

Draft Environmental
Impact Report

APPENDIX

E

NOISE TECHNICAL DATA

Roadway Construction Noise Model (RCNM),Version 1.0

Report date: 6/22/2021

Case Description: Rodeo Refinery Demolition

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)			Equipment			
		Daytime	Evening	Night	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Residential	Residential	65	65	45				
Description	Impact	Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	
Excavator	No		40		80.7	1475	10	
Excavator	No		40		80.7	1475	10	
Excavator	No		40		80.7	1475	10	
Excavator	No		40		80.7	1475	10	
Hydra Break Ram	Yes		10	90		1475	10	
Hydra Break Ram	Yes		10	90		1475	10	
Shears (on backhoe)	No		40		96.2	1475	10	
Shears (on backhoe)	No		40		96.2	1475	10	
Man Lift	No		20		74.7	1475	10	
Man Lift	No		20		74.7	1475	10	
Man Lift	No		20		74.7	1475	10	
Man Lift	No		20		74.7	1475	10	
Front End Loader	No		40		79.1	1475	10	
Front End Loader	No		40		79.1	1475	10	

Calculated (dBA)

Equipment	*Lmax	Leq
Excavator	41.3	37.3
Excavator	41.3	37.3
Excavator	41.3	37.3
Excavator	41.3	37.3
Hydra Break Ram	50.6	40.6
Hydra Break Ram	50.6	40.6
Shears (on backhoe)	56.8	52.8
Shears (on backhoe)	56.8	52.8
Man Lift	35.3	28.3
Man Lift	35.3	28.3
Man Lift	35.3	28.3
Man Lift	35.3	28.3
Front End Loader	39.7	35.7
Front End Loader	39.7	35.7
Total	56.8	56.4

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.0

Report date: 6/22/2021

Case Description: Rodeo Refinery Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Residential	Residential	65	65	45

Description	Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16	80.6	80.6	1475	10
Crane	No	16	80.6	80.6	1475	10
Crane	No	16	80.6	80.6	1475	10
Crane	No	16	80.6	80.6	1475	10
Crane	No	16	80.6	80.6	1475	10
Man Lift	No	20	74.7	74.7	1475	10
Man Lift	No	20	74.7	74.7	1475	10
Generator	No	50	80.6	80.6	1475	10
Pumps	No	50	80.9	80.9	1475	10
Impact Pile Driver	Yes	20	101.3	101.3	1475	10

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	41.2	33.2
Crane	41.2	33.2
Crane	41.2	33.2
Crane	41.2	33.2
Crane	41.2	33.2
Man Lift	35.3	28.3
Man Lift	35.3	28.3
Generator	41.2	38.2
Pumps	41.5	38.5
Impact Pile Driver	61.9	54.9
Total	61.9	55.2

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.0

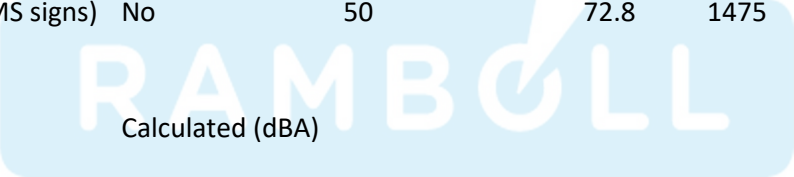
Report date: 6/22/2021

Case Description: Rodeo Nighttime Construction Activities

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Residential	Residential	65	65	45

Description	Impact	Device	Usage(%)	Equipment			Estimated Shielding (dBA)
				Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Forklift	No		40		67	1475	10
Forklift	No		40		67	1475	10
Generator (<25KVA, VMS signs)	No		50		72.8	1475	10
Generator (<25KVA, VMS signs)	No		50		72.8	1475	10
Generator (<25KVA, VMS signs)	No		50		72.8	1475	10
Generator (<25KVA, VMS signs)	No		50		72.8	1475	10
Generator (<25KVA, VMS signs)	No		50		72.8	1475	10
Generator (<25KVA, VMS signs)	No		50		72.8	1475	10



Calculated (dBA)

Equipment	*Lmax	Leq
Forklift	27.6	23.6
Forklift	27.6	23.6
Generator (<25KVA, VMS signs)	33.4	30.4
Generator (<25KVA, VMS signs)	33.4	30.4
Generator (<25KVA, VMS signs)	33.4	30.4
Generator (<25KVA, VMS signs)	33.4	30.4
Generator (<25KVA, VMS signs)	33.4	30.4
Generator (<25KVA, VMS signs)	33.4	30.4
Total	33.4	38.5

*Calculated Lmax is the Loudest value.

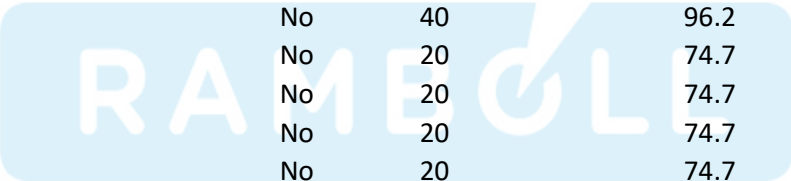
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/15/2021
 Case Description: Carbon Plant Demolition 1512

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Residential	Residential	65	65	45

Description	Impact	Device	Usage(%)	Equipment			Estimated Shielding (dBA)
				Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Excavator	No	No	40		80.7	1512	0
Excavator	No	No	40		80.7	1512	0
Excavator	No	No	40		80.7	1512	0
Excavator	No	No	40		80.7	1512	0
Hydra Break Ram	Yes	Yes	10	90		1512	0
Hydra Break Ram	Yes	Yes	10	90		1512	0
Shears (on backhoe)	No	No	40		96.2	1512	0
Shears (on backhoe)	No	No	40		96.2	1512	0
Man Lift	No	No	20		74.7	1512	0
Man Lift	No	No	20		74.7	1512	0
Man Lift	No	No	20		74.7	1512	0
Man Lift	No	No	20		74.7	1512	0
Front End Loader	No	No	40		79.1	1512	0
Front End Loader	No	No	40		79.1	1512	0



Equipment	Calculated (dBA)	
	*Lmax	Leq
Excavator	51.1	47.1
Excavator	51.1	47.1
Excavator	51.1	47.1
Excavator	51.1	47.1
Hydra Break Ram	60.4	50.4
Hydra Break Ram	60.4	50.4
Shears (on backhoe)	66.6	62.6
Shears (on backhoe)	66.6	62.6
Man Lift	45.1	38.1
Man Lift	45.1	38.1
Man Lift	45.1	38.1
Man Lift	45.1	38.1
Front End Loader	49.5	45.5
Front End Loader	49.5	45.5
Total	66.6	66.2

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/15/2021
 Case Description: Carbon Plant Demolition 3090

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Residential	Residential	65	65	45

Description	Impact	Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
				Spec Lmax (dBA)	Actual Lmax (dBA)		
Excavator	No	No	40		80.7	3090	0
Excavator	No	No	40		80.7	3090	0
Excavator	No	No	40		80.7	3090	0
Excavator	No	No	40		80.7	3090	0
Hydra Break Ram	Yes	Yes	10	90		3090	0
Hydra Break Ram	Yes	Yes	10	90		3090	0
Shears (on backhoe)	No	No	40		96.2	3090	0
Shears (on backhoe)	No	No	40		96.2	3090	0
Man Lift	No	No	20		74.7	3090	0
Man Lift	No	No	20		74.7	3090	0
Man Lift	No	No	20		74.7	3090	0
Man Lift	No	No	20		74.7	3090	0
Front End Loader	No	No	40		79.1	3090	0
Front End Loader	No	No	40		79.1	3090	0

Equipment	Calculated (dBA)	
	*Lmax	Leq
Excavator	44.9	40.9
Excavator	44.9	40.9
Excavator	44.9	40.9
Excavator	44.9	40.9
Hydra Break Ram	54.2	44.2
Hydra Break Ram	54.2	44.2
Shears (on backhoe)	60.4	56.4
Shears (on backhoe)	60.4	56.4
Man Lift	38.9	31.9
Man Lift	38.9	31.9
Man Lift	38.9	31.9
Man Lift	38.9	31.9
Front End Loader	43.3	39.3
Front End Loader	43.3	39.3
Total	60.4	60

*Calculated Lmax is the Loudest value.

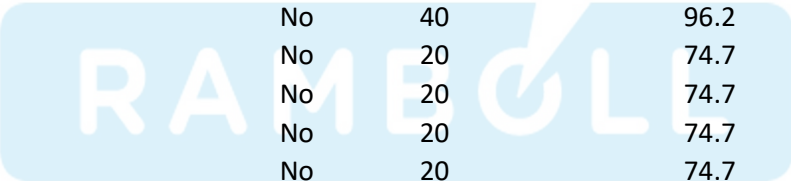
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/15/2021
 Case Description: Santa Maria Refinery

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Residential	Residential	65	65	45

Description	Impact	Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
				Spec Lmax (dBA)	Actual Lmax (dBA)		
Excavator	No	No	40		80.7	2060	0
Excavator	No	No	40		80.7	2060	0
Excavator	No	No	40		80.7	2060	0
Excavator	No	No	40		80.7	2060	0
Hydra Break Ram	Yes	Yes	10	90		2060	0
Hydra Break Ram	Yes	Yes	10	90		2060	0
Shears (on backhoe)	No	No	40		96.2	2060	0
Shears (on backhoe)	No	No	40		96.2	2060	0
Man Lift	No	No	20		74.7	2060	0
Man Lift	No	No	20		74.7	2060	0
Man Lift	No	No	20		74.7	2060	0
Man Lift	No	No	20		74.7	2060	0
Front End Loader	No	No	40		79.1	2060	0
Front End Loader	No	No	40		79.1	2060	0



Equipment	Calculated (dBA)	
	*Lmax	Leq
Excavator	48.4	44.4
Excavator	48.4	44.4
Excavator	48.4	44.4
Excavator	48.4	44.4
Hydra Break Ram	57.7	47.7
Hydra Break Ram	57.7	47.7
Shears (on backhoe)	63.9	59.9
Shears (on backhoe)	63.9	59.9
Man Lift	42.4	35.4
Man Lift	42.4	35.4
Man Lift	42.4	35.4
Man Lift	42.4	35.4
Front End Loader	46.8	42.8
Front End Loader	46.8	42.8
Total	63.9	63.5

*Calculated Lmax is the Loudest value.