30
Mitigated Lw					**82.5**	85	91	89	84	80	76	73	65	59
Distance Correction				672.7		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	16
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Generator Package, SPL				**672.7**	**27.1**	**31**	**37**	**34**	**29**	**25**	**20**	**16**	**5**	**-11**
Boiler Feed Pumps	1091	1469	30	734.7										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation						18	18	18	18	18	18	18	18	18
Total Lw					**94.9**	88	94	92	91	90	89	88	87	83
Distance Correction				734.7		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	6	17
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
Boiler Feed Pumps, SPL				**734.7**	**32.4**	**28**	**34**	**32**	**30**	**29**	**27**	**25**	**21**	**6**
Other Major Pumps	1021	1375	30	729.3										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Residential Property: Approx. 600 Feet West of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Mitigation - Inside building (5% open area)						30	30	30	30	30	30	30	30	30
Total Lw					**82.9**	76	82	80	79	78	77	76	75	71
Distance Correction				729.3		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	6	17
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
Other Pumps, SPL				**729.3**	**20.5**	**16**	**22**	**20**	**18**	**17**	**16**	**13**	**9**	**-6**
Gas Compressor	934	1543	25	900.6										
Lw					**122.9**	113	109	114	113	111	114	119	116	109
Mitigation - Inside building (5% open area)						20	20	20	20	20	20	20	20	20
Mitigated Lw					**102.9**	93	89	94	93	91	94	99	96	89
Distance Correction				900.6		57	57	57	57	57	57	57	57	57
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	7	21
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
Gas Compressor SPL				**900.6**	**37.4**	**31**	**27**	**32**	**31**	**28**	**30**	**34**	**27**	**6**
High Cooling Tower (6 cells)	788	1492	50	988.8										
Lw					**114.5**	114	117	117	114	111	108	108	105	103
Mitigation						15	15	15	15	15	15	15	15	15
Splitting high/low						2	2	2	2	2	2	2	2	2
Mitigated Lw					**97.5**	97	100	100	97	94	91	89	88	86
Distance Correction				988.8		58	58	58	58	58	58	58	58	58
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	1	2	4	8	23
Directivity				n		2	2	2	2	2	2	3	3	3
Barrier						0	0	0	0	0	0	0	0	0
High Total Cooling Tower (6 cells)				**988.8**	**35.1**	**37**	**40**	**40**	**37**	**33**	**29**	**25**	**20**	**3**
Low Cooling Tower (6 cells)	788	1492	10	987.6										
Lw					**114.5**	114	117	117	114	111	108	108	105	103
Mitigation						15	15	15	15	15	15	15	15	15
Splitting						4	4	4	4	4	4	4	4	4
Mitigated Lw					**95.5**	95	98	98	95	92	89	87	86	84
Distance Correction				987.6		58	58	58	58	58	58	58	58	58
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	1	2	4	8	23
Directivity				n		2	2	2	2	2	2	3	3	3
Sheilding						5	5	5	5	5	5	5	5	5
Low Total Cooling Tower (6 cells)				**987.6**	**28.1**	**30**	**33**	**33**	**30**	**26**	**22**	**18**	**13**	**-4**

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Residential Property: Approx. 600 Feet West of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	1620	960	0		**60.3**	72.6	69.0	65.8	61.6	57.8	54.4	50.9	44.2	28.2
						33.2	42.8	49.7	53.0	54.6	54.4	52.1	45.2	27.1
Summary														
Stack Exit, SPL				746.2	42.4	49.7	45.6	49.5	47.3	40.9	32.3	22.2	8.9	-20.3
Combustion Turbine (CT) Inlet SPL				560.0	33.5	44.2	48.2	41.1	39.9	28.6	14.2	9.3	13.9	1.5
CT Compartment SPL				605.3	40.2	42.6	44.5	39.4	37.2	33.9	31.4	36.5	28.9	14.7
CT Generator SPL				583.0	40.4	39.9	39.8	38.7	37.5	37.2	35.8	33.9	26.4	8.6
CT Exhaust Duct SPL				619.7	47.6	58.4	55.3	53.2	46.0	44.6	42.2	39.2	35.6	23.2
HRSG Transition, SPL				640.3	56.9	71.1	67.0	62.9	58.7	54.3	50.8	46.9	38.1	15.5
HRSG Boiler, SPL				696.9	51.8	66.3	61.3	58.1	53.9	48.5	46.0	41.9	32.9	8.4
CT Transformer (GSUT), SPL				506.1	47.7	45.1	51.1	53.0	47.8	47.6	41.2	35.4	28.2	13.6
ST Package, SPL				691.5	43.8	47.4	53.3	51.2	46.0	41.6	37.1	33.0	22.0	5.6
Generator Package, SPL				672.7	44.1	47.6	53.6	51.4	46.2	41.9	37.4	33.3	22.4	6.3
Boiler Feed Pumps, SPL				734.7	50.4	45.9	51.8	49.6	48.4	47.0	45.5	43.3	39.2	24.1
Other Pumps, SPL				729.3	37.5	32.9	38.9	36.7	35.5	34.1	32.5	30.4	26.3	11.3
Gas Compressor SPL				900.6	37.4	31.0	27.0	31.8	30.5	28.0	30.3	34.0	27.1	6.5
High Total Cooling Tower (6 cells)				988.8	50.1	52.2	55.1	54.9	51.6	48.1	44.3	39.8	34.5	17.7
Low Total Cooling Tower (6 cells)				987.6	43.1	45.2	48.1	47.9	44.6	41.1	37.3	32.8	27.6	10.7
Distance to acoustic center				**691.1**										
Stack Exit	1134	1506	150	746.2										
Standard Lw						119	116	121	120	115	109	100	92	76
Mitigation - silencer						12	12	12	12	12	12	12	12	12
Distance Correction				746.2		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	6	17
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**746.2**	**42.4**	**50**	**46**	**49**	**47**	**41**	**32**	**22**	**9**	**-20**
Combustion Turbine (CT) Inlet	1134	1230	35	560.0										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						0	0	0	0	0	0	0	0	0
Upgraded Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Distance Correction				560.0		53	53	53	53	53	53	53	53	53
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	13
Directivity				n		0	0	0	0	0	5	5	5	5
Sheilding						5	5	5	5	5	5	5	5	5
Combustion Turbine (CT) Inlet SPL				**560.0**	**33.5**	**44**	**48**	**41**	**40**	**29**	**14**	**9**	**14**	**1**
CT Compartment	1134	1320	25	605.3										
Lw					**112.8**	113	115	110	108	105	103	103	104	99
Mitigation						12	12	12	12	12	12	12	12	12
Mitigated Lw					**100.8**	101	103	98	96	93	91	97	92	87
Distance Correction				605.3		53	53	53	53	53	53	53	53	53
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	5	14
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
CT Compartment SPL				**605.3**	**40.2**	**43**	**45**	**39**	**37**	**34**	**31**	**36**	**29**	**15**
CT Generator	1134	1281	25	583.0										
Lw					**112.1**	110	110	109	108	106	107	106	101	92
Mitigation						12	12	12	12	12	12	12	12	12
Mitigated Lw					**100.1**	98	98	97	96	96	95	94	89	80
Distance Correction				583.0		53	53	53	53	53	53	53	53	53
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	5	13
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
CT Generator SPL				**583.0**	**40.4**	**40**	**40**	**39**	**38**	**37**	**36**	**34**	**26**	**9**
CT Exhaust Duct	1134	1344	18	619.7										
Lw					**108.0**	117	114	112	105	104	102	100	99	96
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**108.0**	117	114	112	105	104	102	100	99	96
Distance Correction				619.7		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	14
Directivity				n		0	0	0	0	0	0	0	0	0

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Residential Property: Approx. 600 Feet West of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Sheilding						5	5	5	5	5	5	5	5	5
CT Exhaust Duct SPL				**619.7**	**47.6**	**58**	**55**	**53**	**46**	**45**	**42**	**39**	**36**	**23**
HRSG Transition	1134	1375	40	640.3										
Lw					**111.9**	125	121	117	113	109	106	103	97	84
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**111.9**	125	121	117	113	109	106	103	97	84
Distance Correction				640.3		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	15
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						0	0	0	0	0	0	0	0	0
HRSG Transition, SPL				**640.3**	**56.9**	**71**	**67**	**63**	**59**	**54**	**51**	**47**	**38**	**15**
HRSG Boiler	1134	1453	60	696.9										
Lw					**107.6**	121	116	113	109	104	102	99	93	79
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**107.6**	121	116	113	109	104	102	99	93	79
Distance Correction				696.9		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	3	6	16
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Boiler, SPL				**696.9**	**51.8**	**66**	**61**	**58**	**54**	**49**	**46**	**42**	**33**	**8**
CT Transformer (GSUT)	1168	1197	16	506.1										
Lw					**105.4**	102	108	110	105	105	99	94	89	82
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**105.4**	102	108	110	105	105	99	94	89	82
Distance Correction				506.1		52	52	52	52	52	52	52	52	52
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	12
Sheilding						5	5	5	5	5	5	5	5	5
CT Transformer (GSUT), SPL				**506.1**	**47.7**	**45**	**51**	**53**	**48**	**48**	**41**	**35**	**28**	**14**
ST Package	1034	1325	40	691.5										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation - Building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				691.5		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	3	6	16
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
ST Package, SPL				**691.5**	**43.8**	**47**	**53**	**51**	**46**	**42**	**37**	**33**	**22**	**6**
Generator Package	1034	1289	40	672.7										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				672.7		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	16
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Generator Package, SPL				**672.7**	**44.1**	**48**	**54**	**51**	**46**	**42**	**37**	**33**	**22**	**6**
Boiler Feed Pumps	1091	1469	30	734.7										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation						0	0	0	0	0	0	0	0	0
Total Lw					**112.9**	106	112	110	109	108	107	106	105	101
Distance Correction				734.7		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	6	17
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
Boiler Feed Pumps, SPL				**734.7**	**50.4**	**46**	**52**	**50**	**48**	**47**	**45**	**43**	**39**	**24**
Other Major Pumps	1021	1375	30	729.3										

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Residential Property: Approx. 600 Feet West of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Lw					**109.9**	103	109	107	106	105	104	103	102	98
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Total Lw					**99.9**	93	99	97	96	95	94	93	92	88
Distance Correction				729.3		55	55	55	55	55	55	55	55	55
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	6	17
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
Other Pumps, SPL				**729.3**	**37.5**	**33**	**39**	**37**	**35**	**34**	**33**	**30**	**26**	**11**
Gas Compressor	934	1543	25	900.6										
Lw					**122.9**	113	109	114	113	111	114	119	116	109
Mitigation - Inside building (5% open area)						20	20	20	20	20	20	20	20	20
Mitigated Lw					**102.9**	93	89	94	93	91	94	99	96	89
Distance Correction				900.6		57	57	57	57	57	57	57	57	57
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	2	3	7	21
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
Gas Compressor SPL				**900.6**	**37.4**	**31**	**27**	**32**	**31**	**28**	**30**	**34**	**27**	**6**
High Cooling Tower (6 cells)	788	1492	50	988.8										
Lw					**114.5**	114	117	117	114	112	105	106	105	103
Mitigation						0	0	0	0	0	0	0	0	0
Splitting high/low						2	2	2	2	2	2	2	2	2
Mitigated Lw					**112.5**	112	115	115	112	109	106	104	103	101
Distance Correction				988.8		58	58	58	58	58	58	58	58	58
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	1	2	4	8	23
Directivity				n		2	2	2	2	2	2	3	3	3
Barrier						0	0	0	0	0	0	0	0	0
High Total Cooling Tower (6 cells)				**988.8**	**50.1**	**52**	**55**	**55**	**52**	**48**	**44**	**40**	**35**	**18**
Low Cooling Tower (6 cells)	788	1492	50	987.6										
Lw					**114.5**	114	117	117	114	111	106	106	105	103
Mitigation						0	0	0	0	0	0	0	0	0
Splitting						4	4	4	4	4	4	4	4	4
Mitigated Lw					**110.5**	110	113	113	110	107	104	102	101	99
Distance Correction				987.6		58	58	58	58	58	58	58	58	58
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	1	2	4	8	23
Directivity				n		2	2	2	2	2	2	3	3	3
Sheilding						5	5	5	5	5	5	5	5	5
Low Total Cooling Tower (6 cells)				**987.6**	**43.1**	**45**	**48**	**48**	**45**	**41**	**37**	**33**	**28**	**11**

ATMOSPHERIC ABSORPTION (dB/100 meters - 75% of EEI Values)	0.08	0.11	0.17	0.27	0.45	0.70	1.20	2.62	7.56

Magnolia Power Plant Expansion Project
Sound Level Calculation
Second Nearest Residential Area: Approx. 1300 Feet Southwest of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	1300	15	0		**47.6**	58.4	55.2	52.7	48.9	45.2	41.5	38.9	29.3	3.4
						19.0	29.0	36.6	40.3	42.0	41.5	40.1	30.3	2.3
Summary														
Stack Exit, SPL				1507.7	35.5	43.4	39.3	43.0	40.5	33.7	24.6	13.3	-3.3	-44.0
Combustion Turbine (CT) Inlet SPL				1232.7	21.0	32.2	36.1	28.9	27.5	15.8	0.9	-5.0	-3.3	-25.9
CT Compartment SPL				1315.8	38.2	42.7	44.5	39.3	36.9	33.1	30.2	34.1	23.5	-1.4
CT Generator SPL				1277.1	39.0	39.9	39.8	38.5	37.2	36.5	34.5	31.5	21.0	-7.2
CT Exhaust Duct SPL				1339.4	34.4	46.5	43.4	41.1	33.7	32.0	29.0	24.9	18.1	-5.1
HRSG Transition, SPL				1370.7	39.1	54.3	50.2	45.9	41.5	36.7	32.7	27.6	15.7	-18.0
HRSG Boiler, SPL				1449.8	39.2	54.8	49.6	46.3	41.9	36.1	33.0	27.8	15.5	-20.3
CT Transformer (GSUT), SPL				1179.5	34.3	32.6	38.5	40.3	34.9	34.3	27.4	20.6	10.5	-14.3
ST Package, SPL				1337.3	27.1	31.5	37.4	35.1	29.7	25.0	20.0	14.9	1.1	-25.0
Generator Package, SPL				1301.1	27.4	31.8	37.6	35.4	30.0	25.3	20.3	15.3	1.7	-23.9
Boiler Feed Pumps, SPL				1469.3	37.6	34.7	40.5	38.2	36.8	35.0	32.9	29.6	22.3	-3.8
Other Pumps, SPL				1388.6	25.3	22.2	28.1	25.8	24.4	22.6	20.5	17.4	10.4	-14.5
Gas Compressor SPL				1571.4	25.3	21.1	16.9	21.6	20.1	17.3	19.1	21.7	11.9	-18.8
High Total Cooling Tower (6 cells)				1564.0	39.9	42.1	45.0	44.6	41.2	38.3	34.1	29.7	22.0	-3.6
Low Total Cooling Tower (6 cells)				1563.3	35.9	38.1	41.0	40.6	37.2	34.3	30.1	25.7	18.0	-7.6
Distance to acoustic center				**1378.9**										
Stack Exit	1134	1508	150	1507.7										
Standard Lw						119	116	121	120	115	108	100	92	76
Mitigation - silencer						12	12	12	12	12	12	12	12	12
Distance Correction				1507.7		61	61	61	61	61	61	61	61	61
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	6	12	35
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**1507.7**	**35.5**	**43**	**39**	**43**	**41**	**34**	**25**	**13**	**-3**	**-44**
Combustion Turbine (CT) Inlet	1134	1296	35	1232.7										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						0	0	0	0	0	0	0	0	0
Upgraded Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Distance Correction				1232.7		59	59	59	59	59	59	59	59	59
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	10	28
Directivity				n		0	0	0	0	0	5	5	5	5
Sheilding						10	10	10	10	10	10	10	10	10
Combustion Turbine (CT) Inlet SPL				**1232.7**	**21.0**	**32**	**36**	**29**	**28**	**16**	**1**	**-5**	**-3**	**-26**
CT Compartment	1134	1320	26	1315.8										
Lw					**112.8**	113	115	110	108	105	103	109	104	99
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.8**	113	115	110	108	105	103	109	104	99
Distance Correction				1315.8		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	10	30
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
CT Compartment SPL				**1315.8**	**38.2**	**43**	**45**	**39**	**37**	**33**	**30**	**34**	**23**	**-1**
CT Generator	1134	1281	25	1277.1										
Lw					**112.1**	110	110	109	108	108	107	106	101	92
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**112.1**	110	110	109	108	108	107	106	101	92
Distance Correction				1277.1		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	10	29
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
CT Generator SPL				**1277.1**	**39.0**	**40**	**40**	**39**	**37**	**36**	**34**	**32**	**21**	**-7**
CT Exhaust Duct	1134	344	18	1339.4										
Lw					**108.0**	117	114	112	105	104	102	100	99	96
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**108.0**	117	114	112	105	104	102	100	99	96
Distance Correction				1339.4		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	11	31
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
CT Exhaust Duct SPL				**1339.4**	**34.4**	**46**	**43**	**41**	**34**	**32**	**29**	**25**	**18**	**-5**

Magnolia Power Plant Expansion Project
Sound Level Calculation
Second Nearest Residential Area: Approx. 1300 Feet Southwest of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
HRSG Transition	1134	1375	40	1370.7										
Lw					**111.9**	125	121	117	113	109	106	103	97	84
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**111.9**	125	121	117	113	109	106	103	97	84
Distance Correction				1370.7		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	11	32
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
HRSG Transition, SPL				**1370.7**	**39.1**	**54**	**50**	**46**	**41**	**37**	**33**	**28**	**16**	**-18**
HRSG Boiler	1134	1459	80	1449.8										
Lw					**107.6**	121	116	113	109	104	102	99	93	79
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**107.6**	121	116	113	109	104	102	99	93	79
Distance Correction				1449.8		61	61	61	61	61	61	61	61	61
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	12	33
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						5	5	5	5	5	5	5	5	5
HRSG Boiler, SPL				**1449.8**	**39.2**	**55**	**50**	**46**	**42**	**36**	**33**	**28**	**16**	**-20**
CT Transformer (GSUT)	1166	1187	16	1179.5										
Lw					**105.4**	102	108	110	105	105	99	94	89	82
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**105.4**	102	108	110	105	105	99	94	89	82
Distance Correction				1179.5		59	59	59	59	59	59	59	59	59
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	4	9	27
Sheilding						10	10	10	10	10	10	10	10	10
CT Transformer (GSUT), SPL				**1179.5**	**34.3**	**33**	**39**	**40**	**35**	**34**	**27**	**21**	**10**	**-14**
ST Package	1034	1325	40	1337.3										
Lw					**112.5**	116	121	119	114	110	106	103	95	89
Mitigation - Building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				1337.3		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	11	31
Directivity						0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
ST Package, SPL				**1337.3**	**27.1**	**32**	**37**	**35**	**30**	**25**	**20**	**15**	**1**	**-25**
Generator Package	1034	1288	40	1301.1										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				1301.1		60	60	60	60	60	60	60	60	60
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	10	30
Directivity						0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
Generator Package, SPL				**1301.1**	**27.4**	**32**	**38**	**35**	**30**	**25**	**20**	**15**	**2**	**-24**
Boiler Feed Pumps	1091	1469	30	1469.3										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Total Lw					**112.9**	106	112	110	109	108	107	106	105	101
Distance Correction				1469.3		61	61	61	61	61	61	61	61	61
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	12	34
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
Boiler Feed Pumps, SPL				**1469.3**	**37.6**	**35**	**41**	**38**	**37**	**35**	**33**	**30**	**22**	**-4**
Other Major Pumps	1021	1375	30	1388.6										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Total Lw					**99.9**	93	99	97	96	95	94	93	92	88

Magnolia Power Plant Expansion Project
Sound Level Calculation
Second Nearest Residential Area: Approx. 1300 Feet Southwest of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Distance Correction				1388.6		61	61	61	61	61	61	61	61	61
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	1	1	2	3	5	11	32
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
Other Pumps, SPL				**1388.6**	**25.3**	**22**	**28**	**26**	**24**	**23**	**21**	**17**	**10**	**-15**
Gas Compressor	834	1543	25	1571.4										
Lw					**122.9**	113	109	114	113	111	114	119	116	109
Mitigation - Inside building (5% open area)						20	20	20	20	20	20	20	20	20
Mitigated Lw					**102.9**	93	89	94	93	91	94	99	96	89
Distance Correction				1571.4		62	62	62	62	62	62	62	62	62
Atmospheric Absorption (59 deg F, 70% R.H.)						0	1	1	1	2	3	6	13	36
Directivity				n		0	0	0	0	0	0	0	0	0
Sheilding						10	10	10	10	10	10	10	10	10
Gas Compressor SPL				**1571.4**	**25.3**	**21**	**17**	**22**	**20**	**17**	**19**	**22**	**12**	**-19**
High Cooling Tower (6 cells)	788	1492	50	1564.0										
Lw					**114.5**	114	117	117	114	111	108	106	105	103
Mitigation						2	2	2	2	2	2	2	2	2
Mitigated Lw					**112.5**	112	115	115	112	109	106	104	103	101
Distance Correction				1564.0		62	62	62	62	62	62	62	62	62
Atmospheric Absorption (59 deg F, 70% R.H.)						0	1	1	1	2	3	6	12	36
Directivity				n		0	0	0	0	-1	-1	-1	-1	-1
Sheilding						8	8	8	8	8	8	8	8	8
High Total Cooling Tower (6 cells)				**1564.0**	**39.9**	**42**	**45**	**45**	**41**	**38**	**34**	**30**	**22**	**-4**
Low Cooling Tower (6 cells)	788	1492	10	1563.3										
Lw					**114.5**	114	117	117	114	111	108	106	105	103
Mitigation						4	4	4	4	4	4	4	4	4
Mitigated Lw					**110.5**	110	113	113	110	107	104	102	101	99
Distance Correction				1563.3		62	62	62	62	62	62	62	62	62
Atmospheric Absorption (59 deg F, 70% R.H.)						0	1	1	1	2	3	6	12	36
Directivity				n		0	0	0	0	-1	-1	-1	-1	-1
Sheilding						10	10	10	10	10	10	10	10	10
Low Total Cooling Tower (6 cells)				**1563.3**	**35.9**	**38**	**41**	**41**	**37**	**34**	**30**	**26**	**18**	**-8**

ATMOSPHERIC ABSORPTION (dB/100 meters - 75% of EEI Values)	0.08	0.11	0.17	0.27	0.45	0.70	1.20	2.62	7.56

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Commercial Property: Approx. 400 Feet Northwest of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	1450	1350	0		**68.3**	79.1	75.6	72.6	68.4	65.3	62.5	60.1	55.8	45.7
						39.7	49.4	56.5	59.8	62.1	62.5	61.3	56.8	44.6
Summary														
Stack Exit, SPL				383.0	49.1	55.7	51.7	55.7	53.7	47.7	39.7	30.7	20.7	2.7
Combustion Turbine (CT) Inlet SPL				337.8	43.1	53.7	57.7	50.6	49.5	38.3	24.0	19.5	25.1	16.0
CT Compartment SPL				318.4	51.8	53.2	55.2	50.1	48.0	44.8	42.6	48.1	41.7	31.9
CT Generator SPL				324.4	51.2	50.0	50.0	48.9	47.8	47.7	46.4	44.9	38.5	24.6
CT Exhaust Duct SPL				316.6	59.2	69.3	66.2	64.2	57.1	55.9	53.7	51.2	48.8	41.0
HRSG Transition, SPL				319.5	63.5	77.2	73.1	69.1	65.0	60.8	57.6	54.1	46.7	28.9
HRSG Boiler, SPL				341.9	58.6	72.6	67.6	64.5	60.4	55.2	52.9	49.4	41.9	22.8
CT Transformer (GSUT), SPL				326.1	56.9	54.0	60.0	61.9	56.8	56.6	50.4	44.9	38.5	26.6
ST Package, SPL				418.7	48.6	51.8	57.8	55.7	50.6	46.3	42.0	38.4	28.6	16.3
Generator Package, SPL				422.5	48.5	51.7	57.7	55.6	50.5	46.2	41.9	38.3	28.5	16.1
Boiler Feed Pumps, SPL				379.4	62.2	56.7	62.6	60.6	59.5	58.2	57.0	55.4	52.7	43.0
Other Pumps, SPL				430.8	48.0	42.6	48.5	46.4	45.3	44.1	42.7	41.1	38.2	27.7
Gas Compressor SPL				551.5	48.0	40.4	36.3	41.2	40.1	37.8	40.3	44.5	39.1	23.8
Total Cooling Tower (6 cells)				678.6	51.0	52.6	55.5	55.3	52.1	48.8	45.3	41.2	36.3	23.1
Distance to geometric center				**396.4**										
Stack Exit	1134	1506	150	383.0										
Standard Lw						119	116	121	120	119	108	100	92	76
Mitigation - silencer						12	12	12	12	12	12	12	12	12
Distance Correction				383.0		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	0	0	0
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**383.0**	**49.1**	**56**	**52**	**56**	**54**	**48**	**40**	**31**	**21**	**3**
Combustion Turbine (CT) Inlet	1134	1238	35	337.8										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						0	0	0	0	0	0	0	0	0
Upgraded Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Distance Correction				337.8		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Directivity				n		0	0	0	0	0	5	5	5	5
Barrier						0	0	0	0	0	0	0	0	0
Combustion Turbine (CT) Inlet SPL				**337.8**	**43.1**	**54**	**58**	**51**	**49**	**38**	**24**	**20**	**25**	**16**
CT Compartment	1134	1320	25	318.4										
Lw					**112.8**	113	115	110	108	105	103	109	104	99
Mitigation						12	12	12	12	12	12	12	12	12
Mitigated Lw					**100.8**	101	103	98	96	93	91	97	92	87
Distance Correction				318.4		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Compartment SPL				**318.4**	**51.8**	**53**	**55**	**50**	**48**	**45**	**43**	**48**	**42**	**32**
CT Generator	1134	1281	25	324.4										
Lw					**112.1**	110	110	109	108	106	107	106	101	92
Mitigation						12	12	12	12	12	12	12	12	12
Mitigated Lw					**100.1**	98	98	97	96	96	95	94	89	80
Distance Correction				324.4		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Generator SPL				**324.4**	**51.2**	**50**	**50**	**49**	**48**	**48**	**46**	**45**	**39**	**25**
CT Exhaust Duct	1134	1344	18	316.6										
Lw					**108.0**	117	114	112	105	104	102	100	99	96

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Commercial Property: Approx. 400 Feet Northwest of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					108.0	117	114	112	105	104	102	100	99	96
Distance Correction				316.6		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Exhaust Duct SPL				**316.6**	**59.2**	**69**	**66**	**64**	**57**	**56**	**54**	**51**	**49**	**41**
HRSG Transition	1134	1373	40	319.5										
Lw					**111.9**	125	121	117	113	109	106	103	97	84
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**111.9**	125	121	117	113	109	106	103	97	84
Distance Correction				319.5		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Transition, SPL				**319.5**	**63.5**	**77**	**73**	**69**	**65**	**61**	**58**	**54**	**47**	**29**
HRSG Boiler	1134	1453	80	341.9										
Lw					**107.6**	121	116	113	109	104	102	99	93	79
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**107.6**	121	116	113	109	104	102	99	93	79
Distance Correction				341.9		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Boiler, SPL				**341.9**	**58.6**	**73**	**68**	**64**	**60**	**55**	**53**	**49**	**42**	**23**
CT Transformer (GSUT)	1168	1157	16	326.1										
Lw					**105.4**	102	108	110	105	105	99	94	89	82
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**105.4**	102	108	110	105	105	99	94	89	82
Distance Correction				326.1		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Barrier						0	0	0	0	0	0	0	0	0
CT Transformer (GSUT), SPL				**326.1**	**56.9**	**54**	**60**	**62**	**57**	**57**	**50**	**45**	**38**	**27**
ST Package	1034	1325	40	418.7										
Lw					**112.5**	115	121	119	114	110	106	103	98	89
Mitigation - Building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				418.7		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	3	10
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
ST Package, SPL				**418.7**	**48.6**	**52**	**58**	**56**	**51**	**46**	**42**	**38**	**29**	**16**
Generator Package	1034	1288	40	422.5										
Lw					**112.5**	115	121	119	114	110	106	103	98	89
Mitigation						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				422.5		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	3	10
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Generator Package, SPL				**422.5**	**48.5**	**52**	**58**	**56**	**50**	**46**	**42**	**38**	**28**	**16**
Boiler Feed Pumps	1091	1469	30	379.4										

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Commercial Property: Approx. 400 Feet Northwest of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Lw					**109.9**	103	109	107	106	105	104	103	102	98
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Total Lw					**112.9**	106	112	110	109	108	107	106	105	101
Distance Correction				379.4		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Boiler Feed Pumps, SPL				**379.4**	**62.2**	**57**	**63**	**61**	**59**	**58**	**57**	**55**	**53**	**43**
Other Major Pumps	1021	1375	30	430.8										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Total Lw					**99.9**	93	99	97	96	95	94	93	92	88
Distance Correction				430.8		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	3	10
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Other Pumps, SPL				**430.8**	**48.0**	**43**	**49**	**46**	**45**	**44**	**43**	**41**	**38**	**28**
Gas Compressor	934	1543	23	551.5										
Lw					**122.9**	113	109	114	113	111	114	119	116	109
Mitigation - Inside building (5% open area)						20	20	20	20	20	20	20	20	20
Mitigated Lw					**102.9**	93	89	94	93	91	94	99	96	89
Distance Correction				551.5		52	52	52	52	52	52	52	52	52
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	13
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Gas Compressor SPL				**551.5**	**48.0**	**40**	**36**	**41**	**40**	**38**	**40**	**44**	**39**	**24**
Total Cooling Tower (6 cells)	768	1192	45	678.6										
Lw					**110.5**	110	113	113	110	107	104	102	101	99
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**110.5**	110	113	113	110	107	104	102	101	99
Distance Correction				678.6		54	54	54	54	54	54	54	54	54
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	1	1	1	2	5	16
Directivity				n		3	3	3	3	3	3	4	5	6
Barrier						0	0	0	0	0	0	0	0	0
Total Cooling Tower (6 cells)				**678.6**	**51.0**	**53**	**55**	**55**	**52**	**49**	**45**	**41**	**36**	**23**

ATMOSPHERIC ABSORPTION (dB/100 meters - 75% of EEI Values)	0.08	0.11	0.17	0.27	0.45	0.70	1.20	2.62	7.56

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Industrial Property: Approx. 350 Feet Northeast of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Receptor Location	870	1650	0		**72.8**	78.4	76.5	74.8	71.5	69.1	66.6	65.3	63.2	59.6
						39.0	50.3	58.7	62.9	65.9	66.6	66.5	64.2	58.5
Summary														
Stack Exit, SPL				336.1	50.2	56.8	52.8	56.8	54.8	48.8	40.8	31.8	21.8	3.8
Combustion Turbine (CT) Inlet SPL				492.3	39.7	50.4	54.3	47.2	46.1	34.8	20.4	15.7	20.6	9.2
CT Compartment SPL				423.3	48.9	50.7	52.7	47.6	45.5	42.2	39.9	45.3	38.4	27.0
CT Generator SPL				454.4	47.9	47.1	47.0	46.0	44.8	44.6	43.2	41.5	34.6	18.7
CT Exhaust Duct SPL				404.5	56.9	67.1	64.1	62.0	54.9	53.6	51.3	48.7	46.0	36.9
HRSG Transition, SPL				383.3	61.8	75.6	71.5	67.5	63.4	59.1	55.9	52.3	44.6	25.8
HRSG Boiler, SPL				339.0	58.7	72.7	67.6	64.6	60.5	55.3	53.0	49.5	42.0	22.9
CT Transformer (GSUT), SPL				550.8	51.9	49.4	55.3	57.2	52.1	51.8	45.3	39.5	32.1	16.8
ST Package, SPL				366.2	49.9	53.0	58.9	56.9	51.8	47.6	43.3	39.7	30.1	18.6
Generator Package, SPL				399.4	49.1	52.2	58.2	56.1	51.0	46.8	42.5	38.8	29.1	17.1
Boiler Feed Pumps, SPL				287.2	65.0	59.1	65.1	63.0	61.9	60.8	59.6	58.1	55.9	47.6
Other Pumps, SPL				315.2	51.1	45.3	51.3	49.2	48.1	46.9	45.7	44.2	41.9	33.1
Gas Compressor SPL				127.2	62.5	53.2	49.2	54.2	53.1	51.1	54.0	58.8	55.2	46.3
High Total Cooling Tower (6 cells)				184.9	70.3	69.0	72.0	72.0	69.0	67.0	64.0	62.0	61.0	59.0
Low Total Cooling Tower (6 cells)				178.3	68.6	67.3	70.3	70.3	67.3	65.3	62.3	60.3	59.3	57.3
Distance to acoustic center				**361.7**										
Stack Exit	1134	1506	150	336.1										
Standard Lw						119	116	121	120	116	108	100	92	79
Mitigation - silencer						12	12	12	12	12	12	12	12	12
Distance Correction				336.1		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	0	0	0
Directivity						2	3	4	5	6	7	8	10	12
Stack Exit, SPL				**336.1**	**50.2**	**57**	**53**	**57**	**55**	**49**	**41**	**32**	**22**	**4**
Combustion Turbine (CT) Inlet	1134	1236	35	492.3										
Standard Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Mitigation						0	0	0	0	0	0	0	0	0
Upgraded Silencer Lw					**92.3**	102	106	99	98	87	78	74	81	77
Distance Correction				492.3		52	52	52	52	52	52	52	52	52
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	11
Directivity				n		0	0	0	0	0	5	5	5	5
Barrier						0	0	0	0	0	0	0	0	0
Combustion Turbine (CT) Inlet SPL				**492.3**	**39.7**	**50**	**54**	**47**	**46**	**35**	**20**	**16**	**21**	**9**
CT Compartment	1134	1320	25	423.3										
Lw					**112.8**	113	115	110	108	105	103	100	104	99
Mitigation						12	12	12	12	12	12	12	12	12
Mitigated Lw					**100.8**	101	103	98	96	93	91	97	92	87
Distance Correction				423.3		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	3	10
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Compartment SPL				**423.3**	**48.9**	**51**	**53**	**48**	**45**	**42**	**40**	**45**	**38**	**27**
CT Generator	1134	1261	25	454.4										
Lw					**112.1**	110	116	109	108	108	107	106	101	92
Mitigation						12	12	12	12	12	12	12	12	12
Mitigated Lw					**100.1**	98	98	97	96	96	95	94	89	80
Distance Correction				454.4		51	51	51	51	51	51	51	51	51
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	10
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Generator SPL				**454.4**	**47.9**	**47**	**47**	**46**	**45**	**45**	**43**	**42**	**35**	**19**
CT Exhaust Duct	1134	1344	18	404.5										
Lw					**108.0**	117	114	112	106	104	102	100	99	96
Mitigation						0	0	0	0	0	0	0	0	0

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Industrial Property: Approx. 350 Feet Northeast of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Mitigated Lw					**108.0**	117	114	112	105	104	102	100	99	96
Distance Correction				404.5		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
CT Exhaust Duct SPL				**404.5**	**56.9**	**67**	**64**	**62**	**55**	**54**	**51**	**49**	**46**	**37**
HRSG Transition	1134	1375	40	383.3										
Lw					**111.9**	125	121	117	113	109	106	103	97	84
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**111.9**	125	121	117	113	109	106	103	97	84
Distance Correction				383.3		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Transition, SPL				**383.3**	**61.8**	**76**	**72**	**67**	**63**	**59**	**56**	**52**	**45**	**26**
HRSG Boiler	1134	1453	60	339.0										
Lw					**107.6**	121	116	113	109	104	102	99	93	79
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**107.6**	121	116	113	109	104	102	99	93	79
Distance Correction				339.0		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	8
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
HRSG Boiler, SPL				**339.0**	**58.7**	**73**	**68**	**65**	**60**	**55**	**53**	**49**	**42**	**23**
CT Transformer (GSUT)	1168	1187	10	550.8										
Lw					**105.4**	102	108	110	105	105	99	94	89	82
Mitigation						0	0	0	0	0	0	0	0	0
Mitigated Lw					**105.4**	102	108	110	105	105	99	94	89	82
Distance Correction				550.8		52	52	52	52	52	52	52	52	52
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	2	4	13
Barrier						0	0	0	0	0	0	0	0	0
CT Transformer (GSUT), SPL				**550.8**	**51.9**	**49**	**55**	**57**	**52**	**52**	**45**	**40**	**32**	**17**
ST Package	1034	1325	40	366.2										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation - Building (5% open area)						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				366.2		49	49	49	49	49	49	49	49	49
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	8
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
ST Package, SPL				**366.2**	**49.9**	**53**	**59**	**57**	**52**	**48**	**43**	**40**	**30**	**19**
Generator Package	1034	1286	40	399.4										
Lw					**112.5**	115	121	119	114	110	106	103	95	89
Mitigation						13	13	13	13	13	13	13	13	13
Mitigated Lw					**99.5**	102	108	106	101	97	93	90	82	76
Distance Correction				399.4		50	50	50	50	50	50	50	50	50
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	1	1	1	3	9
Directivity						0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Generator Package, SPL				**399.4**	**49.1**	**52**	**58**	**56**	**51**	**47**	**42**	**39**	**29**	**17**
Boiler Feed Pumps	1091	1469	30	287.2										
Lw					**109.9**	103	109	107	106	105	104	103	102	98
2 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Total Lw					**112.9**	106	112	110	109	108	107	106	105	101

Magnolia Power Plant Expansion Project
Sound Level Calculation
Nearest Industrial Property: Approx. 350 Feet Northeast of Nominal Acoustic Center
With Mitigation

	X	Y	Z	Distance (feet)	dBA	OCTAVE BAND CENTER FREQUENCY (Hz) 31.5	63	125	250	500	1000	2000	4000	8000
Distance Correction				287.2		47	47	47	47	47	47	47	47	47
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	2	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Boiler Feed Pumps, SPL				**287.2**	**65.0**	**59**	**65**	**63**	**62**	**61**	**60**	**58**	**56**	**48**
Other Major Pumps	1021	1375	30	315.2										
Lw					**109.9**	103	109	107	106	105	104	103	102	96
4 Major Pumps per Unit						3	3	3	3	3	3	3	3	3
Mitigation - Inside building (5% open area)						13	13	13	13	13	13	13	13	13
Total Lw					**99.9**	93	99	97	96	95	94	93	92	88
Distance Correction				315.2		48	48	48	48	48	48	48	48	48
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	1	1	3	7
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Other Pumps, SPL				**315.2**	**51.1**	**45**	**51**	**49**	**48**	**47**	**46**	**44**	**42**	**33**
Gas Compressor	834	1543	25	127.2										
Lw					**122.9**	113	109	114	113	111	114	119	108	109
Mitigation - Inside building (5% open area)						20	20	20	20	20	20	20	20	20
Mitigated Lw					**102.9**	93	89	94	93	91	94	99	96	89
Distance Correction				127.2		40	40	40	40	40	40	40	40	40
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	0	1	3
Directivity				n		0	0	0	0	0	0	0	0	0
Barrier						0	0	0	0	0	0	0	0	0
Gas Compressor SPL				**127.2**	**62.5**	**53**	**49**	**54**	**53**	**51**	**54**	**59**	**55**	**46**
High Cooling Tower (6 cells)	788	1492	50	184.9										
Lw					**114.5**	114	117	117	114	111	108	106	105	103
Mitigation						2	2	2	2	2	2	2	2	2
Mitigated Lw					**112.5**	112	115	115	112	109	106	104	103	101
Distance Correction				184.9		43	43	43	43	43	43	43	43	43
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	0	0	0
Directivity				n		0	0	0	0	-1	-1	-1	-1	-1
Sheilding						0	0	0	0	0	0	0	0	0
High Total Cooling Tower (6 cells)				**184.9**	**70.3**	**69**	**72**	**72**	**69**	**67**	**64**	**62**	**61**	**59**
Low Cooling Tower (6 cells)	786	1492	10	178.3										
Lw					**114.5**	114	117	117	114	111	108	106	105	103
Mitigation						4	4	4	4	4	4	4	4	4
Mitigated Lw					**110.5**	110	113	113	110	107	104	102	101	99
Distance Correction				178.3		43	43	43	43	43	43	43	43	43
Atmospheric Absorption (59 deg F, 70% R.H.)						0	0	0	0	0	0	0	0	0
Directivity				n		0	0	0	0	-1	-1	-1	-1	-1
Sheilding						0	0	0	0	0	0	0	0	0
Low Total Cooling Tower (6 cells)				**178.3**	**68.6**	**67**	**70**	**70**	**67**	**65**	**62**	**60**	**59**	**57**

ATMOSPHERIC ABSORPTION (dB/100 meters - 75% of EEI Values)	0.08	0.11	0.17	0.27	0.45	0.70	1.20	2.62	7.56

BLACK & VEATCH

MEMORANDUM

City of Burbank
Magnolia Power Project
Equipment Noise Emissions
Typical Equipment Sound Data

B&V Project 099523.0050

February 22, 2001

To: Chuck Schutty

From: Andrew Dicke

As requested, we have compiled typical equipment sound data for the proposed Magnolia Power Project. Based on the plant arrangement depicted in B&V Drawing 099523-DS-S1000 (dated 2/15/01), the primary noise sources are anticipated to include the combustion turbine generator (CTG) packages, the heat recovery steam generator (HRSG) packages, the steam turbine generator (STG) package, the generator step-up transformers (GSUT), the gas compressor package, and the major pumps (i.e. boiler feed pumps, closed cycle cooling water pumps, and condensate pump). Other auxiliary equipment are typically considered secondary noise sources and generally not included in facility noise modeling.

Typical equipment sound levels for the primary noise sources are listed in Tables 1 through 7. The equipment sound data is based on standard packaged equipment, i.e. without any special noise mitigation upgrades, as would typically be guaranteed by the equipment vendors for no added cost. Additionally, all equipment sound data is based on available in-house manufacturer data and/or empirical data provided in *Electric Power Plant Environmental Noise Guide* by Edison Electric Institute (1984). As such, all project-specific equipment sound level data should be verified with the appropriate manufacturers.

The equipment data is being provided to support the facility noise modeling being conducted by others. All equipment sound data includes octave band sound power levels for each noise source component and is based on normal operation of the equipment. Normal operation excludes start-up, shutdown, bypass, and other upset or emergency conditions. Additionally, the corresponding far-field and near-field equipment sound level specifications are included for reference. The equipment envelope is defined as the perimeter line that encompasses all associated equipment and is positioned 3 feet from the face of the equipment.

City of Burbank
Magnolia Power Project
Equipment Noise Emissions
Typical Equipment Sound Data

B&V Project 099523.0050
February 22, 2001

Table 1.
STANDARD PACKAGED COMBUSTION TURBINE GENERATOR
(GE 7FA - 175 MW - Outdoor Installation)

Noise emissions from the CTG package include the noise associated with the air inlet, the turbine compartment, the generator compartment, all compartment vent fans, the turbine exhaust ductwork, and all auxiliary components. Generally, the noise emissions include all equipment and auxiliary components included in the CTG manufacturers scope-of-supply.

Source Component	Octave Band Sound Power Level (Lw), dB									Overall Lw	
	Octave Band Center Frequency, Hz										
	31.5	63	125	250	500	1K	2K	4K	8K	dBA	dB
CT Inlet	102	106	99	98	87	78	74	81	77	92	108
CT Compartment	113	115	110	108	105	103	109	104	99	113	119
GEN Compartment	110	110	109	108	108	107	106	101	92	112	117
Exhaust Duct	117	114	112	105	104	102	100	99	96	108	120

Corresponding Equipment Sound Level Specifications

Far-field	*The combustion turbine generator package shall not exceed a maximum A-weighted sound pressure level (ref: 20 microPa) of 65 dBA at a distance of 400 feet in any direction from the equipment envelope and 5 feet above the ground in a free-field during normal operation of the equipment. Normal operation excludes start-up, shutdown, and all off-normal and emergency conditions.*
Near-field	*The combustion turbine generator package shall not exceed a spatially averaged A-weighted sound pressure level (ref: 20 microPa) of 90 dBA along the equipment envelope at a height of 5 feet above the ground and all personnel platforms during normal operation. Normal operation excludes start-up, shutdown, and all off-normal and emergency conditions.*

Notes:

- Each noise source is considered a point source.
- The height of the inlet point source is approximately 35 ft.
- The heights of the CT and GEN compartment point sources are approximately 25 ft.
- The height of the exhaust duct point source is approximately 18 ft

City of Burbank
Magnolia Power Project
Equipment Noise Emissions
Typical Equipment Sound Data

B&V Project 099523.0050
February 22, 2001

Table 2.
STANDARD PACKAGED HEAT RECOVERY STEAM GENERATOR
(Combined Cycle Outdoor Installation with a GE 7FA CTG)

Noise emissions from the HRSG package include the noise associated with the transition ductwork, the boiler section, the stack, and all associated equipment. Generally, the noise emissions include all equipment and auxiliary components included in the HRSG manufacturers scope-of-supply.

Source Component	Octave Band Sound Power Level (Lw), dB									Overall Lw	
	Octave Band Center Frequency, Hz										
	31.5	63	125	250	500	1K	2K	4K	8K	dBA	dB
Transition Ductwork	125	121	117	113	109	106	103	97	84	112	127
Boiler Section	121	116	113	109	104	102	99	93	79	108	123
Stack Exit	119	116	121	120	115	108	100	92	76	116	126

Corresponding Equipment Sound Level Specifications

Far-field	*The heat recovery steam generator package shall not exceed a maximum A-weighted sound pressure level (ref: 20 microPa) of 65 dBA at a distance of 400 feet in any direction from the equipment envelope and 5 feet above the ground in a free-field during normal operation. Normal operation excludes start-up, shutdown, bypass, and all off-normal and emergency conditions.*
Near-field	*The heat recovery steam generator package shall not exceed a spatially-averaged A-weighted sound pressure level (ref: 20 microPa) of 90 dBA along the equipment envelope at a height of 5 feet above the ground and all personnel platforms during normal operation. Normal operation excludes start-up, shutdown, bypass, and all off-normal and emergency conditions.*

Notes:

- Each noise source is considered a point source.
- The height of the transition ductwork point source is approximately 40 ft.
- The height of the boiler section point source is approximately 80 ft.
- The height of the stack exit point source is not known at this time. Sound propagation of the stack exit point source should include the effect of vertical directivity.

Table 3.
STANDARD PACKAGED STEAM TURBINE GENERATOR
(255 MW - Outdoor Installation)

Noise emissions from the STG package include the noise associated with the turbine compartments, the generator compartment, and all associated auxiliary equipment. Generally, the noise emissions include all equipment and auxiliary components included in the STG manufacturers scope-of-supply.

Source Component	Octave Band Sound Power Level (Lw), dB									Overall Lw	
	Octave Band Center Frequency, Hz										
	31.5	63	125	250	500	1K	2K	4K	8K	dBA	dB
ST Package	115	121	119	114	110	106	103	95	89	112	124
Generator Package	115	121	119	114	110	106	103	95	89	112	124

Corresponding Equipment Sound Level Specifications

Far-field	*The steam turbine generator package shall not exceed a maximum A-weighted sound pressure level (ref: 20 microPa) of 65 dBA at a distance of 400 feet in any direction from the equipment envelope and 5 feet above the ground in a free-field during normal operation. Normal operation excludes start-up, shutdown, bypass, and all off-normal and emergency conditions.*
Near-field	*The steam turbine generator package shall not exceed a spatially averaged A-weighted sound pressure level (ref: 20 microPa) of 90 dBA along the equipment envelope at a height of 5 feet above the ground and all personnel platforms during normal operation. Normal operation excludes start-up, shutdown, bypass, and all off-normal and emergency conditions.*

Notes:

- The steam turbine equipment is located within a building. The building wall panel is anticipated to consist of a single 24 gauge solid outer liner. Locations of ventilation fans and louver openings are not known at this time. Assume each wall will include approximately 5% open area for ventilation.
- The height of the steam turbine building is 70 ft.

Table 4.
STANDARD GENERATOR STEP-UP TRANSFORMER
(Outdoor Installation)

Noise emissions from each GSUT package include the noise associated with the GSUT operating at maximum cooling capacity, i.e. with all cooling fans operating at full load.

Source Component	Octave Band Sound Power Level (Lw), dB									Overall Lw	
	Octave Band Center Frequency, Hz										
	31.5	63	125	250	500	1K	2K	4K	8K	dBA	dB
GSUT	102	108	110	105	105	99	94	89	82	105	114

Corresponding Equipment Sound Level Specifications

Specification	*The generator step-up transformer shall not exceed a maximum A-weighted sound pressure level (ref: 20 microPa) of 85 dBA at a distance of 1 ft from the transformer as measured in accordance with ANSI/IEEE C57.12.90.*

Notes:
- Each noise source is considered a point source.
- The height of each GSUT point source is approximately 16 ft.

Table 5.
MAJOR PUMPS (STANDARD)
(Boiler Feed Pumps - 2 per unit, Condensate Pump, Closed Cycle Cooling Water Pump)

Noise emissions from each pump assembly include the noise associated with the pump and motor.

Source Component	Octave Band Sound Power Level (Lw), dB									Overall Lw	
	Octave Band Center Frequency, Hz										
	31.5	63	125	250	500	1K	2K	4K	8K	dBA	dB
Pump/Motor Assembly	103	109	107	106	105	104	103	102	98	110	115

Corresponding Equipment Sound Level Specifications

Near-field	*The pump/motor assembly shall not exceed a spatially averaged A-weighted sound pressure level (ref: 20 microPa) of 90 dBA along the equipment envelope at a height of 5 feet above the ground or personnel platform during normal operation. Normal operation excludes start-up, shutdown, and all off-normal and emergency conditions.*

Notes:
- Each noise source is considered a point source.
- Boiler Feed Pump (4) = 2250 Hp.
- Condensate Pump (2) = 1000 Hp.
- Closed Cycle Cooling Water Pump (2) = 450 Hp.
- The height of each pump assembly point source should correspond to the top of the pump/motor assembly, as installed.

Table 5.
COOLING TOWER NOISE EMISSIONS

Noise emissions from the cooling tower package include the noise associated with the water fall, fans (including the fan motors and gearboxes) and all associated auxiliary equipment. Generally, the noise emissions include all equipment and auxiliary components included in the supplier's scope-of-supply. The sound power level is presented on a per cell basis.

Source Component	Octave Band Sound Power Level (Lw), dB									Overall Lw	
	Octave Band Center Frequency, Hz										
	31.5	63	125	250	500	1K	2K	4K	8K	dBA	dB
Cooling Tower Fan	106	109	109	106	103	99	96	93	85	105	114
Water Fall Noise (per cell)	78	78	80	83	90	94	94	95	94	101	101
Single Cell Total	106	109	109	106	103	100	98	97	95	107	115
Total Cooling Tower	114	117	117	114	111	108	106	105	103	115	123

Corresponding Equipment Sound Level Specifications	
Far-field	*The cooling tower package shall not exceed a maximum A-weighted sound pressure level (ref: 20 microPa) of 65 dBA at a distance of 400 feet in any direction from the water basin and 5 feet above the ground in a free-field during normal operation. Normal operation excludes start-up, shutdown, and all off-normal and emergency conditions.*
Near-field	*The cooling tower package shall not exceed a spatially-averaged A-weighted sound pressure level (ref: 20 microPa) of 90 dBA along the equipment envelope at a height of 5 feet above the ground during normal operation. Normal operation excludes start-up, shutdown, bypass, and all off-normal and emergency conditions.*

Notes:

- The cooling tower contains 6 cells.
- Each cell air inlet opening and cooling tower fan exhaust is considered a point source.
- The height of each cell air inlet opening is approximately 10 ft above ground.
- The height of each cooling tower fan exhaust is approximately 50 ft above ground.

Table 7.
GAS COMPRESSOR (STANDARD – DRESSER-RAND)

Noise emissions from the gas compressor include the noise associated with the compressor, drive motor, and all associated auxiliary components.

Source Component	Octave Band Sound Power Level (Lw), dB									Overall Lw	
	Octave Band Center Frequency, Hz										
	31.5	63	125	250	500	1K	2K	4K	8K	dBA	dB
Gas Compressor	113	109	114	113	111	114	119	116	109	123	124
Corresponding Equipment Sound Level Specifications											
Near-field	*The gas compressor assembly shall not exceed a spatially-averaged A-weighted sound pressure level (ref: 20 microPa) of 90 dBA along the equipment envelope at a height of 5 feet above the ground or personnel platform during normal operation. Normal operation excludes start-up, shutdown, and all off-normal and emergency conditions.*										

Notes:

- The gas compressor will be located within a building. The building will be constructed of a sandwich wall panel consisting of a perforated inner liner, 4 inches insulation and a 24 gauge solid outer liner. Locations of ventilation fans and louver openings are not known at this time. Assume each wall will include approximately 5% open area for ventilation.
- The height of the gas compressor building is approximately 25 ft.

cc: W. Brent Ferren

ORANGE CHANNEL #3
RADIO NUMBER - ELECTRIC DIVISION (POWER SYSTEMS)

RADIO	TITLE	NAME
Control 12	SCADA Center	SCADA Center Personnel
Control 13	Olive Power Plant	Power Plant Personnel
Control 14	Magnolia Pwr. Plant	Power Plant Personnel

City of Burbank Public Service Department Water-Light-Power

MEMORANDUM

DATE: January 24, 1996

TO: Distribution List

FROM: Roanld V. Stassi, General Manager, PSD

SUBJECT: **Addendum to PSD's Emergency Action Plan**

We last revised PSD's Emergency Action Plan in July 1995. Over the last six months there has been a lot of activity related to Disaster Preparedness. To keep track of all committee and subcommittee meetings and who represents PSD at those meetings, the attached addendum is necessary to supplement the previous Emergency Action Plan circulated to you.

If you have any questions please contact Dev Birla, Sr. Electrical Engineer at extension 3578.

RONALD V. STASSI
General Manager
Public Service Department

RVS:DDB:ph
B:DDB2\EAP-ADDE.NDM

c. Robert Ovrom, City Manager
John Nicoll, Management Services Director
Michael Davis, Fire Chief
Rich Baenan, Disaster Preparedness Coordinator

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R. Ainsworth	R. Hamoui	L. Silva	D. Filson	W. Josue
D. Tyndall	R. Doxsee	J. Lovell	T. Lutgen	P. Hickman
N. Farrand				

ADDENDUM

PSD's Representatives in
Disaster Preparedness Committee/Council Meetings

These meetings are usually held the third Thursday of every month unless specified otherwise.

Electric	Water	Communication
Greg Simay	Fred Lantz	Jack Wildermuth
Dev Birla (alternate)	Bill Smith (alternate)	

In addition to that, Ron Stassi is on the "cc" list of these committee meeting notices along with Pat Hickman, PSD Engineering.

Note: The Disaster Committee consists of only City department representatives and the Disaster Council includes Warner Bros., Disney, NBC, Airport, School District representatives etc. in addition to City Department representatives. The Disaster Committee and Council meetings are held in alternate months.

PSD's Representative in

Hazard Mitigation Committee Meetings

Electric	Water	Administration
Dev Birla	Bill Smith	Swen Williams
Bruno Jeider (if related to Sylmar converter station)		

These meetings are usually held on the third Wednesday of the month if needed.

EOC

SUBCOMMITTEES

Policy Group

Department Heads - Ronald Stassi or his designee

Operations Group

Greg Simay or Dev Birla (Alternate) - Electric Operations Table

Fred Lantz or Ross Burke or
Bill Smith or Leighton Fong (Alternates) - Water Operations Table

Dave Filson and Ray Hamoui - Electric Status Reporting

Jim Lovell or Bob Doxsee - Water Status Reporting

Planning Group

Chuck Beller - Electric
or Willie Josue (Alternate)

Tom Lutgen - Water

Logistics

Leonard Silva -
Jack Wildermuth or
Don Tyndall (Alternate) - Communication Branch

CITY OF BURBANK
TELEPHONE CALLING INSTRUCTIONS

EMERGENCY OPERATIONS CENTER ACTIVATION

LOCATION: 1845 N. ONTARIO ST.

PROCEDURE:

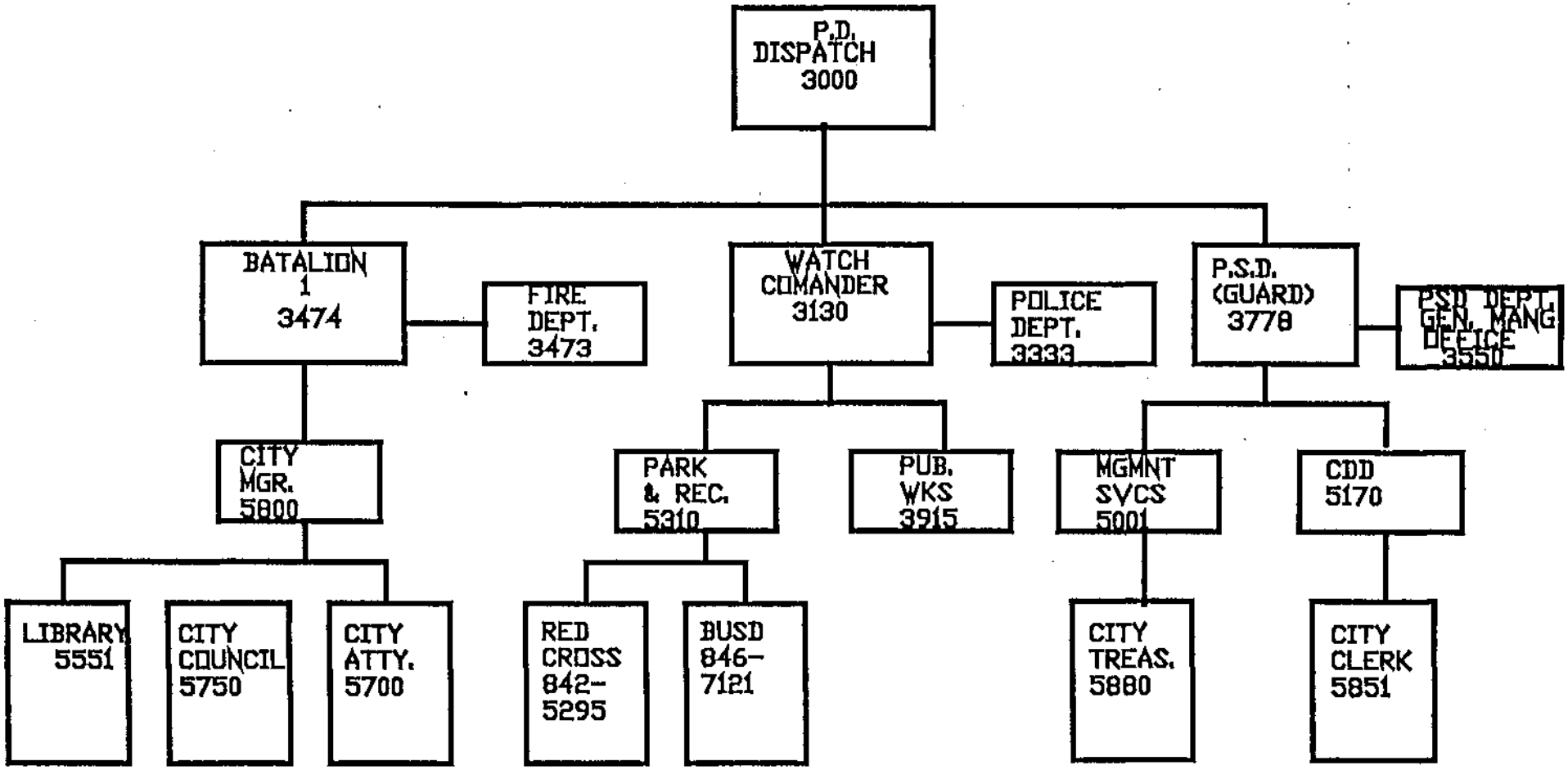
1. ENSURE YOUR OWN SAFETY.
2. IF YOU ARE NOTIFIED OF AN E.O.C. ACTIVATION, ADVISE DESIGNATED PERSONNEL IN YOUR DEPARTMENT.
3. CONTINUE WITH NOTIFICATION TREE BY ALERTING DEPARTMENT(S) BELOW YOURS, IF ANY.

PHONE DIRECTORY (Valid only when E.O.C. activated)

POLICY	
City Council	238-1500
Incident Commander	238-1501
Policy Group 1	238-1502
Policy Group 2	238-1503
Public Information Officer	238-1511
OPERATIONS	
Operations Section Chief	238-1505
Fire	238-1506
Mass Care-Parks/Rec	238-1507
Mass Care-Red Cross	238-1508
Mass Care-School District	238-1509
Police	238-1510
Public Info. Officer (ops.)	238-1511
Public Info. (FAX)	238-1512
Public Works	238-1513
Public Works	238-1514
Public Service - Electric	238-1515
Public Service - Water	238-1516
PLANS	
Plans Section Chief	238-1517
CDD-Building	238-1518
LOGISTICS	
Logistics Section Chief	238-1519
Logistics	238-1520
TRAINING CENTER	
TRAINING CENTER	238-3428
TRAINING CENTER	238-3429
PAY PHONE	843-9959

FOR ADDITIONAL E.O.C. INFORMATION, CONSULT E.O.C. ACTIVATION MANUAL

CITY OF BURBANK EMERGENCY OPERATION CENTER
NOTIFICATION TREE
(NUMBERS SHOWN ARE FOR BUSINESS HOURS ONLY)



I BELIEVE THAT ROSE HAS A LIST OF PEOPLE SHE INFORMS WHEN EOC IS ACTIVATED

CITY OF BURBANK TELEPHONE CALLING INSTRUCTIONS

CITY OF BURBANK
EMERGENCY OPERATIONS CENTER
AFTER HOURS NOTIFICATION LIST

USE THIS LIST IN CONJUNCTION WITH NOTIFICATION SEQUENCE (Attached) FOR PROPER NOTIFICATION ORDER

CITY MANAGER		
1. BUD OVROM, CITY MANAGER	CELL. 388-5649	841-9227
2. STEVE HELVEY, ASSIST. CITY MGR.	CELL. 388-5662	310-945-4221
3. RICH INGA, DEPUTY CITY MANAGER	CELL. 388-5648	842-8250
CITY ATTORNEY		
1. JOE FLETCHER, CITY ATTORNEY	CELL. 427-5350	457-8353
2. JULIE SCOTT, CHIEF ASST. CITY ATTY.		505-1840
3. TERRY STEVENSON, SR. ASST. CITY ATTY.		367-3432
4. MARY RILEY, ASST. CITY ATTY.		805-254-6889
CITY CLERK		
1. MARGE LAUERMAN, CITY CLERK		845-1920
2. MIKE MCININCH, ASST. CITY CLERK		355-6335
3. JERI BROWNE, RECORDS MGMNT. COORD.		241-2094
CITY TREASURER		
1. JAMES ROGERS, TREASURER		848-7828
2. LEONA HANNICK, ASST. TREASURER		845-1655
3. DONNA ANDERSON, ADM. SECTY.		353-7554
COMMUNITY DEVELOPMENT		
BUILDING DIV.		
1. RON KOCH	PAGER 566-0850	842-3749
2. TED KNOWLES		846-2795
3. BRUCE FENG	PAGER 972-6856	972-2004
PLANNING DIV.		
1. ROGER BAKER		563-3437
2. BOB BURDETTEE		841-3578
3. BILL LUNDGREN		841-7491
ROBERT TAGUE, DIRECTOR	CELL. 384-2198	213-667-0240
FIRE DEPARTMENT		
1. MARIO GAGNON, ADMIN.B.C.	PAGER 955-3053	352-0978
2. KEN WHITTEKIEND, B.C.	PAGER 972-6910	841-2355
3. BUTCH JOHNSON, B.C.	PAGER 559-4052	845-0055
MIKE DAVIS, FIRE CHIEF	PAGER 569-8539	955-9447
	CELL. 400-1110	805-984-2925
LIBRARY		
1. LARRY JOHNSON	PAGER 566-0795	567-0552
2. CINDA CATES	PAGER 559-4951	845-5992
3. SANDRA CHRISTOPHER	PAGER 559-5071	846-0522
HOLLY HINMAN, DIRECTOR	PAGER 559-1126	799-3782
MANAGEMENT SERVICES		
1. BUD DETTMAN		845-6992
2. NORM DEXTER		843-6825
3. JOANNE LUTHER KOCH		848-2485
JOHN NICOLL, DIRECTOR		805-252-3249

PARK AND RECREATION

1. WILLIAM LANGER, REC. SUPRV.		848-8521
2. DEBORAH MCMURRY, ADMIN. ANALYST		845-4291
3. MICHAEL ROCKWELL, LEAD WORKER		848-7700
MARY ALVORD, DIRECTOR		840-9441

POLICE

1. TOM HOEFEL, UNIF. DIV. CAPT.	PAGER 593-1720	848-3138
2. ROBERT HEINS, ADMIN. DIV. CAPT.	PAGER 973-0871	845-4143
3. GORDON BOWERS, INV. DIV. CAPT.	PAGER 567-7775	846-5772
4. JAMES GIBSON, SVCS. DIV. CAPT.	PAGER 587-0746	842-3093
DAVE NEWSHAM, POLICE CHIEF	PAGER 955-3221	840-0893
	CELL. 384-3355	

PUBLIC SERVICE DEPT.

1. GUARD	CELL. 388-5634	238-3778
2. RONALD STASSI, GENERAL MANAGER	PAGER 297-1616	248-3887
3. JOHN OSTLY, FIELD SVCS. MGR.		566-9883
4. GREG SIMAY, ASST. GENERAL MGR.		842-7074
5. DEV BIRLA, SR. ELECT. ENGR.		559-2551
6. BILL SMITH		845-1290

PUBLIC WORKS
FIELD SERVICE

1. RALPH COSTANZO, SUPERV.	842-5442
2. JIM VILLASENOR, SUPERV.	842-6692
3. JOEL EMBECK, LANDFILL SUPERV.	848-8909

ENGINEERING DIVISION

1. MIKE MOSS, SNR. CIVIL ENG.	845-0693
2. RON MORRIS, TRAFFIC ENG.	249-5939
3. PAUL THYAMAGONDALU, SUPV. SANITARY ENG.	366-1551
ORA LAMPMAN, DIRECTOR	714-982-9879

NOTES:

A. Line of Authority

The Field Services Manager, or the senior qualified person from Field Services reporting to work and in communication with the Emergency Operations Center (EOC), is in charge and shall activate the **Field Command Post** (see Section 1.3.4- Line of Authority). Other people are needed for EOC operation besides Ronald V. Stassi, General Manager. Tentatively, those people from the Electrical Services Division are: Gregory L. Simay, Dev Birla, Chuck Beller, Ray Hamoui, Willie Josue, Dave Filson, Leonard Silva, Jack Wildermuth and Don Tyndall. The people from the Water Division are: Fred Lantz, Bill Smith, Ross Burke or Leighton Fong, Albert Lopez, Joe Meythaler and Jim Lovell, Tom Lutgen, or Bob Doxsee.

B. **Field Command Post**

The **Field Command Post** will be located at the PSD Yard located at 164 West Magnolia Blvd. If the buildings are safe, the field supervisors will delegate from the normal worksite. However, if the buildings are not safe, a temporary **Field Command Post** will be established elsewhere on the PSD Yard property.

The MARS emergency radio system, emergency frequency scanning, event logging, and the status boards will be maintained at the **Field Command Post.**

The people who would report to the Field Command Post are: John Ostly, Pete Erickson and Robert Merlo from the Field Services Division, and Pat Hickman and Nicki Farrand from the Electrical Services Division.

*SCADA Center and Power Plant personnel should follow the plan and directives of their respective sections and should report to duty if required.

APPENDIX B (CONTINUED)

PERSONNEL ASSIGNED TO EMERGENCY OPERATION CENTER

NAME	ASSIGNED DUTY	HOME PHONE NUMBER
Ronald V. Stassi	Management	(818) 248-3887 Pager - 297-1616
Gregory L. Simay	Operations Table - Electrical	(919) 842-7074
Fred Lantz	Operations Table- Water	(714) 629-2802
Dev Birla	Operations Table- Alternate or SCADA Center	(818) 559-2551
Ross Burke or	Operations Table- Alternates	(818) 986-3496 (818) 841-7467
Leighton Fong or		(818) 244-6962
Bill Smith		(818) 845-1290
Ray Hamoui	Status Reporting	(818) 241-5543
David Filson	Status Reporting	(818) 242-2237
Chuck Beller	Planning	(818) 843-2502
Willie Josue	Planning- Alternate	(818) 259-8891
Jim Lovell	Planning	(818) 352-1642
Tom Lutgen or	Planning- Alternate	(818) 398-8800
Bob Doxsee		(818) 996-1369
Jack Wildermuth	Logistics Communication	(818)
Don Tyndall	Logistics Communication - Alternate	(818) 841-5493
Leonard Silva	Logistics	(818) 845-7728

APPENDIX B (CONTINUED)

PERSONNEL ASSIGNED TO FIELD COMMAND POST OR PSD YARD

NAME	ASSIGNED DUTY	HOME PHONE NUMBER
John Ostly	Field Command Post	(818) 566-9883
Pete Erickson	Field Command Post	(714) 629-2802
Bob Merlo	(Alternate)	(818) 843-2940
Pat Hickman	Field Command Post - Customer Contact	(818) 842-5245
Nicki Farrand	Field Command Post - Customer Contact - Alternate	(818) 846-4065

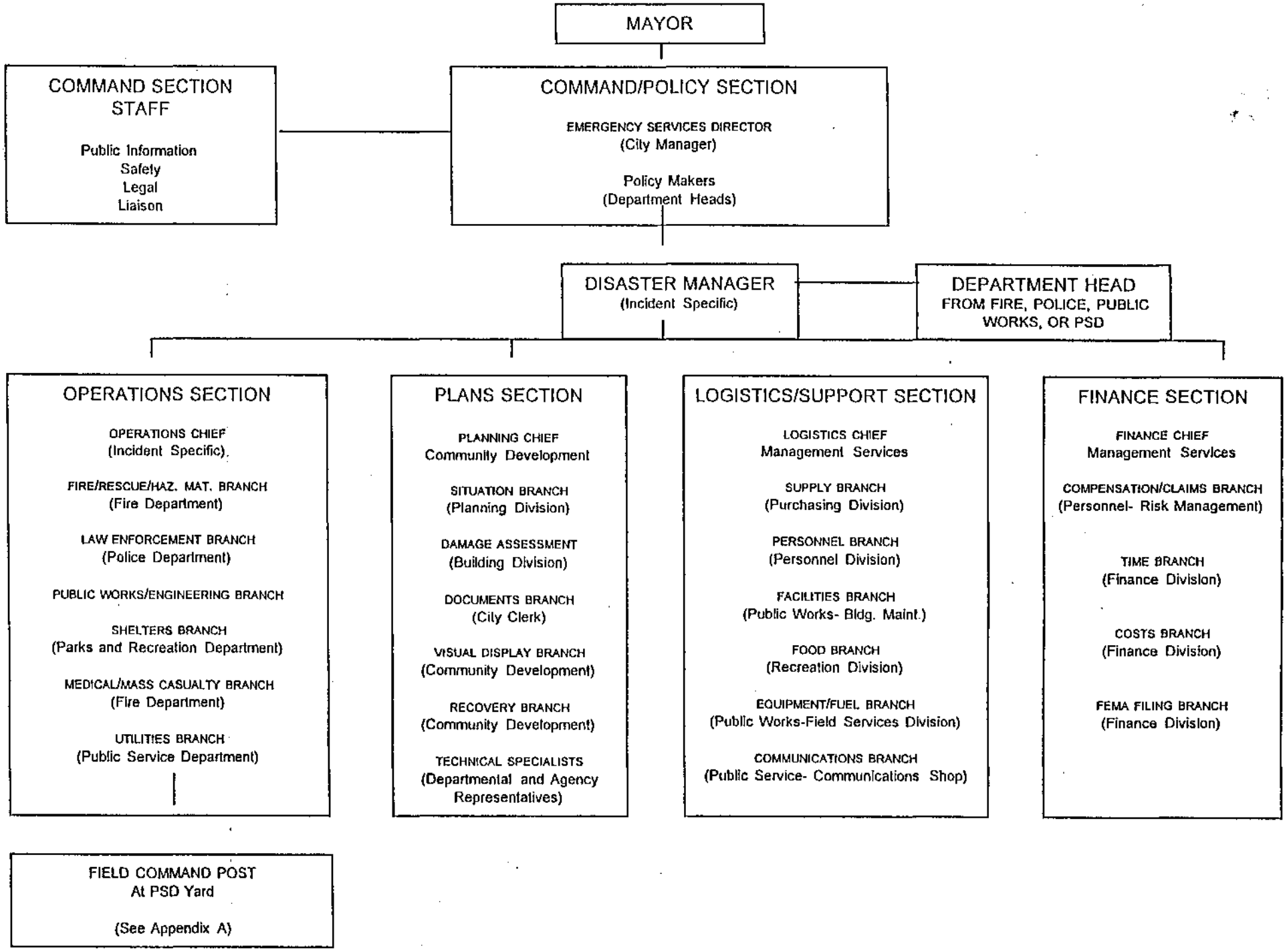
Note: PSD employee's who are not assigned to any specific duty should call the guard as soon as possible to see if they are needed at work.

1. PSD employee's who are called out due to a power outage or water leak may be contacted by PSD's guard.

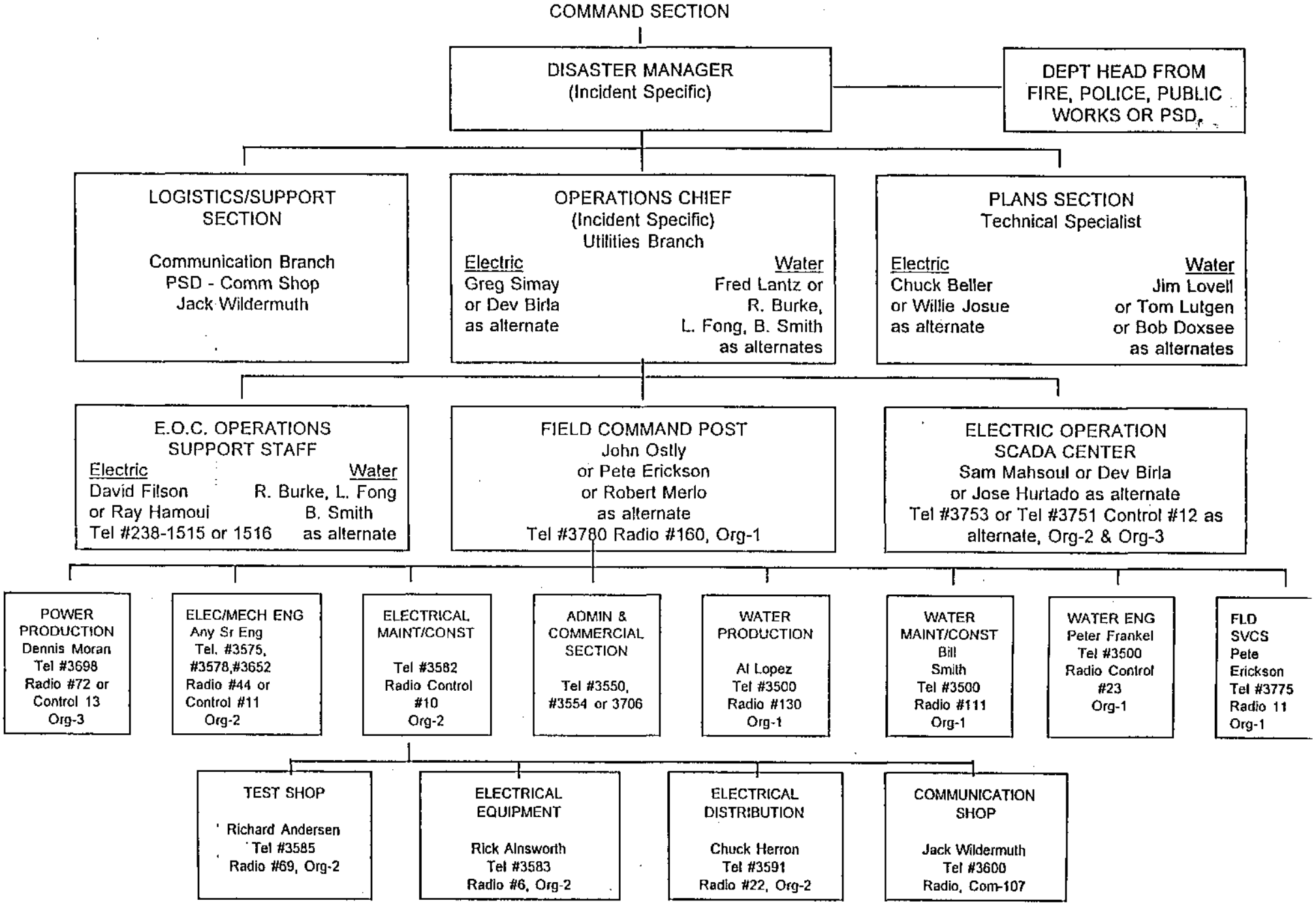
2. If the nature of the disaster is such (e.g. a large earthquake) it may not be possible for the guard to call everyone needed. Each section should develop its own plan for who will respond first in the case of a natural disaster.

APPENDIX B

EMERGENCY OPERATIONS CENTER (EOC)



APPENDIX "A"



PSD - EMERGENCY TABLE OF ORGANIZATION

RECOMMENDED PRIORITY LIST OF CRITICAL CIRCUITS IN THE ORDER FOR ELECTRICAL POWER IN CASE OF A DISASTER

Sr. No.	Description of Facility	Feeder/Station
1.	Power Plant Auxiliaries	Magnolia and Olive Power Plants
2.	E.O.C. and SCADA Center	V-8
3.	PSD Yard	B-1
4.	City Hall, Fire Dept. Headquarter Building and Telephone Co. Customer Station 3027	S-14
5.	Police Building, Central Library and Thompson Memorial Hospital	T-4
6.	Saint Joseph Hospital	N-2, N-10, N-22
7.	Valley Pumping Plant	G-9
8.	KNBC - 3000 W. Alameda	NBC Substation
9.	B.O.U. West Extraction Wells	G-7
10.	KROQ Radio Station	HW-10
11.	Radio Repeater Station near Reservoir #1	T-21
12.	Radio Repeater Station at 3900 W. Alameda	HW-5
13.	PWD Yard at Lake Street	B-2
14.	Red Cross Shelter McCambridge Park Rec. Ctr. (or any other shelters)	M-7
15.	Water Reclamation Plant	B-14
16.	FAA Control Tower	W-10
17.	FAA Radar Tower	C-4
18.	B-G-P Airport (Terminal Bldg.)	GS-11

Sr. No.	Description of Facility	Feeder/Station
19.	B-G-P Airport Runways	W-7
20a.	MWD B-1 Connection Kenneth Road and Tujunga	T-7 (Already covered under Critical Patient feeder 17.w)
20b.	MWD B-2 Connection Keystone and Olive	N-21 (Aready covered under Critical Patient feeder 17.q)
20c.	MWD B-3 Connection Hollywood Way & Olive	A-1
21.	Critical Patient Feeders	See attached list
22.	Well No. 6 Jeffries and Maple St.	V-13 (already covered under Critical Patient feeder 17.ag)
23.	MWD B-5 Connection Gregg and San Fernando Road	—
24.	GAC Facility (only if sufficient MWD water is not available)	B-19
25.	Media City Center (If between 9 a.m. & 9 p.m.)	S-6, S-10
26.	Fourteen most critical Traffic Signals	see attached list
27.	Hughes Market 1100 N. San Fernando Blvd.	M-4
28.	Von's Company 1013 N. San Fernando Blvd.	M-14
29.	Sav-on Drugs 1015 N. San Fernando Blvd.	M-14 (already covered under critical traffic signal list)
30.	Hughes Market 1028 S. San Fernando Blvd.	F-10
31.	Von's Pavilion 1110 W. Alameda Ave.	F-2

Sr. No.	Description of Facility	Feeder/Station
32.	Sav-on Drugs 1011 W. Alameda Ave.	B-3
33.	Lucky Grocery Store 3830 W. Verdugo Ave.	A-96
34.	Sav-on Drugs 511 N. Hollywood Way	A-97 (already covered under critical patient and traffic signal list 17.e)
35.	Von's Company 1820 W. Verdugo Ave.	B-8 (already covered under critical traffic signal list)
36.	Ralph's Market 2500 W. Victory Blvd.	V-9

NOTE: All of these priority circuits can be energized only if enough generation is available, voltage and frequency can be maintained close to normal, and there is no physical damage to electrical equipment in the station and in the field and it is safe to energize.