

1 **5.11 NOISE**

2 Noise is defined as unwanted sound. Sound, traveling in the form of waves from a source, exerts a
3 sound pressure level (referred to as sound level) which is measured in decibels (dB), with zero dB
4 corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the
5 threshold of pain. Pressure waves traveling through air exert a force registered by the human ear
6 as sound. Human response to noise is subjective and can vary greatly from person to person.
7 Factors that can influence individual response include intensity, frequency, and time pattern of the
8 noise; the amount of background noise present prior to the intruding noise; and the nature of work
9 or human activity that is exposed to the noise. The adverse effects of noise include interference
10 with concentration, communication, and sleep. At high levels, noise can induce hearing damage.

11 Environmental noise is usually measured in A-weighted decibels (dBA).¹ Environmental noise
12 typically fluctuates over time, and different types of noise descriptors are used to account for this
13 variability. Typical noise descriptors include maximum noise level (L_{max}), the energy-equivalent
14 noise level (L_{eq}), and the day-night average noise level (DNL).² The DNL noise descriptor is
15 commonly used in establishing noise exposure guidelines for specific land uses. Representative
16 noise sources, associated dBA noise levels, and corresponding effects are shown in Figure 5.11-1.

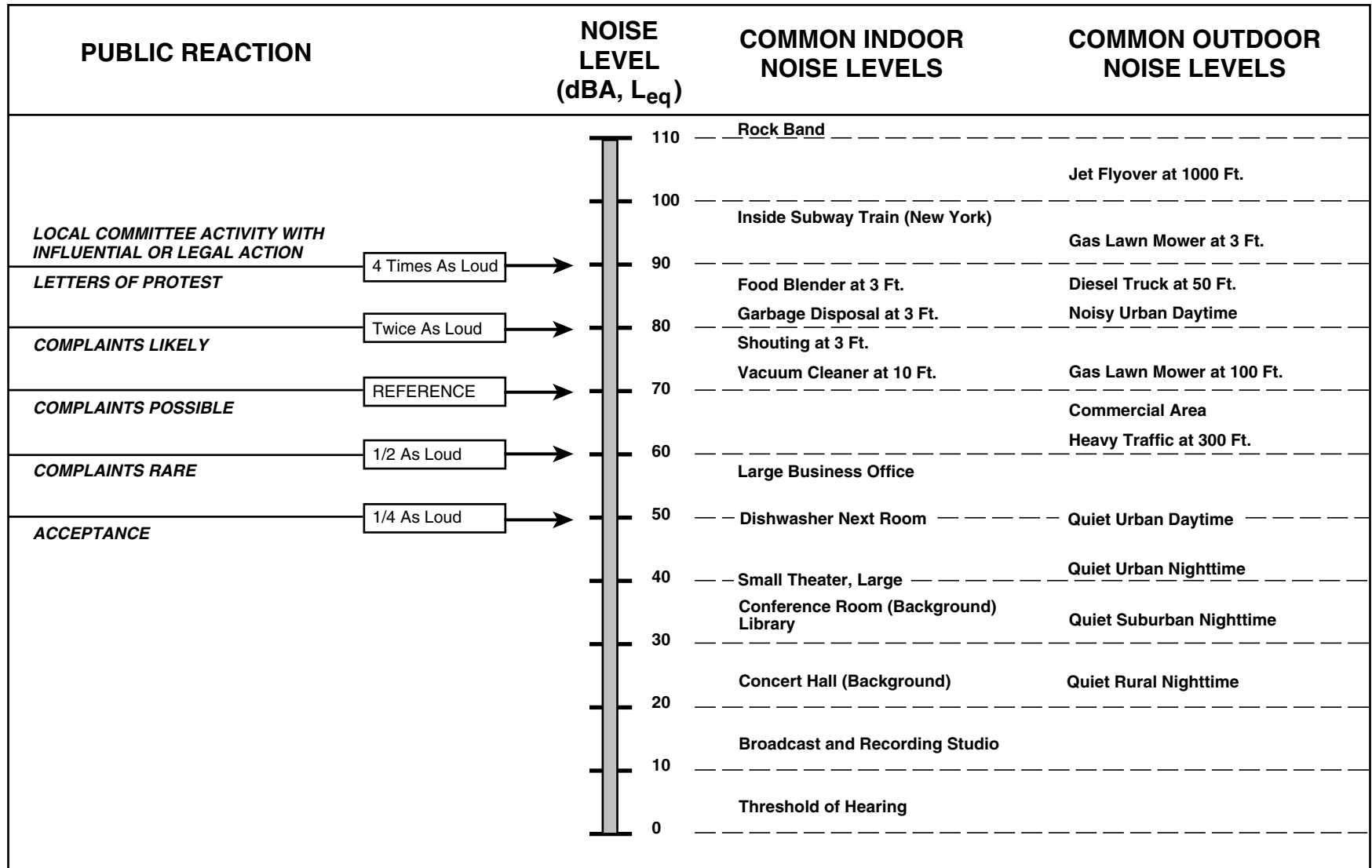
17 Noise levels are measured on a logarithmic scale, instead of a linear scale. On a logarithmic scale,
18 the sum of two noise sources of equal loudness is 3 dBA greater than the noise generated by just
19 one of the noise sources (e.g., a noise source of 60 dBA plus another noise source of 60 dBA
20 generate a composite noise level of 63 dBA). The noise level experienced at a receptor depends on
21 the distance between the source and the receptor, presence or absence of noise barriers and other
22 shielding features, and the amount of noise attenuation (lessening) provided by the intervening
23 terrain. For point or stationary noise sources, such as electric motors, a noise reduction of 6.0 to 7.5
24 dBA is experienced for each doubling of the distance from the source.

25 Transportation sources, such as automobiles, trucks, trains, and aircraft, are the principal sources
26 of noise in the urban environment. Along major transportation corridors, noise levels can reach 80
27 DNL, while along arterial streets, noise levels typically range from 65 to 70 DNL. Industrial and
28 commercial equipment and operations also contribute to the ambient noise environment in their
29 vicinities.

30 Some land uses are considered more sensitive to noise levels than others due to the amount of
31 noise exposure (in terms of both exposure duration and insulation from noise) and the types of
32 activities typically involved. For instance, residential areas, schools, and hospitals generally are
33 more sensitive to noise than are commercial and industrial land uses.

¹ An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels.

² The maximum noise level (L_{max}) refers to the highest instantaneous noise level observed in a given period. L_{eq} , the energy-equivalent noise level (or “average” noise level), is the equivalent steady-state continuous noise level which, in a stated period of time, contains the same acoustic energy as the time-varying sound level that actually occurs during the same period. DNL, the day-night average noise level, is a weighted 24-hour noise level. With the DNL descriptor, average noise levels (in terms of L_{eq}) between 10:00 P.M. and 7:00 A.M. are adjusted upward by 10 dBA to take into account the greater annoyance of nighttime noise as compared to daytime noise. All L_{max} , L_{eq} and DNL values reported herein reflect A-weighted decibels.



Source: ESA 2000a

Figure 5.11-1. Effects of Noise on People

1 **5.11.1 Regulatory Setting**

2 As a general matter, federal and state agencies regulate mobile noise sources, and local agencies
3 regulate stationary noise sources and activities. Federal and state agencies regulate noise from
4 mobile sources by establishing and enforcing noise standards on vehicle manufacturers. Local
5 agencies regulate noise through three principal means: enforcement of local noise ordinances;
6 implementation of noise-related policies contained in the local general plan, such as noise/land
7 use compatibility guidelines; and enforcement of noise-related conditions on permit approvals.

8 **5.11.1.1 Construction-Related Noise Regulations**

9 The construction hour limitations and construction equipment noise standards applicable in the
10 various jurisdictions in which construction activities are proposed are presented in Tables 5.11-1
11 and 5.11-2, which include construction-related noise standards for jurisdictions in the San
12 Francisco Bay Area and the Los Angeles Basin, respectively. The sources for the information
13 compiled in the tables include local noise ordinances, local general plans, and conditions of
14 approval typically imposed by the affected local jurisdictions for building or grading permits.

15 **5.11.1.2 Operations-Related Noise Regulations**

16 Generally, except for the POP sites, the project would not require local permits to which noise-
17 related operational conditions could be attached. The following discussions address relevant noise
18 regulations in the jurisdictions where POPs are proposed in the San Francisco Bay Area and the
19 Los Angeles Basin.

20 **San Francisco Bay Area**

21 After construction, the project would involve operation of stationary noise sources at POP sites in
22 the cities of Oakland, Hayward, Fremont, San Jose, San Mateo, Redwood City, Palo Alto, Mountain
23 View, and Santa Clara. The proposed POPs in Oakland and San Jose would be installed in existing
24 commercial buildings in central business districts and, as such, would not raise any long-term
25 issues related to local noise ordinance standards or general plan policies. The relevant standards
26 and policies for the other jurisdictions are provided below.

27 Hayward. The City of Hayward regulates noise through conditions of approval for local permits.
28 With respect to noise/land use compatibility, the City recognizes 60 DNL as the maximum level of
29 noise normally acceptable for residential uses (City of Hayward 1986).

30 Fremont. The City of Fremont recognizes 60 DNL as the maximum level of noise that is normally
31 acceptable for residential uses (City of Fremont 1991). The City has also established specific
32 noise/land use compatibility standards for new industrial and commercial sources. As measured
33 at any affected residential land use, the exterior noise standard is 50 dBA during the daytime (7:00
34 A.M. to 10:00 P.M.) and 45 dBA at night (10:00 P.M. to 7:00 A.M.) for noise events over a maximum
35 cumulative duration of 30 minutes in an hour or more. For each increment of cumulative periods
36 of 15, 5, 1, and 0 minutes in an hour, the standard is raised by 5 dBA such that the maximum noise
37 level for such events (i.e., 0 minutes in an hour) is 70 dBA during the daytime and 65 dBA during
38 the night.

**Table 5.11-1. Summary of Construction-Related Noise Standards by Jurisdiction,
San Francisco Bay Area Network** (Page 1 of 6)

<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
San Francisco	<ul style="list-style-type: none"> 7:00 a.m. to 8:00 p.m. for buildings or structures, unless special permit issued by Director of Public Works. 	<ul style="list-style-type: none"> Powered Construction Equipment: no more than 80 dBA at 100 feet; Impact Tools and Equipment: equip with intake and exhaust mufflers. Pavement Breakers and Jackhammers: equip with acoustically attenuating shields or shrouds. 	City and County of San Francisco Municipal Code, Police Code, Article 29, Sections 2907 and 2908.
Brisbane	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. 	<ul style="list-style-type: none"> 86 dBA at the property line. 	Brisbane Municipal Code, Ordinance No. 332.
South San Francisco	<ul style="list-style-type: none"> 8:00 a.m. to 8:00 p.m. weekdays; 9:00 a.m. to 8:00 p.m. Saturdays; and 10:00 a.m. to 6:00 p.m. Sundays and holidays. 	None	City of South San Francisco, City Code, Chapter 8.32.
San Bruno	<ul style="list-style-type: none"> 7:00 a.m. to 10:00 p.m. 	<ul style="list-style-type: none"> 85 dBA at 100 feet. 	San Bruno City Code, Title 6, Chapter 6.16, Noise Regulations.
Millbrae	<ul style="list-style-type: none"> 7:30 a.m. to 7:00 p.m. weekdays; and 8:00 a.m. to 6:00 p.m. Saturdays, Sundays, and holidays. 	None	www.ci.millbrae.ca.us/building.html .
Burlingame	<ul style="list-style-type: none"> 8:00 a.m. to 7:00 p.m. Monday through Saturday; and 10:00 a.m. to 6:00 p.m. Sundays and holidays. 	None	City of Burlingame, City Code, Title 10, Section 10.40.037, Powered Equipment.
San Mateo	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. weekdays; 10:00 a.m. to 5:00 p.m. Saturdays; 12:00 p.m. to 4:00 p.m. Sundays; and No construction on holidays. 	None	Acuna, Lucy, Administrative Clerk, City of San Mateo, telephone memorandum, April 11, 2000.
Belmont	<ul style="list-style-type: none"> 8:00 a.m. to 5:00 p.m. weekdays; 10:00 a.m. to 5:00 p.m. Saturdays; and No construction Sundays or holidays. 	None	Leonoudakis, Karen, City of Belmont, phone memorandum, April 10, 2000.

**Table 5.11-1. Summary of Construction-Related Noise Standards by Jurisdiction,
San Francisco Bay Area Network** (Page 2 of 6)

<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
San Carlos	<ul style="list-style-type: none"> 7:00 a.m. to 6:00 p.m. weekdays; and 9:00 a.m. to 5:00 p.m. weekends and holidays. 	None	City Code, Title 9, Chapter 9.30, Noise Control.
Redwood City	<ul style="list-style-type: none"> 8:00 a.m. to 7:00 p.m. weekdays; and No construction weekends or holidays. Posting of construction site notice that identifies the hours and maximum levels allowed for construction under the ordinance. 	<ul style="list-style-type: none"> Individual item of construction equipment used in or near a residential district: no more than 110 dBA at 25 feet. Construction work at any point outside of the construction site property plane: no more than 110 dBA within any part of a residential district. 	City of Redwood City, City Code, Chapter 24, Noise Regulation.
San Mateo County	<ul style="list-style-type: none"> 7:00 a.m. to 6:00 p.m. weekdays; 9:00 a.m. to 5:00, Saturday; and No construction Sundays or holidays. 	<ul style="list-style-type: none"> Property-line standard: no more than 80 dBA. 	San Mateo County Ordinance Code, Title 4, Chapter 4.88 - Noise Control, Section 4.88.360 — Exemptions.
Atherton	<ul style="list-style-type: none"> 8:00 a.m. to 5:00 p.m. weekdays; No construction weekends or holidays. 	None	www.ci.atherton.ca.us/frequentl.html .
Menlo Park	<ul style="list-style-type: none"> 8:00 a.m. to 6:00 p.m. weekdays; No construction weekends or holidays. 	<ul style="list-style-type: none"> Powered construction equipment: no more than 85 dBA at 50 feet. 	Menlo Park, Municipal Code, Title 8, Chapter 8.06, Noise, Section 8.06.040, Exceptions.
Palo Alto	<ul style="list-style-type: none"> 8:00 a.m. to 8:00 p.m. weekdays; 9:00 a.m. to 8:00 p.m. Saturdays; and 10:00 a.m. to 6:00 p.m. Sundays and holidays. Posting of construction site notice that identifies the hours and maximum levels allowed for construction under the ordinance. 	<ul style="list-style-type: none"> Individual equipment: no more than 110 dBA at 25 feet; and Construction site boundary: no more than 110 dBA. 	Palo Alto Municipal Code, Title 9, Chapter 9.10, Section 9.10.060, Special Provisions.
East Palo Alto	<ul style="list-style-type: none"> 7:30 a.m. to 5:30 p.m. weekdays; and No construction weekends except with special authorization from the City. 	None	Bishop, David, Senior Construction Inspector, City of East Palo Alto, telephone memorandum, April 12, 2000.

**Table 5.11-1. Summary of Construction-Related Noise Standards by Jurisdiction,
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<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
Mountain View	<ul style="list-style-type: none"> 7:00 a.m. to 6:00 p.m. weekdays; and No construction weekends or holidays. 	None	von Borck, Jessica, Planner, City of Mountain View, telephone memorandum, February 14, 2000.
Sunnyvale	<ul style="list-style-type: none"> 7:00 a.m. to 6:00 p.m. weekdays; 8:00 a.m. to 5:00 p.m. Saturdays; and No construction on Sundays or holidays. 	None	Sunnyvale Municipal Code, Title 16 – Buildings and Construction; Chapter 16.08; Section 16.08.110 – Hours of Construction – Time and Noise Limitations.
Santa Clara	<ul style="list-style-type: none"> 7:00 a.m. to 6:00 p.m. weekdays; 9:00 a.m. to 6:00 p.m. Saturdays; and No construction on Sundays or holidays. 	None	Santa Clara City Code, Section 18-32.3, Article 2A.
San Jose	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. weekdays; and No construction on weekends or holidays within 500 feet of residential units. 	<ul style="list-style-type: none"> Use available noise suppression devices and properly maintain and muffle loud construction equipment. 	Bills, Michael, Planner, City of San Jose, telephone memorandum, April 10, 2000.
Milpitas	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. every day of week. No holiday construction work. Construction of utility-type service facilities are exempted from the hours limitations. 	None	Milpitas Municipal Code, Chapter 213, Noise Abatement, Section V-231-3.
Fremont	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. weekdays; and 9:00 a.m. to 6:00 p.m. weekends and holidays. 	None	www.ci.fremont.ca.us/citysvcs/development/buildingsafety/constructioncomplaints
Union City	<ul style="list-style-type: none"> 8:00 a.m. to 8:00 p.m. weekdays; 9:00 a.m. to 8:00 p.m. Saturdays; and 10:00 a.m. to 6:00 p.m. Sundays and holidays. 	None	Union City Municipal Code, Section 9.40.053.

**Table 5.11-1. Summary of Construction-Related Noise Standards by Jurisdiction,
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<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
Hayward	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. Monday through Saturday; and 10:00 a.m. to 6:00 p.m. Sunday and holidays. 	None	Hayward City Article 7, Public Nuisances.
San Leandro	None.	None	San Leandro City Code, Title IV, Chapter 1, Article 5.
Oakland	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. weekdays; and 9:00 a.m. to 8:00 p.m. weekends and holidays. 	<p>Weekdays (7:00 a.m. to 7:00 p.m.):</p> <ul style="list-style-type: none"> L_{max} of 80 dBA at residential properties; and L_{max} of 85 dBA at commercial/industrial properties. <p>Weekends (9:00 a.m. to 8:00 p.m.):</p> <ul style="list-style-type: none"> L_{max} of 65 dBA at residential properties; and L_{max} of 70 dBA at commercial/industrial properties. 	Oakland Planning Code, Title 17, Chapter 17.120, Performance Standards.
Newark	<ul style="list-style-type: none"> 8:00 a.m. to 5:00 p.m. weekdays; 7:00 a.m. to 5:00 p.m. weekday and weekend construction hours subject to City approval. 	<p>Maximum Noise Levels Standards at 50 feet:</p> <ul style="list-style-type: none"> 75 dBA for front loader, backhoe, bulldozer, tractor, grader, truck, concrete mixer, concrete pump, crane, derrick, pump, generator, compressor, and jackhammer. 80 dBA for scraper, paver, rock drill, and pneumatic tool; and 90 dBA for pile driver. 	City of Newark, General Plan Update Project 2007, February 1992; Colvin, Clay, City of Newark, telephone memorandum, February 14, 2000.
Alameda County	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. weekdays; and 8:00 a.m. to 5:00 p.m. weekends and holidays. 	None	Alameda County General Ordinance Code, Title 6, Chapter 6.60, Section 6.60.070, Special Provisions or Exceptions.
Dublin	<ul style="list-style-type: none"> 7:00 a.m. to 5:00 p.m. Monday through Friday. 	None	Judy Rector, Office Assistant, city of Dublin, telephone memorandum, April 10, 2000.

**Table 5.11-1. Summary of Construction-Related Noise Standards by Jurisdiction,
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<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
San Ramon	<ul style="list-style-type: none"> 7:30 a.m. to 7:00 p.m. weekdays, excluding holidays; 9:00 a.m. to 6:00 p.m. weekends and holidays. 	None	San Ramon Municipal Code, Division B6, Chapter V, Noise Control.
Danville	<ul style="list-style-type: none"> 7:30 a.m. to 7:00 p.m. weekdays; and 9:00 a.m. to 7:00 p.m. weekends, and holidays. 	None	Danville Municipal Code, Police Regulations, Chapter 4.
Walnut Creek	<ul style="list-style-type: none"> 7:00 a.m. to 6:00 p.m. weekdays, excluding holidays. 	None	Walnut Creek Municipal Code, Title 4, Chapter 6, Article 2.
Berkeley	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. weekdays, excluding holidays; 9:00 a.m. to 8:00 p.m. weekends and holidays. 	<p>Where technically and economically feasible, construction activities must be conducted in such a manner that the maximum noise levels at affected properties will not exceed the following:</p> <p>Weekdays (7:00 a.m. to 7:00 p.m.):</p> <ul style="list-style-type: none"> L_{max} of 75 dBA at single-family residential properties; L_{max} of 80 dBA at multifamily residential properties; and L_{max} of 85 dBA at commercial/industrial properties. <p>Weekends and holidays (9:00 a.m. to 8:00 p.m.):</p> <ul style="list-style-type: none"> L_{max} of 60 dBA at single-family residential properties; L_{max} of 65 dBA at multifamily residential properties; and L_{max} of 70 dBA at commercial/industrial properties. 	City of Berkeley, Municipal Code, Title 13, Chapter 13.40, Section 13.40.070, Prohibited Acts.

**Table 5.11-1. Summary of Construction-Related Noise Standards by Jurisdiction,
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<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
Richmond	<ul style="list-style-type: none"> • 7:00 a.m. to 7:00 p.m. weekdays, excluding holidays; • 9:00 a.m. to 8:00 p.m. weekends and holidays. 	<p>Where technically and economically feasible, construction activities must be conducted in such a manner that the maximum noise levels at affected properties will not exceed the following:</p> <p>Weekdays (7:00 a.m. to 7:00 p.m.):</p> <ul style="list-style-type: none"> • L_{max} of 75 dBA at single-family residential properties; • L_{max} of 80 dBA at multifamily residential properties; and • L_{max} of 85 dBA at commercial/industrial properties. <p>Weekends and holidays (9:00 a.m. to 8:00 p.m.):</p> <ul style="list-style-type: none"> • L_{max} of 60 dBA at single-family residential properties; • L_{max} of 65 dBA at multifamily residential properties; and • L_{max} of 70 dBA at commercial/industrial properties. 	Richmond City Code, Article IX, Health, Chapter 9.52, Community Noise Ordinance.
San Rafael	<ul style="list-style-type: none"> • 7:00 a.m. to 9:00 p.m. any day of the week. 	None	San Rafael Municipal Code, Title 8, Chapter 8.12, Section 8.12.150, Loud or Unusual Noises Prohibited.
Larkspur	<ul style="list-style-type: none"> • 7:00 a.m. to 6:00 p.m. weekdays; and • 9:00 a.m. to 5:00 p.m. weekends and holidays. 	None	City of Larkspur, Municipal Code, Section 9.54.060 E.
Sausalito	<ul style="list-style-type: none"> • 8:00 a.m. to 7:00 p.m. weekdays; • 9:00 a.m. to 5:00 p.m. Saturdays; • No construction on Sundays; and • 9:00 a.m. to 7:00 p.m. holidays. 	None	Sausalito Municipal Code, Section 12.16.140.

Table 5.11-2. Summary of Construction-Related Noise Standards by Jurisdiction, Los Angeles Basin Network

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<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
Burbank	<ul style="list-style-type: none"> Nighttime within a residential zone or within a 500-foot radius of a residential zone. 	None	Burbank Municipal Code, Article 2: Noise Control, Division 2: Special Noise Sources, Section 21-209: Construction in Residential Areas; Exception (Ordinance No. 3058, February 21, 1987).
Pasadena	<ul style="list-style-type: none"> 7:00 a.m. to 9:00 p.m. weekdays and Saturdays within a residential district or within a 500-foot radius of a residential district. 	85 dBA at 100 feet	Pasadena Municipal Code, Title 9: Public Peace, Morals and Welfare, Chapter 9.36: Noise Restrictions 4, Section 9.36.110: Construction Projects and Section 9.36.120: Construction Equipment.
Santa Monica	<ul style="list-style-type: none"> 7:00 a.m. to 8:00 p.m. weekdays. 9:00 a.m. to 8:00 p.m. Saturdays. 	None	City of Santa Monica Municipal Code, Chapter 4.12: Noise, Section 4.12.140: Restrictions on Construction, Maintenance or Repair of Buildings.
Glendale	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. weekdays and Saturdays, within a residential zone or within a 500-foot radius of a residential zone. No construction on Sundays and holidays. 	None	Glendale Municipal Code, Title 8, Chapter 36: Noise Control, Section 8.36.080: Construction on Buildings, Structures and Projects (Ordinance 4973§8, 1991).
Beverly Hills	<ul style="list-style-type: none"> 8:00 a.m. to 6:00 p.m. weekdays and Saturdays. No construction on Sundays and holidays. 	None	Beverly Hills Municipal Code, Section 5-1.206: Restrictions on Construction Activity.

Table 5.11-2. Summary of Construction-Related Noise Standards by Jurisdiction, Los Angeles Basin Network

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<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
West Hollywood	<ul style="list-style-type: none"> • 8:00 a.m. to 7:00 p.m. weekdays; and • No construction on Saturdays (except interior construction), Sundays and City holidays. 	None	City of West Hollywood Municipal Code, Article IV: Public Peace, Chapter III: Noise, Section 4304f: Prohibited Noises – Specific Examples (Construction), September 1995.
Hawthorne	None	None	Mr. Gregg McClain, Planning Assistant, City of Hawthorne Planning Department, telephone/facsimile consultation, January 21, 2000.
Inglewood	<ul style="list-style-type: none"> • 7:00 a.m. to 8:00 p.m. weekdays and Saturdays, within a residential district or within a 500-foot radius of a residential district. 	None	City of Inglewood Municipal Code, Article 2: Noise Regulations, Section 5-41: Construction of Building and Projects, Noise Regulated (Ordinance 88-29, September 13, 1988).
Los Angeles	<ul style="list-style-type: none"> • 7:00 a.m. to 9:00 p.m. weekdays; • 8:00 a.m. to 6:00 p.m. Saturdays and national holidays, within 500 feet of residential properties. • No construction on Sundays. 	None	City of Los Angeles Municipal Code, Chapter IV: Public Welfare, Article 1: Disorderly Conduct Places and Publications, Section 41.40: Noise Due to Construction, Excavation Work – When Prohibited (Ordinance No. 158,587, January 29, 1984).
El Segundo	<ul style="list-style-type: none"> • 7:00 a.m. to 6:00 p.m. weekdays and Saturdays. • No construction on Sundays and federal holidays. 	65 dBA plus 5 dBA at residential property lines; 65 dBA plus 8 dBA at commercial and industrial property lines.	El Segundo Municipal Code, Title 9: Peace, Safety, and Morals, Chapter 9.06: Noise and Vibration Regulations, Section 9.06.080: Exemptions.

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<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
Huntington Park	None	None	Huntington Park Municipal Code, Chapter 11: Nuisances, September 30, 1989.
Downey	<ul style="list-style-type: none"> 7:00 a.m. to 10:00 p.m. every day. 	None	City of Downey Planning Department, telephone consultation, February 17, 2000.
Bellflower	None.	None	City of Bellflower Planning Department, telephone consultation, February 17, 2000.
Lakewood	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. Monday through Saturday; and 9:00 a.m. to 7:00 p.m. Sunday. 	None	City of Lakewood Planning Department, telephone consultation, February 17, 2000.
Long Beach	<ul style="list-style-type: none"> 7:00 a.m. to 7:00 p.m. weekdays and federal holidays. 9:00 a.m. to 6:00 p.m. Saturdays. No construction on Sundays. 	None	City of Long Beach Municipal Code, Chapter 8.80.202, Construction Activity – Noise Regulations.
Norwalk	<ul style="list-style-type: none"> 7:00 a.m. to 6:00 p.m. or sunset, whichever is later, everyday. 	None	City of Norwalk Municipal Code, Public Welfare, Section 5-17.6.2.e, November 1986.
Los Angeles County	<ul style="list-style-type: none"> 6:30 a.m. to 8:00 p.m. Mondays through Saturdays, near the following locations: sleeping quarters in a dwelling, apartment, hotel, mobile home, or other place or residence. No construction on Sundays. 	None	Los Angeles County Code, Title 12: Environmental Protection, Chapter 12.12: Building Construction Noise, Section 12.12.030: Construction Noise Prohibited When (Ordinance 9818§1, 1969).
Cypress	<ul style="list-style-type: none"> 7:00 a.m. to 8:00 p.m. weekdays and Saturdays. No construction on Sundays and federal holidays. 	None	Cypress City Code, Section 13-70.

Table 5.11-2. Summary of Construction-Related Noise Standards by Jurisdiction, Los Angeles Basin Network

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<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
Anaheim	None	None	City of Anaheim Municipal Code, Title 6: Public Health and Safety.
Stanton	<ul style="list-style-type: none"> • 7:00 a.m. to 8:00 p.m. weekdays and Saturdays. • No construction on Sundays and federal holidays. 	None	City of Stanton Municipal Code, Chapter 9.28: Noise Control, Section 9.28.070.
Buena Park	<ul style="list-style-type: none"> • 7:00 a.m. to 8:00 p.m. weekdays and Saturdays. • No construction on Sundays. 	None	City of Buena Park, Ordinance No. 1369, An Ordinance of the City Council of the City of Buena Park Amending Chapter 8.28 of the Buena Park City Code Pertaining to Loud, Disturbing and Unnecessary Noise.
Irvine	<ul style="list-style-type: none"> • 7:00 a.m. to 7:00 p.m. weekdays; • 9:00 a.m. to 6:00 p.m. Saturdays; and • No construction on Sundays and federal holidays unless a temporary waiver is granted by the Chief Building Official. 	None	City of Irvine Code, Chapter 2: Noise, Section 6-8-205a.
Los Alamitos	<ul style="list-style-type: none"> • 7:00 a.m. to 8:00 p.m. weekdays and Saturdays; and • No construction on Sundays and federal holidays. 	None	Los Alamitos Municipal Code, Title 17: Zoning, Chapter 17.40: Noise Control.
Garden Grove	<ul style="list-style-type: none"> • 7:00 a.m. to 8:00 p.m. weekdays and Saturdays. • No construction on Sundays and federal holidays. 	None	Orange County Code, Chapter 6: Noise Control, Section 4-6-7(e).
Westminster	<ul style="list-style-type: none"> • 7:00 a.m. to 8:00 p.m. weekdays and Saturdays. • No construction on Sundays and federal holidays. 	None	City of Westminster Municipal Code, Chapter 8.28: Noise Control, Section 8.28.060, January 1993.
Santa Ana	None	None	City of Santa Ana Noise Element.

Table 5.11-2. Summary of Construction-Related Noise Standards by Jurisdiction, Los Angeles Basin Network

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<i>Jurisdiction</i>	<i>Construction Hours Limitations</i>	<i>Construction Equipment Standards</i>	<i>Reference/Source</i>
Costa Mesa	<ul style="list-style-type: none">• 7:00 a.m. to 8:00 p.m.	None	Costa Mesa Zoning Code, Chapter XIII: Noise Control, Section 13-279(b).
Newport Beach	<ul style="list-style-type: none">• 7:00 a.m. to 6:30 p.m. weekdays.• 8:00 a.m. to 6:00 p.m. Saturdays.• No construction on Sundays and holidays.	None	City of Newport Beach Municipal Code, Chapter 10.28: Loud and Unreasonable Noise, Section 10.28.040: Construction Activity – Noise Regulations.

1 San Mateo. Stationary noise sources in the City of San Mateo are regulated through conditions of
2 approval for local permits. With respect to noise/land use compatibility, the City recognizes 60
3 and 65 DNL as the maximum level of noise that is normally acceptable for residential and parks,
4 respectively (City of San Mateo 1990). The City seeks to minimize noise impacts by protecting
5 residential and park uses from new noise sources that would increase noise by 3 DNL or generate
6 60 DNL or more at the property line, excluding ambient noise levels.

7 Redwood City. With respect to noise/land use compatibility, the City of Redwood City recognizes
8 55, 70, and 75 DNL as the maximum level of noise that is normally acceptable for residential,
9 commercial, and industrial land uses, respectively (City of Redwood City 1990).

10 Palo Alto. The City of Palo Alto's noise ordinance limits noise from stationary equipment (such as
11 heating, ventilation, air conditioning [HVAC] equipment, and generators) to no more than 6 or 8
12 dBA above the local ambient noise level at the property line. The more stringent standard (6 dBA
13 above the ambient level) applies to residential properties and the less stringent standard (8 dBA
14 above the ambient level) applies to commercial and industrial properties. With respect to
15 noise/land use compatibility, the City recognizes 60 DNL as the maximum level of noise that is
16 normally acceptable for residential uses; the corresponding exposure level for commercial and
17 industrial uses is 70 DNL (City of Palo Alto 1998).

18 Mountain View. The City of Mountain View has adopted specific noise ordinance standards for
19 stationary equipment. The standard for such equipment is 55 dBA during the day (7:00 A.M. to
20 10:00 P.M.) and 50 dBA during the night (10:00 P.M. to 7:00 A.M.), and it applies to the nearest
21 residential parcel from the equipment. With respect to noise/land use compatibility, the City
22 recognizes 55, 60, and 70 DNL as the maximum level of noise that is normally acceptable for
23 residential, commercial, and industrial uses, respectively (City of Mountain View 1992).

24 Santa Clara. The City of Santa Clara has a fixed noise source ordinance administered by the
25 Planning Division and the Police Department that limits noise levels based on surrounding land
26 uses. With respect to noise/land use compatibility, the City recognizes 60 dBA as the maximum
27 level of noise normally acceptable in a residential zone.

28 ***Los Angeles Basin Network***

29 The proposed POPs in the Los Angeles Basin all would be located in existing commercial buildings
30 in commercial and industrial areas and, as such, would not raise any long-term operational issues
31 related to local noise ordinances or general plan policies.

32 **5.11.2 Environmental Setting**

33 The following discussions address existing noise sources, noise levels, and sensitive receptors at
34 the various locations where potentially significant construction or operational noise may occur.

35 **5.11.2.1 San Francisco Bay Area Network**

36 ***Cable Routes***

37 Metromedia's proposed San Francisco Bay Area Network Backbone includes new conduit
38 installation within active railroad rights-of-way. Along such areas, relatively high noise events

1 associated with train passbys punctuate a background noise environment influenced largely by
2 more distant traffic sources. Noise levels at 50 feet from the Caltrain tracks are in the 65 to 70 DNL
3 range. Conduit repair or replacement work within the Pacific Bell Structure would occur within
4 public roadway rights-of-way, along which the ambient noise environment varies depending upon
5 traffic volumes, the average vehicle speed, and percentage of heavy trucks in the vehicle mix.

6 Many different types of land uses lie along these rights-of-way, including residences. Likewise,
7 many of the public road rights-of-way, in which conduit repair or replacement work on the Pacific
8 Bell Structure would occur, would also pass through residential areas.

9 **POP Locations**

10 The locations of the proposed POPs are in the cities of Oakland, Hayward, Fremont, San Jose, San
11 Mateo, Redwood City, Palo Alto, Mountain View, and Santa Clara. Two of the proposed POP
12 sites, San Jose and Oakland, are in existing commercial buildings in central business districts
13 where adjacent land uses are less noise-sensitive. At most of the other proposed POP sites, a
14 substantial buffering distance lies between the POP site and the nearest residences. The proposed
15 Fremont, Redwood City, Palo Alto, and Mountain View POP sites are approximately 300, 330, 160,
16 and 350 feet, respectively, from the nearest residences. The proposed Hayward POP site is in the
17 immediate vicinity (as close as 20 feet from the proposed equipment shelter) of residential uses to
18 the north that are located on O'Neil Avenue and Voyager Way. The proposed San Mateo POP site
19 is located a substantial distance from the nearest residential uses (approximately 280 feet) but is
20 within 50 feet of a city park (Trinta Park). The proposed Santa Clara POP site is located
21 approximately 100 feet from the nearest residential use.

22 Oakland. The Oakland POP site is in the central business district. As such, the predominant noise
23 source is traffic on the local street network, including Webster Street, 19th Street, Harrison Street,
24 and 20th Street.

25 Hayward. The ambient noise environment in the vicinity of the Hayward POP site is influenced
26 by distant traffic on Mission Boulevard and stationary noise source associated with utility storage
27 facilities across O'Neil Avenue. At the residences nearest to the proposed POP site, typical
28 daytime background noise levels are in the 50 to 55 dBA range. Nighttime background noise
29 levels are typically 10 dBA less than daytime levels.

30 Fremont. The ambient noise environment in the vicinity of the Fremont POP site is influenced by
31 traffic on Osgood Road and Washington Boulevard. At the residences nearest to the proposed
32 POP (a distance of approximately 300 feet from Osgood Road), typical daytime background noise
33 levels are in the 50 to 55 dBA range. Nighttime background noise levels are typically 10 dBA less
34 than daytime levels.

35 San Jose. The proposed San Jose POP site is in the central business district. As such, the
36 predominant noise source is traffic on the local street network, including South Market Street,
37 West San Fernando Street, San Pedro Street, and Post Street. Noise from aircraft overflights
38 associated with San Jose International Airport occasionally intrudes over the relatively steady
39 background noise environment generated by traffic.

40 San Mateo. The ambient noise environment in the vicinity of the San Mateo POP site is influenced
41 by traffic on State Route 92 and Caltrain passby events. At the residences nearest the proposed

1 POP, typical daytime background noise levels of approximately 60 dBA reflect relatively steady
2 noise from traffic on State Route 92. Nighttime background noise levels are typically 10 dBA less
3 than daytime levels. Caltrain passby events generate maximum noise levels in excess of 75 dBA
4 within 300 feet of the tracks.

5 Redwood City. The ambient noise environment in the vicinity of the Redwood City POP site is
6 influenced by traffic on State Route 84 (Woodside Road), local streets, and Caltrain passby events.
7 At the residences nearest to the proposed POP site, typical daytime background noise levels of 55
8 to 60 dBA reflect relatively steady noise from relatively busy Woodside Road and relatively
9 lightly-traveled Shasta and Manzanita Streets. Nighttime background noise levels are typically 10
10 dBA less than daytime levels. Caltrain passby events generate maximum noise levels in excess of
11 75 dBA within 300 feet of the tracks.

12 Palo Alto. The ambient noise environment in the vicinity of the Palo Alto POP site is influenced by
13 traffic on nearby major arterial streets, Alma Street and Page Mill Expressway, and by Caltrain
14 passby events. At the residences nearest to the proposed POP, typical daytime background noise
15 levels are likely in the 65 to 70 dBA range. Nighttime background noise levels are typically 10 dBA
16 less than daytime levels.

17 Mountain View. The ambient noise environment in the vicinity of the Mountain View POP site is
18 influenced by traffic on nearby major arterial streets, Central Expressway and Shoreline Boulevard,
19 and by Caltrain passby events. At the residences nearest to the proposed POP site, typical daytime
20 background noise levels are likely in the 65 to 70 dBA range. Nighttime background noise levels
21 are typically 10 dBA less than daytime levels.

22 Santa Clara. Ambient noise levels in the vicinity of the Santa Clara POP site is influenced by traffic
23 on nearby arterials, Monroe and Lafayette streets, and by Caltrain passby events. At the residences
24 nearest to the POP site, typical daytime background noise levels in the 65 to 70 dBA range can be
25 expected. Nighttime background noise levels are typically 10 dBA less than daytime levels.

26 **5.11.2.2 Los Angeles Basin Network**

27 New conduit installation associated with the Los Angeles Basin Network would occur within
28 public roadway rights-of-way. The noise environment along the various route segments varies
29 widely depending upon traffic volumes, the average vehicle speed, and percentage of heavy trucks
30 in the vehicle mix. Many types of land uses lie along the proposed rights-of-way, including noise-
31 sensitive uses such as residences.

32 The proposed POP locations are in commercial and industrial districts where the noise
33 environment is influenced by traffic noise and commercial and industrial equipment and activities.