



City of Emeryville

CALIFORNIA

MEMORANDUM

DATE: January 16, 2018

TO: Carolyn Lehr, City Manager

FROM: Charles S. Bryant, Community Development Director

SUBJECT: Update Of City Noise Ordinance

RECOMMENDATION

After hearing a presentation from staff and the consultant, and receiving public testimony, staff recommends that the City Council provide comment and direction regarding the proposed Noise Ordinance update.

BACKGROUND

Noise in Emeryville is regulated by three different, but related sets of provisions: (1) the “Noise Ordinance” in Chapter 13 of Title 5 of the Municipal Code, (2) the “Performance Standards” of the Planning Regulations, in Article 11 of Chapter 5 of Title 9 of the Municipal Code, and (3) the Noise Element of the General Plan.

The Noise Ordinance (see Attachment 1) regulates “annoying or excessive noise that disturbs any reasonable person of normal sensitivity.” It sets general noise standards for all noise in Emeryville, including construction noise; establishes a waiver procedure for evening and weekend construction work; specifies a list of prohibited acts; includes provisions related to leaf blowers, generators, and other loud equipment, and loud parties or gatherings; establishes penalties; and declares that violations are deemed public nuisances. The Noise Ordinance does not establish specific noise limits (i.e. decibel levels) that can be measured.

The Performance Standards (see Attachment 2) include provisions related to air quality, light and glare, liquid or solid waste, noise, odor, and vibration. The noise standards set maximum permitted noise levels in decibels (dBA) for both daytime and nighttime in the RM Medium Density Residential Zone, and in all other zones. These limits may be exceeded by certain amounts for short periods of time. The Performance Standards also stipulate that “when measurements are necessary in the enforcement of these performance standards, they shall be made by competent professionals in the applicable field, in accordance with accepted professional practice.”

The General Plan Noise Element (see Attachment 3) contains an assessment of existing noise sources and levels, including freeways and local roads, railroad, airport, industrial uses, construction, and other equipment, as well as projected noise sources and levels. It includes maps of existing (2005) noise contours and projected future noise

contours. According to these maps, the loudest noise levels (70 dB and above) are adjacent to the freeways and rail line, and major arterial roadways including San Pablo Avenue, Christie Avenue, and 40th, Shellmound, and Powell Streets. The Noise Element also includes a table of acceptable and unacceptable noise levels for various land uses, as well as City goals and policies related to noise.

While these three documents each relate to the regulation of noise, they are used for different purposes. The Noise Ordinance regulates noise generally, including construction noise, and primarily relates to noises that are short-term and transient, such as loud parties and amplified music. Most noise complaints are for violations of the Noise Ordinance. The Performance Standards relate to land uses that are permanent, and which may have associated equipment and activities that produce noise on an on-going basis, such as rooftop heating, ventilation, and air conditioning (HVAC) equipment. The General Plan Noise Element primarily relates to the siting of new uses, to ensure that they are not exposed to unacceptable noise levels. It includes policies that “A noise study and mitigation measures shall be required for all projects that have noise exposure levels greater than ‘normally acceptable’ levels”, and that “Developers shall reduce the noise impacts on new development through appropriate means (e.g. double-paned or soundproof windows, setbacks, berming, and screening). This noise attenuation method should avoid the use of visible sound walls.”

The focus of the current study is on updating the Noise Ordinance. However, modifications to the Noise Ordinance may necessitate companion amendments to the Performance Standards and/or General Plan Noise Element to ensure that they remain consistent.

Since the adoption of the City’s current Noise Ordinance in 2003, much of the City’s industrial areas have been converted to commercial and residential uses. Over the last 14 years, Emeryville’s population has increased by 54 percent, and new residences have been placed near industrial and commercial facilities, which has resulted in a noticeable increase in the number of noise complaints submitted to the Police Department. Because the current Noise Ordinance does not have clear objective noise criteria, law enforcement personnel do not have the ability to determine whether noise exposure levels are in violation of the Noise Ordinance.

To address public concerns regarding noise, the City Council held a study session on February 16, 2016 to consider potential amendments to the Noise Ordinance and provided direction for a noise study. See Attachment 4 for the staff report from the study session. On July 13, 2017, the City Council approved a contract for Environmental Science Associates (ESA) to conduct this noise study.

DISCUSSION

A. *City's Existing Noise Ordinance in Context of Other Cities*

The chart below provides a summary of the City's existing Noise Ordinance and 14 other California jurisdictions in ten key areas:

1. Whether subjective criteria were used to assess violations
2. Whether objective criteria were used to assess violations
3. Whether other factors to consider were specified
4. Restrictions during specific days and/or hours
5. Whether cost recovery was included
6. If specific types of noise were prohibited
7. If exemptions were listed
8. Whether a waiver or permit process was included
9. If animal noise was included
10. If a mandatory warning was necessary prior to issuance of a citation.

	1. Subjective-Normal Sensitivity	2. Objective-Decibels/Distance	3. Factors to Consider	4. Restricted Hours/Days	5. Cost Recovery	6. Specific Types of Noise	7. Exemptions	8. Waiver or Permit	9. Includes Animal Noise	10. Mandatory Warning
Emeryville	•		•	•	•	•	•			
Berkeley	•	•	•	•	•	•	•			•
Cathedral City	•	•	•	•	•	•				
Dublin	•		•							
Folsom		•		•		•				•
Hayward	•	•	•	•	•	•	•			•
Marina	•	•	•	•		•	•	•		
Novato	•		•	•		•			•	
Pleasant Hill	•	•	•	•		•		•		
Richmond	•	•	•	•	•	•	•	•	•	•
Rohnert Park	•	•	•	•	•	•	•	•	•	
Riverside	•	•	•	•		•	•		•	
San Marcos	•	•	•	•		•	•		•	
Santa Maria	•	•	•	•		•	•	•	•	
Santa Monica	•	•	•	•	•	•	•	•	•	
TOTAL/15	14	11	14	14	7	12	13	9	7	4

Noise Limits: Incremental versus Static Limits

Of the comparison ordinances reviewed, cities set noise limits based on one of two models: either 1) a set limit that applies to a particular location or use during daytime and nighttime hours; or 2) a set limit that also allows for increased noise limits above the base limit for a set, short period of time.

For example, in the first category, the cities of Hayward and Rohnert Park established noise limits for various uses and various times.

All measurements dBA	Hayward	Rohnert Park
RESIDENTIAL		
Nighttime (9/10 pm - 7 am)	60 - 70	45 - 55
Daytime (7 am - 9/10 pm)	70**	
COMMERCIAL		
Nighttime & Weekends	70	55
Daytime	70	60
INDUSTRY		
Nighttime	60	70-75
Daytime	70	70-75
CONSTRUCTION		
External - Sunday & Holiday 10 am - 6 pm; Mon - Sat -7 am - 7 pm	86	
Internal - Sunday & Holiday 10 am - 6 pm; Mon - Sat - 7 am - 7 pm	83	

On the other hand, other cities, such as Berkeley, Folsom, and Santa Maria set base limits on noise for residential, commercial and industrial zones; however, those base limits may be exceeded for a set period of minutes, as summarized below:

	30 Min	15 min	5 min	1 min
BERKELEY				
Exterior Residential				
10 pm - 7 am	45-55	50-60	55-65	60-80
7 am - 10 pm	55	60	65	70
Interior Residential				
10 pm - 7 am	45		45	50
7 am - 10 pm	40		40	45

Commercial				
10 pm - 7 am	60	65	70	75
7 am - 10 pm	65	70	75	80

Industry	70	90	90	90
FOLSOM				
EXTERIOR				
10 pm - 7 am	45	50	55	60
7 am - 10 pm	50	55	60	65
INTERIOR				
10 pm - 7 am			35	40
7 am - 10 pm			45	50
SANTA MARIA				
Residential				
Day	55	60	65	70
Night	45	50	55	60
Commercial				
Day	65	70	75	80
Night	60	65	70	75
Industrial				
Day	75	80	85	90
Night	70	75	80	85

As noted above, Emeryville's Performance Standards set maximum daytime and nighttime noise levels in the RM Medium Density Residential Zone (65 dBA and 55 dBA, respectively) and in all other zones (70 dBA and 60 dBA, respectively). They also allow these levels to be exceeded by 5 dBA for up to 15 minutes per hours, by 10 dBA by up to five minutes per hours, and by 15 dBA for up to one minute per hour.

B. City Council Direction for Noise Study

At the February 16, 2016 study session, the City Council provided the following direction regarding update of the Noise Ordinance:

- (1) Objective Criteria: Include object criteria with noise standards measured in decibel levels; and set limits that do not allow for a range of decibels over time.
- (2) Exemptions: Include the following activities as being exempt from the Noise Ordinance:
 - Indoor or outdoor gatherings, shows, sporting and entertainment events provided the events are permitted by the City.
 - Activities conducted on the grounds of any public or private school during regular hours of operation.
 - Events or activities conducted or sponsored by the City
 - Children at play
- (3) Animal Noise: Animal noises are prohibited in a different chapter of the City's municipal code (EMC 6-1.117). The City Council indicated that it wishes animal noise regulations to be consolidated with the Noise Ordinance.
- (4) Mandatory Warning: No mandatory warning prior to issuance of a citation is to be included in the updated ordinance.

C. Noise Study

Attached is a report prepared by ESA entitled City of Emeryville Citywide Noise Ordinance Update: Noise Survey and Options ("ESA Report") dated December 7, 2017 (see Attachment 5).

In summary, this report includes the following:

1. Background and Fundamentals of Acoustics

The ESA Report begins with a section that describes how sound is measured and Figure 1 on Page 3 provides decibel levels (dBA) for common outdoor activities.

2. Noise Survey

The next section of the ESA Report provides a map of the Noise Monitoring Locations. There were 10 long term (LT), unattended sound meters installed. Each LT noise measurement site had one or more corresponding attended short-term (ST) noise measurements. These include:

LT – 1: Watergate Community
LT – 2: Avenue 64 Apartments
LT – 3: Artistry Apartments
LT – 4: Bay Street
LT – 5: North-East portion of the City of Emeryville
LT – 6: Powell Street & Doyle Street
LT – 7: 53rd Street and Boyer Street
LT – 8: 45th Street and Adeline Street
LT – 9: 40th Street & Harlan Street
LT – 10: MacArthur Boulevard & Peralta Street

See Figure 2 on Page 5 of the ESA Report for the map of the above locations. Figure 3 on Page 6 shows pictures of the noise measurement equipment.

Pages 7 to 63 provide baseline noise levels at each of the 10 locations for short term and long-term noise readings.

3. Exterior Noise Standards and Options

Based on the noise survey, the ESA Report provides three options for setting noise standards along with their pros and cons. These options include (1) Standards based on zoning areas, (2) Standards based on increase over Ambient Noise Level, and (3) Source Specific Standards. Each is described below.

(1) Standards based on Zoning Areas

This type of standard is used by the cities of Berkeley and Oakland. This was developed using the existing measured hourly noise levels. Table 22 on Page 65 of the ESA Report provides the minimum, average and maximum measured daytime and nighttime noise levels for each of the following zones:

Medium Density Residential	RM
Medium High Density Residential	RMH
Medium High Density Residential -Watergate	RMH-Watergate
High Density Residential	RH
Mixed Use Residential	MUR
Mixed Use Residential South	MURS
Mixed Use With Non-Residential	MUN
Planned Unit Development	PUD
Office/Technology	O/T
Industrial	I

Table 23 on Page 66 of the ESA Report provides recommended exterior daytime and nighttime noise levels based on the measured noise levels and an explanation is provided for each zone.

ESA separated out a standard for the Watergate community because, even though the area is zoned RMH, it is not exposed to high noise levels from vehicular traffic and rail traffic as compared to the other RMH zones in the City, and therefore experiences a lower ambient noise compared to other RMH zoned areas.

The main advantage of this option is that it provides quantitative standards that vary based on zoning and existing noise levels. Noise sources are allowed to marginally exceed the existing noise level for various increments of time. The main disadvantage is that law enforcement officers would need to be trained in operating a noise meter.

(2) Standards based on increase over Ambient Noise Level

This type of standard is used in the City of San Francisco, where the method creates a standard specific to a given receiving property instead of relying on generalized existing noise levels. So, for example, for noise generated by residential properties, the noise limits would be set 5 dB above the ambient level at any point outside of the property line of a residential use; whereas for industrial and commercial properties the threshold could be a little higher at 8 dB.

The advantage of this methodology is that it provides quantitative standards that are specific to conditions for a given receptor. However, it would be an implementation problem as the existing noise levels with and without the potentially offending source in question would have to be monitored by the enforcement officer. For example, to determine whether a loud party were in violation of the standard, the officer would need to measure the noise of the party, and then have the party shut down briefly so that the ambient noise could be measured, which could prove difficult. Also, ambient noise can vary from day to day depending on atmospheric and other conditions, so the standard would vary over time.

(3) Source Specific Standards

The City of San Francisco also has standards specific to sound amplified equipment. These could be applied in addition to either Option 1 or Option 2. Restrictions may be considered for amplified sound within a certain distance from sensitive receptors such as hospitals, churches and mortuaries and public gatherings.

This works best with option 2 because they both use an increase over ambient standard. However, this would require a programming adjustment to a sound level meter, so it could get complicated for a police officer to implement on-site. Option 3 could be used with Option 1, but it would be more complicated to implement because there would essentially be two different assessment methodologies.

D. Proposed Noise Ordinance Amendments

The ESA Report recommends amendments to the City's Noise Ordinance. The following are the key recommendations:

(1) Exterior Noise Standards. New standards based on the noise readings taken and broken down by Zoning Areas are proposed in this update. The existing Noise Ordinance does not contain measurable noise standards, and the Performance Standards in the Planning Regulations only breaks it down by RM Medium Density Residential and Other Zones.

(2) Interior Noise Standards. The Noise Ordinance currently does not have any interior noise standards. However, these are proposed in the interest of providing a comprehensive ordinance. Many densely built out cities with a large amount of multi-family developments such as Berkeley and San Francisco include such standards, the idea being that shared walls within such uses can lead to noise compatibility problems and complaints. Such standards are included in the Model Community Noise Ordinance developed by the State of California in the 1970s. It should be noted that the Building Code establishes interior noise standards for new building construction for multi-family dwelling units and hotel/motel rooms.

(3) Noise Measurement Procedure. ESA proposes a Noise Measurement Procedure that does not currently exist in the Noise Ordinance.

(4) Animal Noise. As directed by the City Council, ESA proposes including standards for animal noise in the updated Noise Ordinance, taken from Municipal Code Section 6-1.117.

(5) Construction Noise Standards. The existing Noise Ordinance limits construction noise to weekdays from 7:00 a.m. to 6:00 p.m., and pile driving and similarly loud activities to weekdays from 8:00 a.m. to 5:00 p.m., but does not establish measurable noise levels. Many jurisdictions exempt construction noise such as the cities of Sacramento, Riverside and Hayward. ESA has proposed using the external noise standards plus up to a 20 dB increase. The City of Seattle and the City of Santa Monica use a 25 dB increase over their exterior noise standards.

(6) Exemptions. As direct by the City Council, ESA proposes updating the City's Noise Ordinance to exempt the following activities:

- (a) Activities conducted on school grounds such as children at play, bands, and sporting and entertainment events during regular hours of operation.
- (b) Activities conducted on parks and public playgrounds owned, operated, and leased by the City.
- (c) Any mechanical devise, apparatus or equipment related to or connected with emergency activities or emergency work.

- (d) Indoor or outdoor gatherings, shows, sporting and entertainment events provided they are sponsored by the City.

(7) Leaf Blowers, Generators and Other Loud Equipment. ESA proposes updating the Noise Ordinance to include exterior noise standards for leaf blowers, generators and other loud mechanical equipment. Due to the loud nature of leaf blowers, a 20 dB increase above the external noise standards is suggested.

(8) Loud Parties or Gatherings. Per City Council direction, ESA proposes updating the Noise Ordinance to include exterior noise standards for loud parties or gatherings and procedures for law enforcement to follow when responding to noise complaints.

STAFF COMMUNICATION WITH THE PUBLIC

A community meeting on the Noise Ordinance Update was held on August 16, 2017 at ECCL to solicit comments on the issues that need to be considered. A question was raised as to whether one of the goals was to reduce the overall noise level in the City. It was noted that enforcing speed limits was one of the ways to reduce noise. One citizen expressed concern regarding the freeway noise emanating from I-580 and the possibility of constructing a sound wall. Another citizen noted some of the biggest noise makers to be Waste Management trucks, street sweepers, dogs, leaf blowers and ambulances.

The Planning Commission reviewed the Noise Ordinance Update at a study session on December 14, 2017. Four Watergate residents spoke at the meeting. One suggested that the standard for the Medium High Density Residential - Watergate (RMH-Watergate) zone be 50dBA/45dBA instead of 60dBA/55dBA (Daytime/Nighttime) and thought that the hours considered "Daytime" should be 7 am to 9 pm instead of 7 am to 10 pm. Two of the Watergate residents emphasized that the main problem was that the existing Trader Vic's deck allowed for gatherings that continue to be loud; they also stated that the situation at the Watergate complex was unique because the layout creates amplification by water and bouncing of sound. Other issues that were identified as being problematic were noise from leaf blowers, truck idling, racing motorcycles, and sports cars. It was suggested that model ordinances from outside of California and the United States be considered, that limits be put on landscaping equipment such as leaf blowers, and that truck idling time be limited to below the State level of five minutes. An email was also sent to the Commission by Watergate resident Joe Lutz, and is attached to this staff report (see Attachment 6).

A majority of Commissioners agreed with the proposed exterior noise standards based on zoning areas; that interior noise standards should be included; that existing time-based construction hours were appropriate; and that the proposed list of exceptions was appropriate. However, Commissioners expressed concern regarding enforcement of the standards and potential issues with noise meter equipment, including calibration and the ability to obtain accurate measurements. This concern was reinforced when ESA representatives informed the Commission that there were not many cities whose police

departments enforce noise standards with meters. There was also an issue raised regarding transitional areas with the proposed zone-based standards, given the fine-grained nature of Emeryville's zoning map, which would create a situation where neighbors would have different noise standards. Other issues included a suggestion to consider having fixed noise meters for hot spots such as the Watergate community, and the need to find a way to address truck idling.

RECOMMENDED ACTION

After hearing a presentation from staff, the consultant and receiving public testimony, staff requests that the Council give direction regarding the following issues, and any other issues, as appropriate:

- (1) Should the Noise Ordinance include objective, measurable, exterior noise standards? If so, should they be based on zoning districts or on broader areas?
- (2) Should interior noise standards be included in the Noise Ordinance?
- (3) Does the Council agree that the list of proposed exceptions is appropriate?
- (4) Should the Noise Ordinance set measurable standards for construction work (e.g. 20 to 25 dBA above exterior noise levels) in addition to the existing limits on hours (weekdays between 7:00 a.m. and 6:00 p.m.)?
- (5) Should the Noise Ordinance set measurable standards for leaf blowers, generators and other equipment (e.g. 20 to 25 dBA above exterior noise levels) in addition to the existing limits on hours (weekdays between 8:00 a.m. and 5:00 p.m.)?
- (6) Does the Council share the Planning Commission's concerns about the feasibility of enforcement of measurable noise standards?
- (7) Any other comments?

NEXT STEPS

Based on the Council's direction, staff will prepare amendments to the Noise Ordinance, which will be brought back to the Council for first and second reading. Because the Noise Ordinance is not part of the Planning Regulations, no Planning Commission recommendation is required. However, if amendments to the Planning Regulations and/or General Plan are required for consistency, they will be first brought to the Planning Commission for a recommendation and then to the Council for first and second reading.

FISCAL IMPACT

The adoption of measurable noise standards to be enforced by the Police Department will require the purchase of noise meters and the training of officers in their use. These costs are unknown at this time, but are expected to be minimal.

APPROVED AND FORWARDED TO THE CITY COUNCIL OF THE CITY OF EMERYVILLE:



Carolyn Lehr, City Manager

ATTACHMENTS

1. Existing Noise Ordinance (Emeryville Municipal Code Title 5, Chapter 13)
2. Existing Planning Regulations Performance Standards (Emeryville Municipal Code Title 9, Chapter 5, Article 11)
3. Emeryville General Plan Noise Provisions
4. Staff Report from February 16, 2016 City Council Study Session
5. "City of Emeryville Noise Ordinance Update: Citywide Noise Survey and Options prepared by ESA, dated December 7, 2017"
6. Email sent to Planning Commission by Watergate resident Joe Lutz on December 14, 2017