Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/28/2019
Case Description: Grubb Lease offshore

**** Receptor #1 (southern residence)****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
South residence	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	850.0	0.0
Crane	No	16		80.6	850.0	0.0
Generator	No	50		80.6	850.0	0.0
Boring Jack Power Unit	No	50		83.0	850.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	53.1	49.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	55.9	48.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	56.0	53.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Boring Jack Power Unit	58.4	55.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	58.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 (northern residence) ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
North residence	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	1450.0	0.0
Crane	No	16		80.6	1450.0	0.0
Generator	No	50		80.6	1450.0	0.0
Boring Jack Power Unit	No	50		83.0	1450.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	48.4	44.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	51.3	43.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	51.4	48.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Boring Jack Power Unit	53.8	50.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	53.8	53.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Caltrans Transportation and Construction Vibration Guidance Manual

Project Name: Grubb Lease Decommissioning

Scenario: Onshore pipe removal

Select Input Values

Source Levels (PPV)	
Vibratory roller	0.210
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
Crack & seat operations	2.4

Damage Criteria (Lv)	
Human: continous, frequent intermittent sources	
Barely perceptible	0.01
Distinctly perceptible	0.04
Strongly perceptible	0.1
Severe	0.4
Structures: continous, frequent intermittent sources	
Fragile buildings	0.1
Historic & some old buildings	0.25
Older residential	0.3
New residential	0.5
Modern comecial & industrial	0.5

Soil Material Values	
Weak, soft, loose soil	1.4
Competent soils	1.3
Hard compacted soils	1.1
Hard competent bedrock	1.0

Project Data

Source Level	0.089
Soil material (n):	1.3
Distance to receptor(feet)	750

Results

PPV at receptor	0.00107