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OAKLAND

2014 JUL 10 PM 12:39

AGENDA REPORT

TO: HENRY L. GARDNER
INTERIM CITY ADMINISTRATOR

FROM: RACHEL FLYNN

SUBJECT: Permanent Regulations for Crematories

DATE: June 19, 2014

City Administrator
Approval

Date

7/8/14

COUNCIL DISTRICT: City-Wide

RECOMMENDATION

Staff recommends that the City Council conduct a Public Hearing, and upon conclusion adopt:

An Ordinance, Recommended by the Planning Commission, and as Directed by City Council under Emergency Ordinance No. 13222 C.M.S., to Amend the Planning Code to Establish Permanent Regulations Pertaining to Crematories within the City of Oakland

EXECUTIVE SUMMARY

Emergency Ordinance No. 13222 C.M.S. (*Attachment A*), adopted by the City Council on April 1, 2014, which requires a Major Conditional Use permit for any new or expanded Crematorium within the City of Oakland, is set to expire September 28, 2014. Staff is bringing forward a proposal, as directed by the City Council under the Emergency Ordinance, to establish a new land use regulations for "crematories." Staff is bringing forth Planning Code Text Amendments as recommended by the Planning Commission to establish regulations that would require approval of a Major Conditional Use permit for any new or expanded crematory which is consistent with that established by the Emergency Ordinance.

Currently crematories are classified as General Manufacturing Industrial Activities¹ pursuant to Section 17.10.570 of the Planning Code. Prior to adoption of the interim ordinances requiring a major Conditional Use permit (as described below), crematories were outright permitted activities within the M-30 General Industrial Zone, M-40 Heavy Industrial Zones, and IG General Industrial Zones. Crematories were also outright permitted within the CIX-1 and CIX-2 Commercial Industrial Zones if located more than 300 feet from a residential zone (but, if

¹ This current classification for crematories is pursuant to recent practice and interpretation. A formal Determination of such classification has been made, which was the subject of appeal and upheld by the Planning Commission in September 2013.

Item: _____
CED Committee
July 22, 2014

located within 300 feet of a residential zone in the CIX-1 and CIX-2 zones, a conditional use permit was required).

The issue of whether it is appropriate to allow crematories as an outright permitted use within zones described above under the use classification of General Manufacturing activities has been raised in the context of potential public exposure to certain types of pollutants and emissions. In addition, traffic and other potential environmental impacts associated with a crematorium use, and the ability of the public and the City to review and consider potential impacts of a crematorium use and the means for the City to address them have been raised.

OUTCOME

Adoption of the recommended text amendments to the Oakland Planning Code would set forth regulations that would not allow any new crematorium to begin operations or expand existing operations without first getting approval of a Major Conditional Use Permit from the Planning Commission.

BACKGROUND/LEGISLATIVE HISTORY

On May 15, 2012 the City Council adopted Emergency Ordinance No. 13115 C.M.S., requiring a Major Conditional Use permit for any new or expanded crematorium activity within the City of Oakland. The Emergency Ordinance was adopted and put into effect immediately for a period of one-year, expiring on May 14, 2013. Prior to expiration of the Emergency Ordinance, a subsequent Emergency Ordinance No. 13158 C.M.S. was adopted by the City Council on May 7, 2013, extending the Major Conditional Use permit requirement for any new or expanded crematorium until November 3, 2013 or until permanent regulations are adopted by the City Council. Emergency Ordinance No. 13158 C.M.S. also gave direction to the Planning Division to proceed with developing permanent regulations for consideration by the City Council upon recommendation by the Planning Commission.

On September 11, 2013 staff brought forth proposed regulations to the Planning Commission to regulate Crematories. At that hearing the Planning Commission chose not to submit a recommendation to City Council and instead asked staff to return with additional background information and additional options for further review.

Since the proposed new regulations weren't able to proceed to the City Council for consideration at that time, the City Council again extended the Emergency Ordinance applying to Crematories, under Emergency Ordinance No. 13196 C.M.S. on October 15, 2013 and Emergency Ordinance No. 13222 C.M.S. on April 1, 2014, which currently is valid until September 28, 2014.

Item: _____
CED Committee
July 22, 2014

On June 18, 2014 Staff returned to the Planning Commission and presented three options of possible recommendations, which are described in detail in the Planning Commission staff report (**Attachment B**). The Planning Commission voted to take pieces from two of the presented options as their recommendation to City Council.

ANALYSIS

The three potential options presented to the Planning Commission Were:

OPTION #1

The first option would have included Crematories as an industrial land use activity type and would have only permitted them upon the granting of a Major Conditional Use permit, but would be prohibited if located within 1,000 feet of any zone that permits residential activities.

OPTION #2

Under this option staff proposed to reintroduce "crematories" into the Extensive Impact Civic Activity category. The 1935 Planning Code included crematories in the same land use group as cemeteries and columbarium, but this was removed with the adoption of the 1965 Planning Code.

OPTION #3

Under this option staff proposed including a definition for "crematorium" under Section 17.09.040 and adding a component to Section 17.102 of the Planning Code, which is the section that contains use-specific standards or criteria, to establish the requirement for a Major Conditional Use permit for any new or expanded crematorium within the City. This section would include additional use-specific permit criteria that would require a health risk assessment be performed in addition to the general use permit criteria already contained within Section 17.134 of the Planning Code. By adding the use as a definition under Section 17.09 of the Planning Code it would be regulated whether it is proposed in conjunction with a Cemetery (Civic Activity), Funeral Home (Commercial Activity), or a stand-alone crematory (Industrial Activity).

The Planning Commission voted to select Option #2 to classify crematories as an Extensive Impact Civic activity type, and also voted to include the specific use permit criteria for crematories from Option #3. Under this proposal the following changes would be made to the Planning Code (additions shown in underline and subtractions show in ~~strikethrough~~):

Item: _____
CED Committee
July 22, 2014

17.10.240 - Extensive impact civic activities.

Extensive Impact Civic Activities include the activities typically performed by, or the maintenance and operation of, the following institutions and installations:

B. Cemeteries, mausoleums, and columbariums, and crematories;

17.103.025 Crematories

A conditional use permit for any conditionally permitted Crematorium under an Extensive Impact Civic Activity may only be granted upon determination that the proposal conforms to the general use permit criteria set forth in the conditional use permit procedure in Chapter 17.134, to any and all applicable use permit criteria set forth in the particular individual zone regulations, and to the following use permit criterion:

- A. Any proposed new or expanded crematorium must submit a Health Risk Assessment that shows that there is no significant health risk to the surrounding community.

PUBLIC OUTREACH/INTEREST

This item did not require any additional public outreach other than the required public notice for the City Council Hearing and Planning Commission Hearing of June 18, 2014, in which a Public Notice was placed in the Oakland Tribune on Saturday May 31, 2014 to meet the minimum 17 day public notice prior to the Planning Commission hearing.

This item has appeared before the Planning Commission on multiple occasions. First the proposed Zoning Text Amendments appeared before the Planning Commission Hearing of August 28, 2013. At that hearing the Commission voted to continue to the item to September 11, 2013 and required staff to provide an additional courtesy notice to all operating crematories within the City of Oakland, which was provided.

At the September 11, 2013 Planning Commission hearing the Commission made no recommendation and requested the item return to Commission with further information.

On June 18, 2014 Staff returned to the Planning Commission with background information that was requested and the Commission provided a recommendation and voted to move the item forward for City Council consideration.

Item: _____
CED Committee
July 22, 2014

COORDINATION

The proposed text changes and this staff report have been reviewed by the City Attorney's Office and the Budget Office.

COST SUMMARY/IMPLICATIONS

The proposed amendments will have no direct fiscal impact on the City. No additional staffing will be necessary to implement these amendments. No additional costs are expected to be incurred.

SUSTAINABLE OPPORTUNITIES

Economic: Staff sees no economic opportunities from the proposed adoption of regulations pertaining to Crematories within the City of Oakland.

Environmental & Social Equity: The adoption of the Ordinance to establish permanent regulations for crematories will allow staff to further analyze the potential impacts from crematories, through a Major Conditional Use permit, which may emit toxic air pollutants and have the potential to impact the health of our neighborhoods, many of which already suffer from highly disproportionate rates of illness related to air pollution in comparison to the rest of Alameda County.

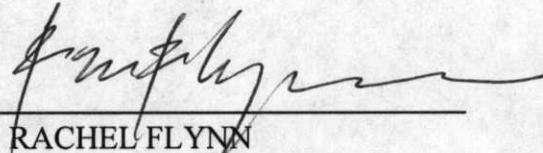
CEQA

The proposal relies on the previously certified Final Environmental Impact Report (EIR) for the Land Use and Transportation Element of the General Plan (1998); the Oakland Estuary Policy Plan EIR (1998); the EIRs for the West Oakland (2003), Central City East (2003), Coliseum (1995), Central District (2011) and Oakland Army Base (2002 & 2012) Redevelopment Areas.

As a separate and independent basis, the proposal is also exempt from CEQA pursuant to CEQA Guidelines Section 15183 "Projects Consistent with a Community Plan, General Plan or Zoning" and Section 15061(b)(3), "General Rule – no possibility of significant environmental impact".

For questions regarding this report, please contact Peterson Vollmann, Planner III at (510) 238-6167.

Respectfully submitted,



RACHEL FLYNN
Director
Department of Planning & Building

Reviewed by:
Scott Miller, Zoning Manager

Prepared by:
Peterson Vollmann, Planner III
Department of Planning & Building
Bureau of Planning

ATTACHMENTS:

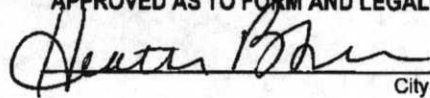
- A. Emergency Ordinance No. 13222 C.M.S.
- B. Planning Commission Staff Report from June 18, 2014

Item: _____
CED Committee
July 22, 2014

REQUIRES 6 VOTES FOR PASSAGE

FILED
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OAKLAND
INTRODUCED BY COUNCILMEMBER
2014 MAR 20 PM 12:52

APPROVED AS TO FORM AND LEGALITY


City Attorney

OAKLAND CITY COUNCIL
ORDINANCE No. 13222 C.M.S.

AN EMERGENCY ORDINANCE PURSUANT TO CHARTER SECTION 213, EXTENDING BY ONE HUNDRED AND EIGHTY (180) DAYS EMERGENCY ORDINANCE NUMBER 13196 C.M.S. REQUIRING A MAJOR CONDITIONAL USE PERMIT TO ESTABLISH A CREMATORIUM WITHIN THE CITY OF OAKLAND, TO TAKE EFFECT IMMEDIATELY UPON INTRODUCTION AND ADOPTION (EXTENDS THE ONE HUNDRED AND EIGHTY (180) DAY EMERGENCY ORDINANCE ADOPTED OCTOBER 15, 2013)

WHEREAS, on May 15, 2012, the City Council adopted Emergency Ordinance Number 13115 C.M.S., to establish interim controls for crematories, requiring a Major Conditional Use permit to establish a crematorium for a period of one year until May 10, 2013 or until permanent regulations are adopted regulating crematoriums; and

WHEREAS, on May 7, 2013, the City Council adopted Emergency Ordinance Number 13158 C.M.S., to extend interim controls for crematories, requiring a Major Conditional Use permit to establish a crematorium for an additional period of one hundred and eighty (180) days until November 3, 2013 or until permanent regulations are adopted regulating crematoriums; and

WHEREAS, on September 11, 2013 staff presented proposed permanent regulations for crematories within the City of Oakland to the Planning Commission, which voted to continue the item to a future date and requested staff provide additional information, thus delaying the item past the expiration date of the existing Emergency Ordinance 13158 C.M.S.; and

WHEREAS, on October 15, 2013, the City Council adopted Emergency Ordinance Number 13196 C.M.S., to extend interim controls for crematories, requiring a Major Conditional Use permit to establish a crematorium for an additional period of one hundred and eighty (180) days until April 13, 2014 or until permanent regulations are adopted regulating crematoriums; and

WHEREAS, currently crematories are classified as General Manufacturing Industrial Activities pursuant to Section 17.10.570 of the Planning Code, and are outright permitted activities within the M-30 General Industrial Zones, M-40 Heavy Industrial Zones, IG General Industrial Zones, D-CE-5 & D-CE-6 Central Estuary Industrial Zones, and the D-GI Gateway Industrial Zone. Crematories are outright permitted within the CIX-1 and CIX-2 Commercial Industrial Zones if outside of 300 feet from a residential zone. No discretionary planning permits or public notice are required prior to issuance of a building permit for a crematorium within these industrial zones. Only if located within 300 feet of a residential zone in the CIX-1 and CIX-2 zones is a conditional use permit required.; and

WHEREAS, the issue of whether it is appropriate to allow crematoria as an outright permitted

ATTACHMENT A

use within industrial zones under the use classification of General Manufacturing activities has been raised in the context of public exposure to certain types of pollutants and emissions and the ability to review those impacts; and

WHEREAS, except as provided in the Interim Controls, the City permits outright, without any discretionary planning review, crematoria under the classification of a General Manufacturing Industrial activity, within the M-30 General Industrial Zone, M-40 Heavy Industrial Zones, and IG General Industrial Zones. Crematoria are outright permitted within the CIX-1 and CIX-2 Commercial Industrial Zones if outside of 300 feet from a residential zone; and

WHEREAS, crematoria emit particulate matter falling under the category of toxic pollutants; and

WHEREAS, on May 15, 2012, the City Council received, and on August 29, 2012 the Planning Commission and City staff received, letters from the Alameda County Public Health Department stating that cremators used within crematories emit a number of criteria air pollutants such as particulate matter, nitrogen compounds, sulfur compounds, carbon monoxide and precursor organic compounds and toxic emissions such as acetaldehyde, arsenic, beryllium, cadmium, hexavalent chromium, copper, formaldehyde, hydrogen chloride, hydrogen fluoride, lead, mercury, nickel, selenium, chlorinated dibenzodioxins and furans, and polycyclic aromatic hydrocarbons/ benzo (a) pyrene equivalents; and

WHEREAS, a cremation center can displace commercial activities and negatively affect the economic revitalization of any community in which a crematorium would locate; and

WHEREAS, a crematorium in any part of Oakland has the potential to impact the health of our neighborhoods, many of which already suffer from highly disproportionate rates of illness related to air pollution in comparison to the rest of Alameda County; and

WHEREAS, staff needs additional time beyond the April 13, 2014 expiration date of the Emergency Ordinance to September 28, 2014 to continue to work with an Air Quality consultant to provide information and expertise responding to the request from the Planning Commission for staff to return to the Planning Commission with additional information relating to the health risks associated with crematories; and

WHEREAS, the provisions of the California Environmental Quality Act (CEQA) have been satisfied and the proposal relies on the following environmental documents to satisfy any requirements under the California Environmental Quality Act (CEQA): the previously certified Final Environmental Impact Report for the Land Use and Transportation Element of the General Plan, adopted in 1998 (General Plan EIR); and

WHEREAS, as a separate and independent basis, the proposal is also exempt from CEQA under several CEQA Guidelines: section 15061(b)(3), known as the "General Rule," that states a project is exempt from CEQA if there is no possibility that the activity in question will have a significant effect on the environment; and

WHEREAS, for the reasons set forth above, pursuant to City Charter section 213, the Council declares that this ordinance is necessary to preserve the public peace, health, welfare or safety and to avoid a direct threat to the health, safety, and welfare of the community, and the "Whereas" clauses above taken together constitute the City Council's statement of the reasons constituting such necessity and emergency; now, therefore

THE COUNCIL OF THE CITY OF OAKLAND DOES ORDAIN AS FOLLOWS:

Section 1. The recitals above are true and correct and are an integral part of this Ordinance.

Section 2. This Ordinance complies with the California Environmental Quality Act.

Section 3. Any new crematorium or expansion of any existing crematorium shall only be permitted upon the granting of a major conditional use permit pursuant to Planning Code Section 17.134.

Section 4. No building, zoning or other permit that has been issued for any building or structure for which rights to proceed with said building or structure have not yet vested pursuant to the provisions of State law shall proceed without complying with this ordinance. Further, no building, zoning or other permit for any building or structure shall be issued by any department, agency, employee or agent of the City of Oakland to allow for any building or structure without complying with the requirements of Section 3 above. No use which has not vested prior to the date of this ordinance shall commence in violation of the provisions of this ordinance.

Section 5. The controls imposed by this ordinance shall remain in place and be effective for a continuous one hundred and eighty (180) days from the effective date of this ordinance, or until the City Council adopts permanent controls for crematories, whichever comes first.

Section 6. The Planning and Zoning Division is directed, over the next one hundred and eighty (180) days, to conduct further studies and develop a draft set of permanent amendments to the Planning Code and/or Municipal Code regarding the subject matter of this ordinance.

Section 7. For the term of this ordinance, as set for the in Section 5 above, the provisions of this ordinance shall govern, and to the extent there is any conflict between the provisions of this ordinance and the provisions of any other City code, ordinance, resolution or policy, all such conflicting provisions shall be suspended.

Section 8. This ordinance shall be effective immediately upon its adoption by the City Council, subject to the provisions of Section 213 of the Charter of the City of Oakland.

Section 9: This Ordinance is enacted pursuant to the City of Oakland's general police powers, Sections 106 and 213 of the Charter of the City of Oakland, and Article XI of the California Constitution.

Section 10. If any provision of this ordinance or the application thereof to any person or circumstances is held invalid, the remainder of this ordinance and the application of such provisions to other persons or circumstances shall not be affected thereby.

IN COUNCIL, OAKLAND, CALIFORNIA, APR 01 2014

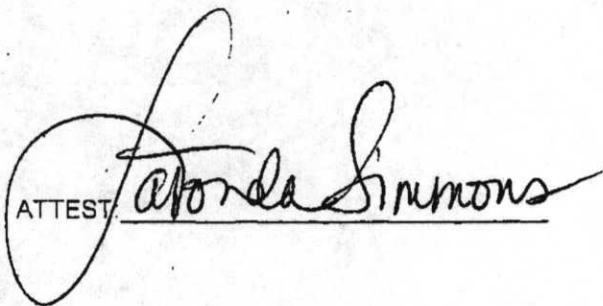
PASSED BY THE FOLLOWING VOTE:

AYES- BROOKS, GALLO, GIBSON MCELHANEY, KALB, KAPLAN, REID, SCHAAF, and PRESIDENT KERNIGHAN - 8

NOES- 0

ABSENT- 0

ABSTENTION- 0

ATTEST 

Introduction Date **APR 01 2014**

LaTonda Simmons
City Clerk and Clerk of the Council
of the City of Oakland, California

DATE OF ATTESTATION: 4-2-14

Location:	Citywide
Proposal:	Discussion of proposed zoning text amendments to introduce a new Activity Classification for and regulations applying to "Crematories"
Applicant:	City Planning Commission
Case File Number:	ZT13-211
Planning Permits Required:	Zoning Text Amendment
General Plan:	All General Plan designations
Zoning:	All Zoning districts
Environmental Determination:	The proposal relies on the previously certified Final Environmental Impact Report (EIR) for the Land Use and Transportation Element of the General Plan (1998); the Oakland Estuary Policy Plan EIR (1998); the EIRs for the West Oakland (2003), Central City East (2003), Coliseum (1995), Central District (2011) and Oakland Army Base (2002 & 2012) Redevelopment Areas. As a separate and independent basis, the proposal is also exempt from CEQA pursuant to CEQA Guidelines Section 15183 "Projects Consistent with a Community Plan, General Plan or Zoning" and Section 15061(b)(3), "General Rule - no possibility of significant environmental impact".
Service Delivery District:	All Service Delivery districts
City Council District:	All City Council districts
Status:	Hearing by the Planning Commission
Action to be Taken:	Recommendation to City Council.
For further information:	Contact: Peterson Z. Vollmann at 238-6167 or email pvollmann@oaklandnet.com .

SUMMARY

Staff is bringing forward a proposal, as directed by the City Council, to establish permanent regulations applying to "crematories". Based primarily on discussions from the Planning Commission hearing in September 2013 as well as various City Council meetings, staff has drafted a few options of potential Planning Code Text Amendments (Attachment A) that would regulate "crematories". Staff requests the review of the various proposals by the Planning Commission and that a recommendation is provided on one of the options for adoption by the City Council.

BACKGROUND

Currently crematories are classified as General Manufacturing Industrial Activities¹ pursuant to Section 17.10.570 of the Planning Code. Prior to adoption of the interim ordinances requiring a major Conditional Use permit (as described below), crematories were outright permitted activities within the M-30 General Industrial Zone, M-40 Heavy Industrial Zones, and IG General Industrial Zones. Crematories were also outright permitted within the CIX-1 and CIX-2 Commercial Industrial Zones if located more than 300 feet from a residential zone (but, if located

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ATTACHMENT B

within 300 feet of a residential zone in the CIX-1 and CIX-2 zones, a conditional use permit was required).

The issue of whether it is appropriate to allow crematories as an outright permitted use within zones described above under the use classification of General Manufacturing activities has been raised in the context of potential public exposure to certain types of pollutants and emissions. In addition, traffic and other potential environmental impacts associated with a crematorium use, and the ability of the public and the City to review and consider potential impacts of a crematorium use and the means for the City to address them have been raised.

On May 15, 2012, the City Council adopted Emergency Ordinance 13115 C.M.S., requiring a Major Conditional Use permit for any new or expanded crematorium activity within the City of Oakland. The Emergency Ordinance was adopted and put into effect immediately for a period of one-year, expiring on May 14, 2013. Prior to expiration of the Emergency Ordinance 13115, a subsequent Emergency Ordinance 13158 C.M.S. was adopted by the City Council on May 7, 2013, extending the Major Conditional Use permit requirement for any new or expanded crematorium until November 3, 2013 or until permanent regulations were adopted by the City Council. Emergency Ordinance 13158 also gave direction to the Planning Division to proceed with developing permanent regulations for consideration by the City Council, upon recommendation by the Planning Commission.

On September 11, 2013 staff brought forth proposed regulations to the Planning Commission to regulate Crematories. At that hearing the Planning Commission chose not to submit a recommendation to City Council and instead asked staff to return with additional background information and additional options for further review.

Given that the item wasn't able to proceed to the City Council for consideration the City Council again extended the Emergency Ordinance applying to Crematories under Emergency Ordinance 13196 on October 15, 2013 and Emergency Ordinance 13222 (Attachment B) on April 1, 2014, which currently is valid until September 28, 2014.

KEY ISSUES

The main issue with regard to crematories is related to the potential health threats from the mercury emissions that are produced from the incineration of a body that may contain dental amalgam fillings partially made up of mercury. Last time this item appeared before the Planning Commission there were concerns about the placement of these facilities in close proximity to residential areas, especially those that already have a high level of health problems within the communities. The issue was also raised that there wasn't enough information regarding the potential health impacts from crematories, and the Commission had asked staff to provide further information.

There have been numerous studies worldwide attempting to determine the real and direct health impacts related to crematories. Unfortunately at this point this is still quite a controversial issue and many of the studies have been inconclusive with regard to exactly what impacts are presented to nearby communities from the operation of crematories. However, while the emissions of cancer causing Toxic Air Contaminants (TAC's) are relatively low for these operations in comparison to other commercial or industrial activities, the potential amount of

mercury vapor emitted can be quite high and is on a comparative level to that of some refineries in the Bay Area.

In this section staff will provide a brief overview on this issue with regard to health impacts related to mercury, health issues in impacted Oakland communities, information on crematorium regulations in other jurisdictions, and location of existing crematoriums in the Bay Area. Attached to this report is additional detailed background information on emissions related to crematorium operations (Attachment C).

Mercury

As previously mentioned the main health issue regarding the operation of crematoriums is the release of mercury in the incineration process. This occurs from the mercury contained within amalgam dental fillings melting during the cremation process and releasing the mercury in a vaporized form. The EPA provides the following statement regarding health impacts from Elemental Mercury Vapor on their website, "*Elemental (metallic) mercury primarily causes health effects when it is breathed as a vapor where it can be absorbed through the lungs. These exposures can occur when elemental mercury is spilled or products that contain elemental mercury break and expose mercury to the air, particularly in warm or poorly-ventilated indoor spaces.* However, most of the focus from the EPA appears to be based upon health impacts from methylmercury, which people are exposed to by consumption of fish.

Based upon information obtained from the Bay Area Air Quality District (BAAQMD) a crematorium is estimated to emit approximately one pound of mercury per 1,000 bodies processed. An estimate is used due to the inability to identify if there are any amalgam fillings present, as it is illegal under California State law to open the contents of a closed casket prior to cremation. The crematorium at the Evergreen Cemetery on Camden Street processed 4,221 bodies in the last reporting year and emitted an estimated 4.2 pounds of mercury and the crematorium at the Chapel of the Chimes processed 529 bodies and emitted an estimated 0.55 pounds of mercury. For reference, the Chevron Refinery in Richmond emits an estimated 2.98 pounds of mercury per year, the Tesoro refinery in Martinez emits an estimated 2.19 pounds of mercury per year, and the Shell refinery in Martinez emits an estimated 8.31 pounds of mercury per year. However, there are other refineries that emit much larger quantities of mercury, with the two Phillips 66 plants in Rodeo emitting an estimated 230 pounds per year combined and the Valero plant in Benicia emitting an estimated 27 pounds of mercury per year. However, while there may be similar amounts of mercury emissions, the main health issues regarding refineries are the health issues caused with asthma and cancer risk, which are not as much of an issue only from mercury vapor emissions.

While it is clear that mercury vapor is being emitted from the operation of crematoriums, it is still inconclusive what, if any, direct health impacts are related to this. As mentioned, there have been numerous studies worldwide looking at this very issue and are still ongoing. The EPA also largely focuses on the impacts on Mercury vapor within enclosed spaces and at the moment doesn't appear to regulate crematoriums. BAAQMD does regulate crematoriums, and recent examples of processing permits to operate include the proposed crematorium at 9850 Kitty Lane, which was cleared in the Health Risk Screening for the project. However, the concern has been that BAAQMD doesn't perform a cumulative analysis and only performs a project level analysis. So while the project level analysis cleared the activity at the site, a cumulative analysis wasn't performed, as described below.

A cumulative screening analysis looks at not just the activity itself, but other activities within the vicinity to determine the cumulative impacts from all of those stationary and source emissions. An example of a "stationary" emission would be a crematorium, while a "source" emission would be something such as a freeway. The cumulative analysis places a 1,000 foot boundary around the project site and adds up all other emission sources (in the form of calculated cancer risk and non-cancer hazard index numbers) within the radius. If the screening analysis shows cancer risk exceeds 10 in a million at the project level or exceeds a hazard index of 1.0 then there may be a potential impact, or under the cumulative analysis the cancer risk exceeds 100 in a million or the hazard index exceeds 10.0. However, this analysis is performed to determine if there is a risk to sensitive receptors within 1,000 feet of the project site since evidence shows that TAC's are dispersed within such a distance. "Sensitive receptors" include residential uses, schools, parks, daycare centers, nursing homes, and medical centers. Therefore, if no sensitive receptors are present within 1,000 feet there would not be any potential significant impact. In the case of 9850 Kitty Lane, the nearest sensitive receptors were the residential area over 1,200 feet away from the site and a school (Community Light House Charter School) which was over 2,700 feet away from the site.

For reference, staff has included a map (Attachment D) of the City that identifies stationary and source TAC emissions and the locations of all the existing and the proposed location of crematoriums in the City.

Health Issues in Oakland

Staff has received public correspondence from the Alameda County Department of Public Health that outlines the high rates of health issues in Oakland, particularly in areas closest to industrial zones and particularly in East Oakland. The major issues that they have identified in East Oakland are increased rates of hospitalization at more than one and a half times the average rate for Alameda County for health issues related to asthma, stroke, and congestive heart failure.

Crematoriums in the Bay Area

Based upon information provided by BAAQMD, the Bay Area has approximately 44 operating crematoriums in the region that processed approximately 30,638 bodies last reporting year. At present there are three crematoriums operating within the Oakland city limits. Two are located on Piedmont Avenue adjacent to each other (Mountain View Cemetery & Chapel of The Chimes) and one is located on Camden Avenue (Evergreen Cemetery). Of the 30,683 bodies processed by crematoriums in the Bay Area, the three Oakland crematoriums processed 4,828 of those bodies in the last reporting year or 16% of the total of the region, with Evergreen Cemetery processing the most in the region at 4,221 bodies.

Crematorium Regulations in Other Cities

As part of this zoning update process there has been a lot of concern about how crematories are classified in terms of the use classification as well as how they are regulated. Similar to the City of Oakland determination that classifies a stand-alone crematorium as an industrial activity, other cities also classify such activity as an industrial activity or only permit the activity within industrial zones. Many cities also classify the use within a similar category as cemeteries or at least allow them as a continued accessory use to a cemetery. For reference staff has included a list of how other cities classify and regulate crematories which are as follows:

Crematorium Regulations in Other Jurisdictions			
City	Use Classification	Where Allowed	Other Regulations
San Jose	General Service - Crematory	Permitted with a CUP only in Light & Heavy Industrial Zones	Prohibited if within 500 feet of a residence, school, or day care center
San Francisco	Classified as an Industrial Activity through an interpretation – “incinerators”	Permitted only with a Conditional Use permit in the M-2 Industrial Zone	
Berkeley	Miscellaneous – Crematories	Requires a Public Hearing Use Permit in the C-W Zone (West Berkeley Commercial Zone) only	
Sacramento	Commercial & Institutional Uses – Mortuary & Crematory	Permitted in some commercial Zones if 50% of the building is dedicated to office or residential uses	
Los Angeles	Crematory (also included as accessory use in the definition of cemetery)	Permitted in the M-2 Light Industrial Zone & M-3 Heavy Industrial Zone – requires a Conditional Use in all other zones.	
Long Beach	Institutional – Crematorium	Allowed as an accessory use only to a mortuary in the Community and Regional Commercial Zones	
Richmond	<u>Two Classifications</u> Business & Personal Service – Funeral & Interment Service Cemetery	Permitted in the CRR Zone (Community & Regional Recreation District) under the Cemetery classification	
Walnut Creek	Funeral & Internment Service	Crematories as a subcategory are not permitted	
Albany	Funeral & Internment Service	Require a Use Permit in the CMX- Commercial mixed Use Zone & the SPC – San Pablo Commercial Zone	
El Cerrito	<u>Two Classifications</u> Cemetery Funeral Parlor & Mortuary	Funeral Parlors & Mortuaries require a CUP in the CC-Community Commercial & TOM – Transit Oriented Mixed Use Zones Cemeteries require a CUP in the Public & Semi-public Zone and the Parks &	Cemeteries are permitted activities in the Public & Semi-public Zone and the Parks & Recreation Zone if they were in existence in 1977.

		Recreation Zone	
Hayward	Mortuary	Requires an Administrative Use Permit in the CG-General Commercial Zone and the CC-C-Central City Commercial Zone	Crematories are permitted to continue to operate as part of a cemetery that existed since 1959, but any new cemetery is prohibited within Hayward
San Leandro	Crematoriums are prohibited within the City of San Leandro	Prohibited in all zones	

PROPOSALS

Following are three options for the Planning Commission to consider.

OPTION #1

Under this option staff proposes adding the following to Section 17.10 of the Oakland Planning Code to establish a separate and distinct activity type for crematories:

Section 17.10.588 – Crematorium

An activity that involves cremation of human remains through incineration.

At the recommendation of Bay Area Air Quality Management District (BAQQMD), staff has proposed to exclude the cremation of animals from the activity type since the major concern of health impacts with crematoria is heavily related to the presence of mercury fillings in teeth, which are not likely to be present in animals.

Under this option staff proposes to only allow a crematorium upon the granting of a Major Conditional Use permit within the following industrial zones and only if also located more than 1,000 feet from any zone that permits or conditionally permits permanent residential activities (See Attachment A for specific text amendments):

- M-20, Light Industrial Zone
- M-30, General Industrial Zone
- M-40, Heavy Industrial Zone
- CIX-1, Commercial Industrial Mix 1 Zone
- CIX-2, Commercial Industrial Mix 2 Zone
- IG, General Industrial Zone
- D-CE-5, Central Estuary District Industrial Zone-5
- D-CE-6, Central Estuary District Industrial Zone-6

Following are the general Conditional Use permit findings that would need to be made for any new or expanded crematorium:

SECTION 17.134.050 –CONDITIONAL USE PERMIT FINDINGS:

1. That the location, size, design, and operating characteristics of the proposed development will be compatible with, and will not adversely affect, the livability or appropriate development of

abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage, and density; to the availability of civic facilities and utilities; to harmful effect, if any upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development.

2. That the location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping, or civic environment, and will be as attractive as the nature of the use and its location and setting warrant.
3. That the proposed development will enhance the successful operation of the surrounding area in its basic community functions, or will provide an essential service to the community or region.
4. That the proposal conforms to all applicable design review criteria set forth in the DESIGN REVIEW PROCEDURE of Chapter 17.136 of the Oakland Planning Code.
5. That the proposal conforms in all significant respects with the Oakland General Plan and with any other applicable plan or development control map which has been adopted by the City Council.

Staff believes that these modifications to the Planning Code would address the concerns that prompted the establishment of the Emergency Ordinances pertaining to crematories within the City of Oakland by prohibiting such uses within close proximity (1000 feet) to areas that contain or allow permanent residential activities as well as providing notice and a public process through the Major Conditional Use permit procedure whenever such facility is proposed, even if further than 1,000 feet from zones that contain permanent residential activities. However, at the Planning Commission hearing on September 11, 2013 the concern was raised that this could prohibit expansion of existing crematories within the City limits as they are all located within residential zones. In addition, the concern was raised that under this proposal the only locations where these uses would potentially be permitted would be within industrial zones, which are all currently located within the flatlands where there are the greatest concerns with air quality related health issues. See Attachment E for Map of locations where a CUP could be applied for within the City under this "Option #1" proposal.

OPTION #2

Under this option staff proposes to reintroduce "crematories" into the Extensive Impact Civic Activity category. The 1935 Planning Code included crematories in the group of cemeteries and columbarium, but this was removed with the adoption of the 1965 Planning Code. Under this option Planning Code Section 17.10.240(B) would be amended as follows:

17.10.240 - Extensive impact civic activities.

Extensive Impact Civic Activities include the activities typically performed by, or the maintenance and operation of, the following institutions and installations:

B. Cemeteries, mausoleums, ~~and~~ columbariums, and crematories;

This would be less restrictive than option #1 by allowing expansion of existing crematories, and would expand the areas that could support crematories beyond the industrial areas in the flatlands. It would be less restrictive because it could allow crematories anywhere within the City upon the granting of a Conditional Use Permit with certain conditions added upon the permit. This could arise as an issue in the

future within residential areas, particularly those within the flatland residential areas of East and West Oakland. This option broadens the areas of the City that could (through a discretionary permit) allow crematories.

While this Major Conditional Use permit process would trigger CEQA review since it would be a discretionary permit, there is nothing to say that the proposal wouldn't be exempt from CEQA. The main CEQA threshold that would be under review for a crematorium would be the Air Quality thresholds, which in the past under BAAQMD applications have not been an issue at the project level. At the cumulative level, they may be even more likely to pass the CEQA threshold in some residential areas due to the lack of other source emissions within the 1,000 foot vicinity that is analyzed as part of the cumulative review.

OPTION #3

Under this option staff proposes including a definition for "crematorium" under Section 17.09.040 and adding a component to Section 17.102 of the Planning Code, which is the section that contains use-specific standards or criteria, to establish the requirement for a Major Conditional Use permit for any new or expanded crematorium within the City. This section would include additional use-specific permit criteria that would require a health risk assessment be performed in addition to the general use permit criteria already contained within Section 17.134 of the Planning Code. By adding the use as a definition under Section 17.09 of the Planning Code it would be regulated whether it is proposed in conjunction with a Cemetery (Civic Activity), Funeral Home (Commercial Activity), or a stand-alone crematory (Industrial Activity).

This approach would address the issue of being too restrictive and not allowing any expansion of existing crematories within the City, as any existing crematory within the City could be permitted upon the granting of a Major Conditional use permit based upon meeting the required criteria. This would also seem to address the concern that these activities could only be located within the flatland areas of East and West Oakland such as Option #1 because of the prohibition on such uses in any area other than industrial zones. This option would also address the concern that a crematory would be able to be established as a stand-alone activity in a residential zone as could be the case under Option #2.

ENVIRONMENTAL DETERMINATION

The proposal to establish regulations for crematories relies on the previously certified Final Environmental Impact Report (EIR) for the Land Use and Transportation Element of the General Plan (1998); the Oakland Estuary Policy Plan EIR (1998); the EIRs for the West Oakland (2003), Central City East (2003), Coliseum (1995), Central District (2011) and Oakland Army Base (2002 & 2012) Redevelopment Areas.

As a separate and independent basis, the proposal to establish regulations for crematories is also exempt from CEQA pursuant to CEQA Guidelines Section 15183 "Projects Consistent with a Community Plan, General Plan or Zoning" and Section 15061(b)(3), "General Rule - no possibility of significant environmental impact".

RECOMMENDATIONS

1. Affirm staff's environmental determination;
2. Recommend to the City Council proposed text amendments regarding Crematories. The Planning Commission should recommend specific regulations, such as one of the aforementioned options, a combination of options, or an alternate recommendation.


Prepared by:



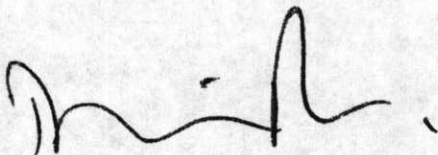
Peterson Z. Vollmann
Planner III

Approved by:

Approved for forwarding to the
City Planning Commission:



SCOTT MILLER
Zoning Manager
Bureau of Planning



DARIN RANELETTI
Deputy Director
Bureau of Planning

ATTACHMENTS:

- A. Potential Zoning Text Amendments (Options 1-3)
- B. Emergency Ordinance 13222
- C. "Background Information on Crematorium Emissions" by ESA
- D. Map Showing Locations of TAC Emissions
- E. Map Showing Option #1 CUP Locations
- F. Alameda County Department of Public Health Correspondence

**ATTACHMENT A:
PROPOSED CHANGES TO THE PLANNING CODE**

Items that are underlined are insertions, while items that appear in ~~strikeout~~ are deletions.

OPTION #1

Change #1

17.10.030 - Listing of activity classifications.

All activities are classified into the following activity types, which are described in Article II of this chapter. (See Section 17.10.050 for classification of combinations of activities resembling different types.) The names of these activity types start with capital letters throughout the zoning regulations.

D. Industrial Activities:

Custom Manufacturing

Light Manufacturing

General Manufacturing

Heavy/High Impact Manufacturing

Research and Development

Construction Operations

Warehousing, Storage and Distribution

Regional Freight Transportation

Trucking and Truck-Related

Recycling and Waste-Related

Hazardous Materials Production, Storage and Waste Management

Crematorium

Change #2

Part 4 - Industrial Activity Types

17.10.540 - General description of industrial activities.

- 17.10.550 - Custom manufacturing industrial activities.
- 17.10.560 - Light manufacturing industrial activities.
- 17.10.570 - General manufacturing industrial activities.
- 17.10.580 - Heavy/high impact manufacturing industrial activities.
- 17.10.581 - Research and development industrial activities.
- 17.10.582 - Construction operations industrial activities.
- 17.10.583 - Warehousing, storage, and distribution industrial activities.
- 17.10.584 - Regional freight transportation industrial activities.
- 17.10.585 - Trucking and truck-related industrial activities.
- 17.10.586 - Recycling and waste-related industrial activities.
- 17.10.587 - Hazardous materials production, storage, and waste management industrial activities.
- 17.10.588 - Crematorium

Change #3

17.10.588 - Crematorium.

An activity that involves cremation of human remains through incineration.

Change #4

17.33.030 - Permitted and conditionally permitted activities.

Table 17.33.01 lists the permitted, conditionally permitted, and prohibited activities in the CN zones. The descriptions of these activities are contained in Chapter 17.10. Section 17.10.040 contains permitted accessory activities.

"P" designates permitted activities in the corresponding zone.

"C" designates activities that are permitted only upon the granting of a Conditional Use Permit (CUP) in the corresponding zone (see Chapter 17.134 for the CUP procedure).

"L" designates activities subject to certain limitations or notes listed at the bottom of the table.

"—" designates activities that are prohibited except as accessory activities according to the regulations contained in Section 17.010.040.

Table 17.33.01: Permitted and Conditionally Permitted Activities

Activities	Zones				Additional Regulations
	CN-1	CN-2	CN-3	CN-4	
Industrial Activities					
Custom Manufacturing	C(L4)(L12)	C(L4)(L12)	C(L12)	C	
Light Manufacturing	—	—	—	—	
General Manufacturing	—	—	—	—	
Heavy/High Impact	—	—	—	—	
Research and Development	—	—	—	—	
Construction Operations	—	—	—	—	
Warehousing, Storage, and Distribution					
A. General Warehousing, Storage and Distribution	—	—	—	—	
B. General Outdoor Storage	—	—	—	—	
C. Self- or Mini-Storage	—	—	—	—	
D. Container Storage	—	—	—	—	
E. Salvage/Junk Yards	—	—	—	—	
Regional Freight Transportation	—	—	—	—	
Trucking and Truck-Related	—	—	—	—	
Recycling and Waste-Related					
A. Satellite Recycling Collection Centers	—	—	—	—	
B. Primary Recycling Collection Centers	—	—	—	—	
Hazardous Materials Production, Storage, and Waste Management	—	—	—	—	
Crematorium	—	—	—	—	

Change #5

17.35.030 - Permitted and conditionally permitted activities.

Table 17.35.01 lists the permitted, conditionally permitted, and prohibited activities in the CC zones. The descriptions of these activities are contained in Chapter 17.10. Section 17.10.040 contains permitted accessory activities.

"P" designates permitted activities in the corresponding zone.

"C" designates activities that are permitted only upon the granting of a Conditional Use Permit (CUP) in the corresponding zone (see Chapter 17.134 for the CUP procedure).

"L" designates activities subject to certain limitations or notes listed at the bottom of the table.

"—" designates activities that are prohibited except as accessory activities according to the regulations contained in Section 17.010.040.

Table 17.35.01: Permitted and Conditionally Permitted Activities

Activities	Zones			Additional Regulations
	CC-1	CC-2	CC-3	
Industrial Activities				
Custom Manufacturing	C	C	P	
Light Manufacturing	—	C	P(L10)	
General Manufacturing	—	—	—	
Heavy/High Impact	—	—	—	
Research and Development	—	—	—	
Construction Operations	—	—	—	
Warehousing, Storage, and Distribution				
A. General Warehousing, Storage and Distribution	—	—	P	
B. General Outdoor Storage	—	—	—	
C. Self-or Mini Storage	—	—	—	
D. Container Storage	—	—	—	
E. Salvage/Junk Yards	—	—	—	
Regional Freight Transportation	—	—	—	
Trucking and Truck-Related	—	—	—	
Recycling and Waste-Related				
A. Satellite Recycling Collection Centers	—	—	—	
B. Primary Recycling Collection Centers	—	—	—	
Hazardous Materials Production, Storage, and Waste Management	—	—	—	
Crematorium	—	—	—	

Change #6

17.37.030 - Permitted and conditionally permitted activities.

Table 17.37.01 lists the permitted, conditionally permitted, and prohibited activities in the CR-1 zone. The descriptions of these activities are contained in Chapter 17.10. Section 17.10.040 contains permitted accessory activities.

"P" designates permitted activities in the corresponding zone.

"C" designates activities that are permitted only upon the granting of a Conditional Use Permit (CUP) in the corresponding zone (see Chapter 17.134 for the CUP procedure).

"L" designates activities subject to certain limitations or notes listed at the bottom of the table.

"—" designates activities that are prohibited except as accessory activities according to the regulations contained in Section 17.010.040.

Table 17.37.01: Permitted and Conditionally Permitted Activities

Activities	Zone	Additional Regulations
	CR-1	
Industrial Activities		
Custom Manufacturing	P(L4)	

Light Manufacturing	P(L4)	
General Manufacturing	C(L4)	
Heavy/High Impact	—	
Research and Development	P	
Construction Operations	—	
Warehousing, Storage, and Distribution		
A. General Warehousing, Storage and Distribution	P(L4)	
B. General Outdoor Storage	C(L4)	
C. Self-or Mini Storage	C(L4)	
D. Container Storage	C(L4)	
E. Salvage/Junk Yards	—	
Regional Freight Transportation	C(L4)	
Trucking and Truck-Related	C(L4)	
Recycling and Waste-Related		
A. Satellite Recycling Collection Centers	C(L4)	
B. Primary Recycling Collection Centers	C(L4)	17.103.060
Hazardous Materials Production, Storage, and Waste Management	—	
Crematorium	—	

Change #7

17.58.040 - Permitted and conditionally permitted activities.

Table 17.58.01 lists the permitted, conditionally permitted, and prohibited activities in the CBD-R, CBD-P, CBD-C and CBD-X zones. The descriptions of these activities are contained in Chapter 17.10.

"P" designates permitted activities in the corresponding zone.

"C" designates activities that are permitted only upon the granting of a conditional use permit (see Chapter 17.134 for the CUP procedure) in the corresponding zone.

"L" designates activities subject to certain limitations or notes listed at the bottom of the Table.

"—" designates activities that are prohibited except as accessory activities according to the regulations contained in Section 17.010.040.

Table 17.58.01: Permitted and Conditionally Permitted Activities

Activities	Primary Zones				Combining Zones* CBD-P/CH	Additional Regulations
	CBD-R	CBD-P	CBD-C	CBD-X		
Industrial Activities						
Custom Manufacturing	—	—	—	C(L13)	—	
Light Manufacturing	—	—	—	C(L13)	—	
General Manufacturing	—	—	—	—	—	
Heavy/High Impact	—	—	—	—	—	
Research and Development	—	—	C(L13)	C(L13)	—	
Construction Operations	—	—	—	—	—	
Warehousing, Storage, and Distribution						
A. General Warehousing, Storage and	—	—	—	C(L13)	—	

Distribution)		
B. General Outdoor Storage	--	--	--	--	--	
C. Self- or Mini Storage	--	--	--	--	--	
D. Container Storage	--	--	--	--	--	
E. Salvage/Junk Yards	--	--	--	--	--	
Regional Freight Transportation	--	--	--	--	--	
Trucking and Truck-Related	--	--	--	--	--	
Recycling and Waste-Related						
A. Satellite Recycling Collection Centers	--	--	C	C	--	
B. Primary Recycling Collection Centers	--	--	--	--	--	
Hazardous Materials Production, Storage, and Waste Management	--	--	--	--	--	
Crematorium	--	--	--	--	--	

Change #8

17.65.030 - Permitted, conditionally permitted, and prohibited activities.

The following table lists the permitted, conditionally permitted, and prohibited activities in the HBX zones. The descriptions of these activities are contained in Chapter 17.10. A legally constructed facility shall be allowed to contain or be converted to contain any activities listed as permitted in the table below if they meet all applicable regulations.

"P" designates permitted activities in the corresponding zone.

"C" designates activities that are permitted only upon the granting of a conditional use permit (see Chapter 17.134) in the corresponding zone.

"L" designates activities subject to certain limitations listed at the bottom of the table.

"—" designates uses that are prohibited in the corresponding zone.

Activity	Regulations			Additional Regulations
	HBX-1	HBX-2	HBX-3	
Industrial Activities				
Custom Manufacturing	P(L3)	P(L3)	P(L3)	17.120
Light Manufacturing	P(L3)(L8)	P(L3)(L8)	P(L3)(L8)	17.120
General Manufacturing	--	--	--	
Heavy/High Impact Manufacturing	--	--	--	
Research and Development	P(L3)(L8)	P(L3)(L8)	P(L3)(L8)	
Construction Operations	P(L9)	P(L9)	P(L9)	
Warehousing, Storage, and Distribution				
A. General Warehousing, Storage and Distribution	P(L3)	P(L3)	P(L3)	
B. General Outdoor Storage	C	C	C	
C. Self- or Mini-Storage	C(L11)	C(L11)	C(L11)	
D. Container Storage	--	--	--	
E. Salvage/Junk Yards	--	--	--	
Regional Freight Transportation	--	--	--	
Trucking and Truck-Related	--	--		
Recycling and Waste-Related				
A. Satellite Recycling Collection Centers	--	--	--	
B. Primary Recycling Collection Centers	--	--	--	

Hazardous Materials Production, Storage, and Waste Management	--	--	--	
Crematorium	=	=	=	

Change #9

17.72.030 Permitted and Conditionally Permitted Activities

Table 17.72.01 lists the permitted, conditionally permitted, and prohibited activities in the M-20, M-30, and M-40 zones. The descriptions of these activities are contained in Chapter 17.10. Section 17.10.040 contains permitted accessory activities.

- “P” designates permitted activities in the corresponding zone.
- “C” designates activities that are permitted only upon the granting of a Conditional Use permit (CUP) in the corresponding zone (see Chapter 17.134 for the CUP procedure).
- “L” designates activities subject to certain limitations or notes listed at the bottom of the table.
- “--” designates activities that are prohibited except as accessory activities according to the regulations contained in Section 17.010.040.

Activities	Zones			Additional Regulations
	M-20	M-30	M-40	
Industrial Activities				
Custom Manufacturing	P(L8)	P	P	
Light Manufacturing	P(L9)	P	P	
General Manufacturing	C(L9)	C(L9)	C(L9)	
Heavy/High Impact	--	--	C	
Research and Development	C	C	P	
Construction Operations	C	P	P	
Warehousing, Storage, and Distribution				
A. General Warehousing, Storage and Distribution	C	P	P	
B. General Outdoor Storage	C	P	P	
C. Self- or Mini Storage	P	P	P	
D. Container Storage	C	P	P	
E. Salvage/Junk Yards	C	C	P(L10)	
Regional Freight Transportation	C	C	C	
Trucking and Truck-Related				
A. Freight/Truck Terminal	C	P(L7)(L11)	P(L7)(L11)	

B. Truck Yard	C	P(L7)(L11)	P(L7)(L11)	
C. Truck Weigh Stations	C	P(L7)(L11)	P(L7)(L11)	
D. Truck and Other Heavy Vehicle Sales, Rental and Leasing	C	P(L7)(L11)	P(L7)(L11)	
E. Truck and Other Heavy Vehicle Service, Repair and Refueling	C	P(L7)(L11)	P(L7)(L11)	
Recycling and Waste-Related				
A. Satellite Recycling Collection Centers	C	C	C	
B. Primary Recycling Collection Centers	--	C	P	17.103.060
Hazardous Materials Production, Storage, and Waste Management	C(L12)	C(L12)	C(L12)	
<u>Crematorium</u>	<u>C(L14)</u>	<u>C(L14)</u>	<u>C(L14)</u>	

Limitations on Table 17.72.01:

- L1.** The total floor area devoted to these activities on any single lot may only exceed fifteen thousand (15,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).
- L2.** No new or expanded Special Health Care Civic Activity shall be located closer than two thousand five hundred (2,500) feet from any other such activity or five hundred (500) feet from any K-12 school or Transitional Housing, Enriched Housing, or Licensed Emergency Shelters Civic Activity. See Section 17.103.020 for further regulations regarding Special Health Care Civic Activities.
- L3.** Communications equipment installation and exchanges are only permitted upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).
- L4.** The total floor area devoted to these activities on any single lot may only exceed three thousand (3,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).
- L5.** See Section 17.102.170 for special regulations relating to massage services. Also, no new or expanded laundromat shall be located closer than five hundred (500) feet from any existing laundromat. See Section 17.102.450 for further regulations regarding laundromats.
- L6.** No new or expanded adult entertainment activity shall be located closer than one thousand (1,000) feet to the boundary of any residential zone or three hundred (300) feet from any other adult entertainment activity. See Section 17.102.160 for further regulations regarding adult entertainment activities.
- L7.** No facility accommodating either of these activities that is located within one hundred fifty (150) feet of any residential zone boundary shall be constructed, established, or altered in exterior appearance, unless the proposal have been approved pursuant to the Design Review Procedure (see Chapter 17.136 for the Design Review Procedure).
- L8.** These activities are only permitted upon the granting of a Conditional Use Permit if located within one hundred fifty (150) feet of a residential zone (see Chapter 17.134 for the CUP procedure).
- L9.** Electroplating activities are prohibited.
- L10.** Salvage/Junk Yards Industrial Activities in the M-40 zone are only permitted upon the granting of a Conditional Use Permit if located within four hundred (400) feet of any zone except the M-30 zone (see

Chapter 17.134 for the CUP procedure). The following regulations shall apply to all Salvage/Junk Yards Industrial Activities in the M-40 zone that do not require for a conditional use permit: Except for accessory off-street parking, landscaping, and screening, said activities shall be conducted entirely within an enclosed building or behind a solid lumber, masonry, or sheet metal fence or wall not less than ten (10) feet high, subject to the standards for required landscaping and screening in Chapter 17.124. All openings in such fence or wall shall be equipped with solid gates or doors of the same height as the fence or wall, and said gates or doors shall be kept securely closed at such times as the establishment is not open for business. Open storage of vehicles and other scrap material shall not exceed twenty (20) feet in height.

L11. Only permitted upon the granting of a Conditional Use Permit (see Section 17.134 for the CUP procedure) in the West Oakland Community Development District, defined to include all areas between Interstate 980 to the east, 3rd Street to the south, Interstate 880 to the west, and Interstate 580 to the north.

L12. These activities are prohibited when located within two thousand (2,000) feet from a residential facility. When not within two thousand (2,000) feet of a residential facility, Hazardous Materials Production, Storage, and Waste Management is only permitted upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure). In addition to the CUP criteria contained in Section 17.134.050, this activity must meet the following use permit criteria:

1. That the project is not detrimental to the public health, safety or general welfare of the community;
2. That the project is or will be adequately served by roads and other public or private service facilities;
3. That the project is consistent with the regional fair-share facility needs assessment and siting criteria established in the Alameda County Hazardous Waste Management Plan;
4. That the cumulative effects of locating the project within the proposed area have been analyzed and where applicable, measures have been incorporated into the project.

L13. Crop and Animal Raising is only permitted upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure). In addition to the CUP criteria contained in Section 17.134.050, this activity must meet the following use permit criteria:

1. The proposal will not adversely affect the livability or appropriate development of abutting properties and the surrounding neighborhood in terms of noise, water and pesticide runoff, farming equipment operation, hours of operation, odor, security, and vehicular traffic;
2. Agricultural chemicals or pesticides will not impact abutting properties or the surrounding neighborhood; and
3. The soil used in growing does not contain any harmful contaminants and the activity will not create contaminated soil.

L14. Prohibited within 1,000 feet of any zone that permits or conditionally permits permanent residential activities.

Change #10

17.73.020 - Permitted and conditionally permitted uses and facilities.

The following table lists the permitted, conditionally permitted, and prohibited uses and facilities in the CIX-1, CIX-2, IG and IO zones. The descriptions of these uses are contained in Chapter 17.10.

"P" designates permitted uses and facilities in the corresponding zone.

"C" designates uses and facilities that are permitted only upon the granting of a conditional use permit (see Chapter 17.134) in the corresponding zone.

"L" designates uses and facilities subject to certain limitations listed at the bottom of the Table.

"—" designates uses and facilities that are prohibited in the corresponding zone.

Table 17.73.020: Permitted and Conditionally Permitted Uses and Facilities

Uses	Zones				Additional Regulations
	CIX-1	CIX-2	IG	IO	
Industrial Uses					
Custom Manufacturing	P	P	P	P	
Light Manufacturing	P	P	P	P	
General Manufacturing	L3	L3	P	—	
Heavy Manufacturing	—	—	C	—	
Research and Development	P	P	P	P	
Construction Operations	L3	L3	L3	C	
Warehousing, Storage and Distribution					
A. General Warehousing, Storage and Distribution	P	P	P	P	No retail component of this use allowed in IG or IO. Also, see Sections 17.73.060
B. General Outdoor Storage	C	L3	P	P	
C. Self or Mini Storage	C	C	—	C	
D. Container Storage	—	L3	P	—	
E. Automotive Salvage and Junk Yards	—	—	L3	—	
Regional Freight and Transportation:					
A. Seaport	—	—	P	C	
B. Rail Yard	—	C	P	—	
Trucking and Truck-Related:					
A. Freight/Truck Terminal	L5	L3	P	—	The establishment of new or expanded trucking and trucking-related activities requires Regular Design Review approval if located within 150 feet of any residential zone (see Chapter 17.136 for the Design Review procedure).
B. Truck Yard	L5	C	P	C	
C. Truck Weigh Stations	—	P	P	—	
D. Truck and Other Heavy Vehicle Sales, Rental and Leasing	L6	P	P	P	
E. Truck and Other Heavy Vehicle Service, Repair, and Refueling	L5	P	P	—	
Recycling and Waste-Related Activities					
A. Satellite Recycling Collection Centers	C	C	C	C	
B. Primary Recycling	L10	L10	L11	—	

Collection Centers					
Hazardous Materials Production, Storage and Waste-Related Activities					L12 See also Health and Safety Protection Zone (S-19)
A. Small Scale Transfer and Storage	—	C	C	—	
B. Industrial Transfer/Storage	—	—	C	—	
C. Residuals Repositories	—	—	C	—	
D. Oil and Gas Storage	—	—	L2	—	
Crematorium	C(L14)	C(L14)	C(L14)	—	

Limitations:

L1. Limited to location on a ground floor in CIX-2, IG and IO. Over five thousand (5,000) sf floor area requires a conditional use permit in CIX-2, IG, and IO.

L2. Prohibited within three hundred (300) feet of a residential zone and requires a conditional use permit elsewhere throughout the zone. (Conditional use permit is required in CIX-2).

L3. A conditional use permit is required if within three hundred (300) feet of a residential zone; Permitted if beyond three hundred (300) feet of a residential zone.

L5. Prohibited within six hundred (600) feet of a residential zone. A conditional use permit is required elsewhere throughout the zone. Also, only permitted upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure) in the West Oakland Community Development District, defined to include all areas between Interstate 980 to the east, 3rd Street to the south, Interstate 880 to the west, and Interstate 580 to the north.

L6. A conditional use permit is required: a) if within three hundred (300) feet of a residential zone, and b) if located anywhere in the district when outdoor repair and service activity exceeds fifty percent (50%) of site area. Also, only permitted upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure) in the West Oakland Community Development District, defined to include all areas between Interstate 980 to the east, 3rd Street to the south, Interstate 880 to the west, and Interstate 580 to the north.

L7. A conditional use permit is required for entertainment uses. Also, No new or expanded adult entertainment activity shall be located closer than one thousand (1,000) feet to the boundary of any residential zone or three hundred (300) feet from any other adult entertainment activity. See Section 17.102.160 for further regulations regarding adult entertainment activities.

L8. Entertainment, educational and athletic services are not permitted.

L10. Prohibited within three hundred (300) feet of a residential zone; a conditional use permit containing requirements no less stringent than the performance standards set out in Section 17.73.035 is required if beyond three hundred (300) feet of a residential zone boundary.

L11. Prohibited within three hundred (300) feet of a residential zone, permitted outright beyond three hundred (300) feet with a standard set of performance standards that would apply to existing, new or expanded uses, as detailed in Section 17.73.035.

Table 17.101E-01: Permitted and Conditionally Permitted Activities

Activities	D-CE-1	D-CE-2	D-CE-3	D-CE-4	D-CE-5	D-CE-6	Additional Regulations
Industrial Activities							
Custom Manufacturing	C	P	P (L3)	P (L3)	P	P	17.102.040
Light Manufacturing	C	P	P(L2)(L10)	P(L3)(L10)	P	P	17.102.040
General Manufacturing	--	--	--	--	P	P	
Heavy/High Impact	--	--	--	--	--	C	
Research and Development	P (L2)	P(L3)(L10)	P(L3)(L10)	P(L3)(L10)	P	P	
Construction Operations	--	--	--	C	P (L14)	P (L14)	
Warehousing, Storage, and Distribution							
A. General Warehousing, Storage and Distribution	C	--	P (L2)	P (L3)	P	P	
B. General Outdoor Storage	--	--	--	--	P (L14)	P (L14)	
C. Self- or Mini Storage	--	--	--	C	C	--	
D. Container Storage	--	--	--	--	P (L14)	P (L14)	
E. Salvage/Junk Yards	--	--	--	--	--	C	
Regional Freight Transportation							
A. Seaport	--	--	--	--	--	C	
B. Rail Yard	--	--	--	--	C	C	
Trucking and Truck-Related							
A. Freight/Truck Terminal	--	--	--	--	P (L14)	P(L14)	
B. Truck Yard	--	--	--	--	C	P(L14)	
C. Truck Weigh Stations	--	--	--	--	P	P(L14)	

Table 17.101E.01: Permitted and Conditionally Permitted Activities

Activities	D-CE-1	D-CE-2	D-CE-3	D-CE-4	D-CE-5	D-CE-6	Additional Regulations
D. Truck & Other Heavy Vehicle Sales, Rental & Leasing	--	--	--	--	P(L14)	P(L14)	
E. Truck & Other Heavy Vehicle Service, Repair, and Refueling	--	--	--	--	P(L14)	P(L14)	
Recycling and Waste-Related							
A. Satellite Recycling Collection Centers	--	P (L15)	P (L15)	P (L15)	P (L15)	P (L15)	17.10.040
B. Primary Recycling Collection Centers	--	--	--	--	--	C (L16)	17.73.035
Hazardous Materials Production, Storage, and Waste Management							
A. Small Scale Transfer and Storage	--	--	--	--	C	C(L14, L17)	
B. Industrial Transfer/Storage	--	--	--	--	--	C(L14, L17)	
C. Residuals Repositories	--	--	--	--	--	C(L14, L17)	
D. Oil and Gas Storage	--	--	--	--	--	C(L14, L17)	
<u>Crematorium</u>	=	=	=	=	<u>C(L19)</u>	<u>C(L19)</u>	

Limitations on Table 17.101E.01:

- L1. No Residential Care, Service-Enriched Permanent Housing, Transitional Housing, or Emergency Shelter Residential Activity shall be located closer than three hundred (300) feet from any other such activity. See Section 17.102.212 for other regulations regarding these activities.
- L2. The total floor area devoted to these activities by a single establishment shall only exceed ten thousand (10,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).
- L3. The total floor area devoted to these activities by a single establishment shall only exceed twenty-five thousand (25,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).

- L4. The total floor area devoted to a grocery store shall only exceed twenty thousand (20,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure). The total floor area devoted to a restaurant shall only exceed three thousand (3,000) square feet upon the granting of a conditional use permit (see Chapter 17.134 for the CUP procedure).
- L5. These activities are only allowed on the ground floor of a building. Except in D-CE-4, the total floor area devoted to these activities by any single establishment may only exceed five-thousand (5,000) square feet upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure).
- L6. Retail is only allowed as an accessory use per Section 17.10.040.
- L7. The total floor area devoted to these activities by a single establishment shall not exceed five thousand (5,000) square feet.
- L8. Entertainment, educational and athletic services are not permitted.
- L9. Administrative activities accessory to an existing industrial activity are limited to twenty percent (20%) of floor area in D-CE-6.
- L10. Not including accessory activities, this activity shall take place entirely within an enclosed building. Other outdoor activities shall only be permitted upon the granting of a conditional use permit (see Chapter 17.134 for the CUP procedure).
- L11. These activities are only allowed in the Tidewater South area of D-CE-5, not permitted in any other areas of D-CE-5.
- L12. This activity is only permitted upon the granting of a Conditional Use Permit (see Chapter 17.134) if it is the principal activity on a lot that is twenty five thousand (25,000) square feet or larger or covers twenty five thousand (25,000) square feet or more of floor area.
- L13. This activity is only permitted upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure) and that all repair and servicing is performed in an enclosed building.
- L14. A Conditional Use Permit is required if located within 300 feet of: a) the estuary shoreline; b) the D-CE-3 zone; or c) any Open Space zone (see Chapter 17.134 for the CUP procedure). This activity is permitted if beyond 300 feet.
- L15. Permitted within a grocery store or other large associated development, but if it is a stand alone collector center then a Conditional Use Permit (see Chapter 17.134 for the CUP procedure) is required. If the recycling collection is placed within the parking lot the overall parking requirements for the principal activity shall still be met.
- L16. A Conditional Use Permit (see Chapter 17.134 for the CUP procedure) is required for this activity, but is not permitted within 300 feet of: a) the estuary shoreline; b) the D-CE-1, D-CE-2, D-CE-3, or D-CE-4 zone; or c) any Open Space zone. All special regulations for primary collection centers in the industrial zones must be met as listed in Section 17.73.035.
- L17. This activity is only permitted upon determination that the proposal conforms to the general use permit criteria set forth in the Conditional Use Permit procedure in Chapter 17.134 and to all of the following additional use permit criteria:
 - 1. That the project is not detrimental to the public health, safety, or general welfare of the community;
 - 2. That the project is or will be adequately served by roads and other public or private service facilities;
 - 3. That the project is consistent with the regional fair-share facility needs assessment and siting criteria established in the Alameda County Hazardous Waste Management Plan;

4. That the cumulative effects of locating the project within the proposed area have been analyzed and where applicable, measures that minimize adverse impacts to the surrounding community have been incorporated into the project.
- L18. Crop and Animal Raising is only permitted upon determination that the proposal conforms to the general use permit criteria set forth in the Conditional Use Permit procedure in Chapter 17.134 and to all of the following additional use permit criteria:
1. The proposal will not adversely affect the livability or appropriate development of abutting properties and the surrounding neighborhood in terms of noise, water and pesticide runoff, farming equipment operation, hours of operation, odor, security, and vehicular traffic;
 2. Agricultural chemicals or pesticides will not impact abutting properties or the surrounding neighborhood; and
 3. The soil used in growing does not contain any harmful contaminants and the activity will not create contaminated soil.

L19. Prohibited within 1,000 feet of any zone that permits or conditionally permits permanent residential activities.

Change #12

17.101F.030 - Permitted and conditionally permitted activities.

Table 17.101F.01 lists the permitted, conditionally permitted, and prohibited activities in the D-GI zone. The descriptions of these activities are contained in Chapter 17.10. Section 17.10.040 contains permitted accessory activities.

"P" designates permitted activities in the zone.

"C" designates activities that are permitted only upon the granting of a Conditional Use Permit (CUP) in the corresponding zone (see Chapter 17.134 for the CUP procedure).

"L" designates activities subject to certain limitations or notes listed at the bottom of the table.

"—" designates activities that are prohibited except as accessory activities according to the regulations contained in Section 17.010.040.

Table 17.101F.01: Permitted and Conditionally Permitted Activities

Activities	Zone	Additional Regulations
	D-GI	
Industrial Activities		
Custom Manufacturing	P	
Light Manufacturing	P	
General Manufacturing	P	
Heavy/High Impact	C	
Research and Development	P	
Construction Operations	P(L2)	
Warehousing, Storage, and Distribution		
A. General Warehousing, Storage and Distribution	P	
B. General Outdoor Storage	P	

C. Self-or Mini Storage	P	
D. Container Storage	P	
E. Salvage/Junk Yards	—	
Regional Freight Transportation		
A. Seaport	P	
B. Rail Yard	P	
Trucking and Truck-Related		
A. Freight/Truck Terminal	P	
B. Truck Yard	P	
C. Truck Weigh Stations	P	
D. Truck and Other Heavy Vehicle Sales, Rental, and Leasing	P	
E. Truck and Other Heavy Vehicle Service, Repair, and Refueling	P	
Recycling and Waste-Related		
A. Satellite Recycling Collection Centers	P	
B. Primary Recycling Collection Centers	P(L7)	17.73.035
Hazardous Materials Production, Storage, and Waste Management		
A. Small Scale Transfer and Storage	C	
B. Industrial Transfer/Storage	C	
C. Residuals Repositories	C	
D. Oil and Gas Storage	C	
Crematorium	—	

Limitations on Table 17.101F.01:

- L1.** Community gardens and botanical gardens are prohibited.
- L2.** These activities are limited to establishments that support or are associated with trucking, warehousing, or maritime-related activities.
- L3.** Community Assembly Activities are limited to public and private nonprofit clubs, lodges, and meeting halls.
- L4.** Nonassembly Cultural Activities are limited to museums and commemorative exhibits pertaining to trucking, warehousing, or maritime-related activities or the history of the site.
- L5.** Convenience Markets are limited to establishments located on the same lot as an Automobile and Other Light Vehicle Gas Station and Servicing Activity or a Truck and Other Heavy Vehicle Service, Repair, and Refueling Activity.
- L6.** Group Assembly Activities and Personal Instruction and Improvement Services Activities are limited to instructional services.
- L7.** Primary Recycling Collection Centers shall comply with the performance standards set forth in Section 17.73.035.

Change #13

17.134.020 - Definition of major and minor conditional use permits.

- A. Major Conditional Use Permit. A conditional use permit is considered a major conditional use permit if it involves any of the following:
1. Thresholds. Any project that meets any of the following size thresholds:
 - a. The actual project site (including only portions of the lot actually affected by the project) exceeds one acre;
 - b. Nonresidential projects involving twenty-five thousand (25,000) square feet or more of floor area, except in the R-80, CBD-R, CBD-P (when not combined with the S-7 zone), CBD-C, CBD-X, S-2, or S-15 zones;
 - c. Residential projects requiring a conditional use permit for density resulting in a total number of living units as follows:
 - i. Three (3) or more dwelling units in the RM-2 zone,
 - ii. Seven (7) or more dwelling units in the RM-3 or RM-4 zone.
 - d. Residential projects requiring a conditional use permit to exceed the basic or permitted density which results in seven (7) or more living units in the RU or CBD-R zone.
 - e. Large Scale Developments. Any development which is located in the R-80, CBD-R, CBD-P (when not combined with the S-7 zone), CBD-C, CBD-X, S-2, or S-15 zone and results in more than one hundred thousand (100,000) square feet of new floor area.
 2. Uses. Any project that involves any of the following activity or facility types except where the proposal involves only accessory parking, the resumption of a discontinued nonconforming activity, or an addition to an existing activity which does not increase the existing floor area by more than twenty percent (20%):
 - a. Activities:
 - i. Residential Care Residential,
 - ii. Service Enriched Housing Residential,
 - iii. Transitional Housing Residential,
 - iv. Emergency Shelter Residential,
 - v. Extensive Impact Civic,
 - vi. Fast-food Restaurant Commercial,
 - vii. Convenience Market Commercial,
 - viii. Alcoholic Beverage Sales Commercial or sale of alcoholic beverages at any full-service restaurant in a location described by Section 17.103.030(B),
 - ix. Heavy Manufacturing,
 - x. Small Scale Transfer and Storage Hazardous Waste Management,
 - xi. Industrial Transfer/Storage Hazardous Waste Management,
 - xii. Mining and Quarrying Extractive,
 - xiii. Special Health Care Civic Activities.
 - xv. Crematorium

OPTION #2

17.10.240 - Extensive impact civic activities.

Extensive Impact Civic Activities include the activities typically performed by, or the maintenance and operation of, the following institutions and installations:

B. Cemeteries, mausoleums, ~~and~~ columbariums, and crematories;

OPTION #3

Change #1

17.09.040 – Definitions

"Court" means an area between two walls on the same lot, measured for a specified distance, in a horizontal plane, perpendicularly from either of such walls; located on the same lot as said walls; and open and unobstructed except for the facilities allowed therein by Section 17.108.130.

"Crematorium" means any activity or facility that involves cremation of human remains through incineration.

"Day" means calendar day.

Change #2

17.102.XXX – Crematories

Conditional Use Permit Requirement for Crematories. Any new or expanded crematorium is permitted only upon the granting of a conditional use permit pursuant to Section 17.134., and subject to the following additional use permit criterion:

1. Any proposed new or expanded crematorium must submit a Health Risk Assessment that shows that there is no significant health risk to the surrounding community.

Change #3

17.134.020 - Definition of major and minor conditional use permits.

A. Major Conditional Use Permit. A conditional use permit is considered a major conditional use permit if it involves any of the following:

1. Thresholds. Any project that meets any of the following size thresholds:
 - a. The actual project site (including only portions of the lot actually affected by the project) exceeds one acre;
 - b. Nonresidential projects involving twenty-five thousand (25,000) square feet or more of floor area, except in the R-80, CBD-R, CBD-P (when not combined with the S-7 zone), CBD-C, CBD-X, S-2, or S-15 zones;
 - c. Residential projects requiring a conditional use permit for density resulting in a total number of living units as follows:
 - i. Three (3) or more dwelling units in the RM-2 zone,
 - ii. Seven (7) or more dwelling units in the RM-3 or RM-4 zone.
 - d. Residential projects requiring a conditional use permit to exceed the basic or permitted density which results in seven (7) or more living units in the RU or CBD-R zone.
 - e. Large Scale Developments. Any development which is located in the R-80, CBD-R, CBD-P (when not combined with the S-7 zone), CBD-C, CBD-X, S-2, or S-15 zone and results in more than one hundred thousand (100,000) square feet of new floor area.
2. Uses. Any project that involves any of the following activity or facility types except where the proposal involves only accessory parking, the resumption of a discontinued nonconforming activity, or an addition to an existing activity which does not increase the existing floor area by more than twenty percent (20%):
 - a. Activities:
 - i. Residential Care Residential,
 - ii. Service Enriched Housing Residential,
 - iii. Transitional Housing Residential,
 - iv. Emergency Shelter Residential,
 - v. Extensive Impact Civic,
 - vi. Fast-food Restaurant Commercial,
 - vii. Convenience Market Commercial,
 - viii. Alcoholic Beverage Sales Commercial or sale of alcoholic beverages at any full-service restaurant in a location described by Section 17.103.030(B),
 - ix. Heavy Manufacturing,
 - x. Small Scale Transfer and Storage Hazardous Waste Management,

- xi. Industrial Transfer/Storage Hazardous Waste Management,
 - xii. Mining and Quarrying Extractive,
 - xiii. Special Health Care Civic Activities.
3. Special Situations. Any project that involves any of the following situations:
- a. Any project that requires development of an Environmental Impact Report (EIR);
 - b. Any single establishment containing a Commercial or Industrial Activity, or portion thereof, which is located in any residential zone and occupies more than five thousand (5,000) square feet of floor area, except where the proposal involves only the resumption of a nonconforming activity;
 - c. Off-Street Parking Facilities in the C-40, CBD-P, CBD-C, CBD-X, and S-2 zones serving fifty (50) or more vehicles;
 - d. Transient Habitation Commercial Activities in the C-40 and C-45 zones;
 - e. Monopole Telecommunications Facilities in, or within three hundred (300) feet of the boundary of, any residential or HBX zone;
 - f. Any project in the OS zone listed as requiring a major conditional use permit in Chapter 17.11;
 - g. Any electroplating activity as defined in Section 17.09.040 subject to the provisions of Section 17.102.340;
 - h. Any Telecommunications Facility in or within one hundred (100) feet of the boundary of any residential or HBX zone;
 - i. Any Telecommunications Facility whose antennas and equipment are not fully concealed from view within three hundred (300) feet of the boundary of the RH, RD, RM, RU-1, or RU-2 zones, or any HBX zone.
 - j. Any crematorium activity as defined in Section 17.09.040 subject to the provisions of Section 17.102.XXX

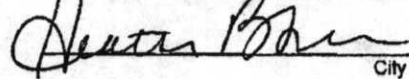
REQUIRES 6 VOTES FOR PASSAGE

FILED
OFFICE OF THE CITY CLERK
OAKLAND

INTRODUCED BY COUNCILMEMBER

2014 MAR 20 PM 12:52

APPROVED AS TO FORM AND LEGALITY



City Attorney

OAKLAND CITY COUNCIL

ORDINANCE No. 13222 C.M.S.

AN EMERGENCY ORDINANCE PURSUANT TO CHARTER SECTION 213, EXTENDING BY ONE HUNDRED AND EIGHTY (180) DAYS EMERGENCY ORDINANCE NUMBER 13196 C.M.S. REQUIRING A MAJOR CONDITIONAL USE PERMIT TO ESTABLISH A CREMATORIUM WITHIN THE CITY OF OAKLAND, TO TAKE EFFECT IMMEDIATELY UPON INTRODUCTION AND ADOPTION (EXTENDS THE ONE HUNDRED AND EIGHTY (180) DAY EMERGENCY ORDINANCE ADOPTED OCTOBER 15, 2013)

WHEREAS, on May 15, 2012, the City Council adopted Emergency Ordinance Number 13115 C.M.S., to establish interim controls for crematories, requiring a Major Conditional Use permit to establish a crematorium for a period of one year until May 10, 2013 or until permanent regulations are adopted regulating crematoriums; and

WHEREAS, on May 7, 2013, the City Council adopted Emergency Ordinance Number 13158 C.M.S., to extend interim controls for crematories, requiring a Major Conditional Use permit to establish a crematorium for an additional period of one hundred and eighty (180) days until November 3, 2013 or until permanent regulations are adopted regulating crematoriums; and

WHEREAS, on September 11, 2013 staff presented proposed permanent regulations for crematories within the City of Oakland to the Planning Commission, which voted to continue the item to a future date and requested staff provide additional information, thus delaying the item past the expiration date of the existing Emergency Ordinance 13158 C.M.S.; and

WHEREAS, on October 15, 2013, the City Council adopted Emergency Ordinance Number 13196 C.M.S., to extend interim controls for crematories, requiring a Major Conditional Use permit to establish a crematorium for an additional period of one hundred and eighty (180) days until April 13, 2014 or until permanent regulations are adopted regulating crematoriums; and

WHEREAS, currently crematories are classified as General Manufacturing Industrial Activities pursuant to Section 17.10.570 of the Planning Code, and are outright permitted activities within the M-30 General Industrial Zones, M-40 Heavy Industrial Zones, IG General Industrial Zones, D-CE-5 & D-CE-6 Central Estuary Industrial Zones, and the D-GI Gateway Industrial Zone. Crematories are outright permitted within the CIX-1 and CIX-2 Commercial Industrial Zones if outside of 300 feet from a residential zone. No discretionary planning permits or public notice are required prior to issuance of a building permit for a crematorium within these industrial zones. Only if located within 300 feet of a residential zone in the CIX-1 and CIX-2 zones is a conditional use permit required.; and

WHEREAS, the issue of whether it is appropriate to allow crematoria as an outright permitted

ATTACHMENT B

use within industrial zones under the use classification of General Manufacturing activities has been raised in the context of public exposure to certain types of pollutants and emissions and the ability to review those impacts; and

WHEREAS, except as provided in the Interim Controls, the City permits outright, without any discretionary planning review, crematoria under the classification of a General Manufacturing Industrial activity, within the M-30 General Industrial Zone, M-40 Heavy Industrial Zones, and IG General Industrial Zones. Crematoria are outright permitted within the CIX-1 and CIX-2 Commercial Industrial Zones if outside of 300 feet from a residential zone; and

WHEREAS, crematoria emit particulate matter falling under the category of toxic pollutants; and

WHEREAS, on May 15, 2012, the City Council received, and on August 29, 2012 the Planning Commission and City staff received, letters from the Alameda County Public Health Department stating that cremators used within crematories emit a number of criteria air pollutants such as particulate matter, nitrogen compounds, sulfur compounds, carbon monoxide and precursor organic compounds and toxic emissions such as acetaldehyde, arsenic, beryllium, cadmium, hexavalent chromium, copper, formaldehyde, hydrogen chloride, hydrogen fluoride, lead, mercury, nickel, selenium, chlorinated dibenzodioxins and furans, and polycyclic aromatic hydrocarbons/ benzo (a) pyrene equivalents; and

WHEREAS, a cremation center can displace commercial activities and negatively affect the economic revitalization of any community in which a crematorium would locate; and

WHEREAS, a crematorium in any part of Oakland has the potential to impact the health of our neighborhoods, many of which already suffer from highly disproportionate rates of illness related to air pollution in comparison to the rest of Alameda County; and

WHEREAS, staff needs additional time beyond the April 13, 2014 expiration date of the Emergency Ordinance to September 28, 2014 to continue to work with an Air Quality consultant to provide information and expertise responding to the request from the Planning Commission for staff to return to the Planning Commission with additional information relating to the health risks associated with crematories; and

WHEREAS, the provisions of the California Environmental Quality Act (CEQA) have been satisfied and the proposal relies on the following environmental documents to satisfy any requirements under the California Environmental Quality Act (CEQA): the previously certified Final Environmental Impact Report for the Land Use and Transportation Element of the General Plan, adopted in 1998 (General Plan EIR); and

WHEREAS, as a separate and independent basis, the proposal is also exempt from CEQA under several CEQA Guidelines: section 15061(b)(3), known as the "General Rule," that states a project is exempt from CEQA if there is no possibility that the activity in question will have a significant effect on the environment; and

WHEREAS, for the reasons set forth above, pursuant to City Charter section 213, the Council declares that this ordinance is necessary to preserve the public peace, health, welfare or safety and to avoid a direct threat to the health, safety, and welfare of the community, and the "Whereas" clauses above taken together constitute the City Council's statement of the reasons constituting such necessity and emergency; now, therefore

THE COUNCIL OF THE CITY OF OAKLAND DOES ORDAIN AS FOLLOWS:

Section 1. The recitals above are true and correct and are an integral part of this Ordinance.

Section 2. This Ordinance complies with the California Environmental Quality Act.

Section 3. Any new crematorium or expansion of any existing crematorium shall only be permitted upon the granting of a major conditional use permit pursuant to Planning Code Section 17.134.

Section 4. No building, zoning or other permit that has been issued for any building or structure for which rights to proceed with said building or structure have not yet vested pursuant to the provisions of State law shall proceed without complying with this ordinance. Further, no building, zoning or other permit for any building or structure shall be issued by any department, agency, employee or agent of the City of Oakland to allow for any building or structure without complying with the requirements of Section 3 above. No use which has not vested prior to the date of this ordinance shall commence in violation of the provisions of this ordinance.

Section 5. The controls imposed by this ordinance shall remain in place and be effective for a continuous one hundred and eighty (180) days from the effective date of this ordinance, or until the City Council adopts permanent controls for crematories, whichever comes first.

Section 6. The Planning and Zoning Division is directed, over the next one hundred and eighty (180) days, to conduct further studies and develop a draft set of permanent amendments to the Planning Code and/or Municipal Code regarding the subject matter of this ordinance.

Section 7. For the term of this ordinance, as set for the in Section 5 above, the provisions of this ordinance shall govern, and to the extent there is any conflict between the provisions of this ordinance and the provisions of any other City code, ordinance, resolution or policy, all such conflicting provisions shall be suspended.

Section 8. This ordinance shall be effective immediately upon its adoption by the City Council, subject to the provisions of Section 213 of the Charter of the City of Oakland.

Section 9: This Ordinance is enacted pursuant to the City of Oakland's general police powers, Sections 106 and 213 of the Charter of the City of Oakland, and Article XI of the California Constitution.

Section 10. If any provision of this ordinance or the application thereof to any person or circumstances is held invalid, the remainder of this ordinance and the application of such provisions to other persons or circumstances shall not be affected thereby.

IN COUNCIL, OAKLAND, CALIFORNIA, APR 01 2014

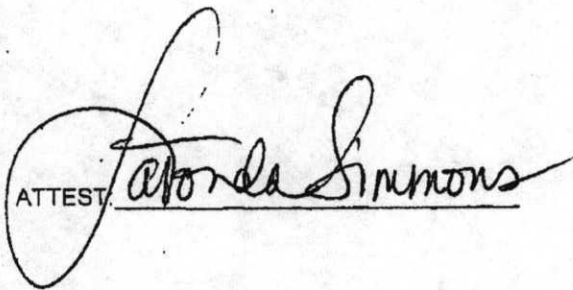
PASSED BY THE FOLLOWING VOTE:

AYES- BROOKS, GALLO, GIBSON MCELHANEY, KALB, KAPLAN, REID, SCHAAF, and PRESIDENT KERNIGHAN - 8

NOES- 0

ABSENT- 0

ABSTENTION- 0

ATTEST 

Introduction Date **APR 01 2014**

LaTonda Simmons
City Clerk and Clerk of the Council
of the City of Oakland, California

DATE OF ATTESTATION: 4-2-14

BACKGROUND INFORMATION ON CREMATORIUM EMISSIONS

Prepared for
City of Oakland, California

June 2014



ATTACHMENT C

BACKGROUND INFORMATION ON CREMATORIUM EMISSIONS

Prepared for
City of Oakland, California

June 2014



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Woodland Hills

TABLE OF CONTENTS

Background Information on Crematorium Emissions

	<u>Page</u>
Introduction	1
How Crematories Operate	2
Air Emissions from Crematories	3
Health Risks Resulting from Crematory Operations.....	4
Mercury Exposure.....	5
Other TACs.....	6
Air Quality Regulatory Requirements Applicable to Crematories in the San Francisco Bay Area	8
Air Permitting	8
CEQA.....	10
Mitigation to Reduce Health Risks from Crematory Air Emissions.....	11
Extract Teeth.....	11
Require Buffer Zones.....	12
Modify Operating Hours.....	12
Modify Exhaust Stacks.....	12
Install Filtering Systems.....	12
List of Figures	
1. Typical Cremation Equipment with Stack.....	2
List of Tables	
1. Criteria Pollutant Emission Factors for Crematories	3
2. Toxic Air Contaminant Emission Factors for Crematories.....	4
3. Type of Health Risks from Toxic Air Contaminants Emitted by Crematories.....	7
4. Hypothetical Health Risk Screening Analysis.....	9
5. BAAQMD's CEQA Risk and Hazards Thresholds.....	11

Acronyms

ATC	authority to construct
BAAQMD	Bay Area Air Quality Management District
BACT	best available control technology
CAPCO	California Air Pollution Control Officers Association
CARB	California Air Resources Board, a department of the California Environmental Protection Agency
CEQA	California Environmental Quality Act
CO	carbon monoxide
HRSA	health risk screening analysis
NOx	nitrogen oxides
OEHA	Office of Environmental Protection Agency, a department of the California Environmental Protection Agency
PM10	particulate matter 10 microns or less in diameter
POC	precursor organic compounds (sometimes referred to as reactive organic gases or ROG)
PTO	permit to operate
REL	reference exposure level
SFBAAB	San Francisco Bay Area Air Basin
SO2	sulfur dioxide
TAC	toxic air contaminants
T-BACT	toxics best available control technology

BACKGROUND INFORMATION ON CREMATORIUM EMISSIONS

Introduction

This report examines the air quality impacts associated with cremation. Cremation involves the use of a furnace operating under high temperatures to reduce the body of a deceased animal or human to its basic chemical components. To understand crematory air impacts, this report first describes how crematories operate, followed by a discussion of the air pollutants released during crematory operation. Next, the report describes the health effects of crematory air pollutants, and examines how existing rules and regulations apply to crematory air emissions. Finally, the report discusses mitigation measures that can be used to reduce or eliminate crematory health risks.

Modern cremation has existed since the 1870's, but at a rate of less than 5% of all deaths until 1972. The percentage of cremations in the U.S. increased rapidly after 1972, reaching 43% by 2012.¹ In 2012, over one million cremations were performed in the United States, accounting for final disposition of 43 percent of deaths. In California, over 135,000 cremations were performed in 2012, which accounted for final disposition of 56 percent of deaths. The number of crematories in California has increased from 189 in 2009 to 225 in 2012, a 19 percent increase.²

There are several reasons why there is an increasing demand for the use of cremation to dispose of final remains.³

- Cost is a key issue. The cost of cremation with limited memorialization services generally ranges between \$1,000 and \$3,000. This is substantially lower than a traditional funeral with burial that ranges from \$6,250 to \$8,000 before accounting for gravesite, burial vault, and headstone.
- Cremation includes a wider range of memorialization options than traditional burials. Cremated remains can be placed in a single location (a gravesite or columbarium), scattered at a favorite location, or incorporated into keepsake urns, jewelry, and other items.
- Cremation allows people to more easily transport remains.

¹ Reindl, J., 2012. Summary of References on Mercury Emissions from Crematoria.

² Singhal LLC, 2013. Annual CANA Statistics Report 2012: Executive Summary, Featuring final 2011 data, newly released 2012 data and projections to 2017.

³ Singhal LLC, 2012. Annual CANA Statistics Report 2011, Including Projections to 2016.

- Many religions are becoming more tolerant of cremation and have begun to relax restrictions that once prevented or limited cremations.
- Environmental concerns are becoming increasingly important to consumers. Traditional burials require land consumption and cemetery maintenance into perpetuity. Although cremation can eliminate these land use related environmental issues, it can also result in human health impacts as described in this report.

How Crematories Operate

Figure 1 shows a typical cremation unit. An incinerator with a primary and secondary chamber is the most widely used type of cremator. Using an afterburner, the secondary chamber is heated to an operating temperature of 1500° F or higher. A “cremation case charge”, consisting of human or animal remains enclosed in a wooden casket, cardboard casket, or a body bag is inserted into the primary chamber, called a retort, and the retort door is closed. The burner in the primary chamber is activated and, within about 30 minutes, the cremation burner in the primary chamber begins a controlled cycling range of 1750 to 1800° F.

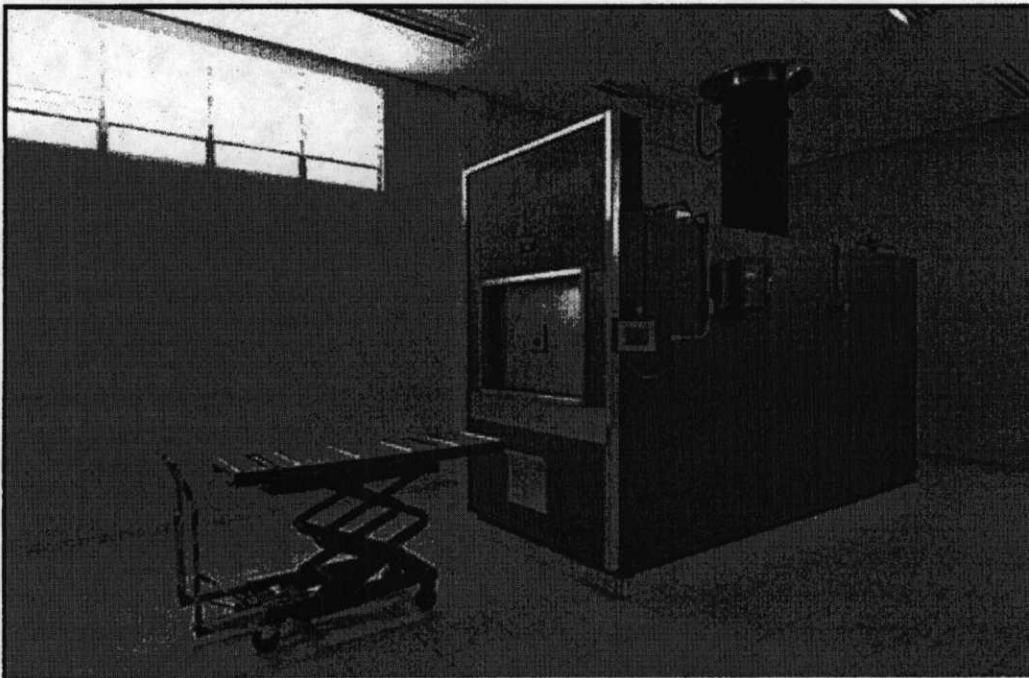


Figure 1
Typical Cremation Equipment with Stack

Cycling continues until the cremation is complete. During cremation, a large portion of the body (especially the organs) and other soft tissue are vaporized and oxidized due to the heat, and the gases are discharged through the exhaust system to the atmosphere. Approximately two hours is required for complete cremation, though this varies based on charge weight.

Filtration systems (baghouses) are being used in many countries to control particulate matter emissions. Activated carbon adsorption is also being used on a limited basis to control mercury emissions that result from dental amalgam. These emission control technologies are scaled down versions of emission control systems used in the waste incineration industry.

Once the cremation is complete, all that remains are dry bone fragments, consisting mostly of calcium phosphorus and minor minerals. The operator typically uses a cremulator to pulverize the "cremains" into grains of sand and dry bone chips.⁴ Those cremains are then transferred to a vase or other holding vessel.

Air Emissions from Crematories

Cremation can produce emissions of fly ash, smoke, gases, and odor. Odor and visible emissions can be objectionable to many people on aesthetic grounds. A poorly designed retort with inadequate turbulence, temperatures, and residence time can result in objectionable emissions. Visible and odorous emissions can best be controlled by good retort design. An afterburner in the secondary chamber of the retort compensates for any deficiencies in the design of the primary chamber to minimize air contaminants. As described below in the air quality regulatory requirements section, the Bay Area Air Quality Management District (BAAQMD) requires that cremation retorts include a secondary chamber with combustion temperatures of 1500°F or greater to minimize odors, visible emissions, and criteria pollutant emissions.

Almost all retorts use natural gas as the preferred cremation fuel. **Table 1** shows the emission factors for criteria pollutants emitted during cremations. Criteria pollutants are chemical compounds for which federal and state ambient standards have been set. They include particulate matter (PM10), nitrous oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), and precursor organic compounds (POCs). The emission factors shown in Table 1 include criteria pollutants emitted by natural gas combustion and by body and case combustion.⁵

TABLE 1
CRITERIA POLLUTANT EMISSION FACTORS FOR CREMATORIES

Pollutant	Natural Gas Combustion (pounds per million cubic feet of natural gas burned)	Body and Case Combustion (pounds per ton)
PM10	7.6	1.13
NO _x	100	3.56
CO	84	2.95
SO ₂	0.6	2.17
POC	5.5	2.99

NOTE: Emission factors are as recommended by BAAQMD in its Permit Handbook. Natural gas combustion emissions are in terms of pounds of pollutant per million cubic feet of gas burned. Body and case (casket, bag, or box) combustion are in terms of pounds of pollutant per ton of body and case cremated.

⁴ Lee, M.K. Carol, 2012. BAAQMD Permit Handbook 11.6 Crematories.

⁵ Case includes wood casket, cardboard casket, or body bag.

Table 2 shows the toxic air contaminant (TAC) emission factors for crematories. Unlike criteria pollutants, TACs are pollutants for which no California or federal ambient standards have been set. TACs are pollutants that can pose health risks, depending on the dosage. The TACs emission factors shown in Table 2 are those recommended by the BAAQMD. Except for three TACs, all of the emission factors shown in Table 2 are based on the U.S. Environmental Protection Agency's (EPA's) Factor Information REtrieval (FIRE) Data System.⁶ Formaldehyde and acetaldehyde emission factors are based on data developed by the California Air Resources Board (CARB).⁷ Mercury emission factors are based on a report prepared by BAAQMD.⁸

**TABLE 2
TOXIC AIR CONTAMINANT EMISSION FACTORS FOR CREMATORIES**

Toxic Air Contaminant	Emission Factor (pounds/body)
Acetaldehyde	1.3E-4
Arsenic	3.0E-5
Antimony	3.0E-5
Beryllium	1.4E-6
Cadmium	1.1E-5
Chromium, hexavalent	1.4E-5
Copper	2.7E-5
Formaldehyde	3.4E-5
Hydrogen chloride	7.2E-2
Hydrogen fluoride	6.6E-4
Lead	6.6E-5
Mercury	3.4E-3 (annual average) 1.3E-2 (acute average)
Nickel	3.8E-5
Selenium	4.4E-5
Chlorinated dibenzodioxins and furans (expressed as 2,3,7,8 TCDD equivalents)	1.4E-9
Polycyclic aromatic hydrocarbons (PAHs) [expressed as benzo(a)pyrene equivalent]	4.9E-8

NOTE: Emission factors are as recommended by BAAQMD in its Permit Handbook. Emission factors are in terms of pounds of pollutant emitted per body cremated.

Health Risks Resulting from Crematory Operations

TACs are a defined set of airborne pollutants that pose a potential hazard to human health. The potential health effects associated with TACs are grouped into short- and long-term health impacts. Short-term effects include eye watering, persistent cough, throat pain, and headaches. Long-term impacts include cancer, birth defects, neurological damage, asthma, bronchitis and/or genetic damage. Health risks are typically grouped into three categories: short-term or acute risks

⁶ EPA, 2014. EPA WebFire. Available at: <http://cfpub.epa.gov/webfire/> Updated June 6, 2014.

⁷ CARB, 1992. Evaluation Test on Two Propane Fired Crematories Camellia Memorial Lawn Cemetery. Test Report No. C-90-004.

⁸ Lundquist, J. 2012. Mercury Emissions from the Cremation of Human Remains. BAAQMD, September 12, 2012.

(1 to 8-hour exposure), long-term or chronic risks (annual exposure), and long-term carcinogenic risks (up to 70 year exposure).

For evaluation purposes, the health effects of TACs are quite diverse and are assessed locally rather than regionally. TACs are separated into carcinogens and non-carcinogens based on the nature of the physiological effects associated with exposure to the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per million exposed individuals.

Non-carcinogenic substances differ from carcinogens in that there is assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis. Acute and chronic exposure to non-carcinogens is expressed as a hazard index (HI), which is the ratio of expected exposure levels to an acceptable reference exposure level (REL).⁹

TACs are primarily regulated through State and local risk management programs. These programs are designed to eliminate, avoid, or minimize the risk of adverse health effects from TAC exposure. A chemical becomes a regulated TAC in California based on designation by the California Office of Environmental Health Hazard Assessment (OEHHA). OEHHA derives cancer potencies and RELs for individual TACs based on the current scientific knowledge that considers possible differential effects on infants, children, and other sensitive subpopulations, as required by the Children's Environmental Health Protection Act.¹⁰

Mercury Exposure

Table 2 above lists the TACs that BAAQMD considers to be of most concern for crematories. Although each of the TACs shown in Table 2 have specific health risks, the pollutant of most concern for crematories is mercury. This is evident for several reasons. First, BAAQMD has developed a crematory emission factor for mercury that is specific to the San Francisco Bay Area Air Basin (SFBAAB).¹¹ Also, the California Air Pollution Control Officers Association (CAPCOA) has prepared a draft report that focuses solely on mercury emissions from crematories.¹² Finally, studies in other states that are investigating crematory emissions focus primarily on mercury emissions.¹³⁻¹⁴⁻¹⁵

Mercury is a concern because its emission rate is high for crematories and because mercury poses specific acute and chronic health risks for infants and children. Mercury, however, does not pose a carcinogenic health risk.

⁹ BAAQMD, 2011. BAAQMD CEQA Guidelines Updated May 2011.

¹⁰ Senate Bill 25, Escutia, Chapter 731, Statutes of 1999, Health and Safety Code Sections 39669.5 et seq.

¹¹ Lundquist, J. 2012. Mercury Emissions from the Cremation of Human Remains. BAAQMD, September 12, 2012.

¹² CAPCOA, 2014. Draft Report Describing Mercury Emitted from Crematories, Potential Health Risks, and Risk Reduction Measures.

¹³ Tetra Tech EM Inc. 2007. Pollution Prevention Crematoria Project Final Report. Prepared for Colorado Department of Public Health and Environment.

¹⁴ Georgia Senate Crematoria Study Committee, 2012.

¹⁵ Mari, M. and J. L. Domingo. 2010. Toxic emissions from crematories: A review. In *Environment International* 36 (2010) 131-137.

In 2008, OEHHA reevaluated the toxicity of mercury and lowered the one-hour REL from 1.8 to 0.6 $\mu\text{g mercury}/\text{m}^3$, and set an eight-hour REL of 0.06 $\mu\text{g mercury}/\text{m}^3$.¹⁶ OEHHA had also previously established a chronic (annual) mercury REL of 0.03 $\mu\text{g}/\text{m}^3$. Consequently, a crematory that results in mercury concentrations at sensitive receptors exceeding 0.6 $\mu\text{g}/\text{m}^3$ for the one-hour average, 0.06 $\mu\text{g}/\text{m}^3$ for the eight-hour average, or 0.03 $\mu\text{g}/\text{m}^3$ for the annual average would result in significant health risks. These risks would need to be reduced through the use of mitigation measures.

Mercury has caused particular concern among some communities located near crematory operations. Most mercury emissions from crematories are associated with dental amalgam fillings of cremated decedents. Although various internal organs of the human body contain mercury, this amount is considered negligible compared to the amount of mercury in bodies with amalgam fillings. When mercury is burned, it becomes a colorless, odorless gas. Mercury exposure has the potential to cause a variety of health problems, including harm to the brain and kidneys. Pregnant women and young children are especially vulnerable to harm from mercury exposure, because exposure can adversely affect neurological development in developing fetuses and children.

Elemental mercury exposures can adversely affect several organ systems. The effects of acute, high-level inhalation exposures first appear in the lungs as pulmonary dysfunction, and is often followed by respiratory failure leading to death. At lower levels of exposure, the kidneys, brain, and especially the developing brain, are more sensitive targets. Short-term maternal exposure to mercury vapor during pregnancy may result in long lasting neurobehaviorial effects in the offspring, and the effects upon which the acute REL is based.

Chronic, low-level exposures also adversely affect the central nervous system and manifest as motor deficits (tremors, unsteady gait, and performance decrements), mood changes (irritability, nervousness), poor concentration, short-term memory deficits, tremulous speech, blurred vision, paresthesia, and decreased nerve conduction. Renal and cardiovascular functions are also impaired with long-term exposure.¹⁷

Other TACs

As stated above, of all the TACs emitted by crematories, mercury typically represents the pollutant of greatest concern. Mercury poses an acute and chronic health risk. However, other TACs emitted by crematories also pose health risks. **Table 3** shows the type of health risks posed by each of the TACs having crematory emission factors identified by BAAQMD. Some of the pollutants, such as acetaldehyde and arsenic, pose acute, chronic, and carcinogenic health risks. Others, such as lead and PAHs, pose carcinogenic risks but not acute or chronic risks.

¹⁶ CAPCOA, 2014.

¹⁷ California Office of Environmental Health Hazard Assessment. 2008. Technical Support Document (TSD) for Noncancer Reference Exposure Levels (RELs). Appendix D. Individual Acute, 8-hour, and Chronic REL Summaries.

**TABLE 3
TYPE OF HEALTH RISKS FROM TOXIC AIR CONTAMINANTS EMITTED BY CREMATORIES**

Toxic Air Contaminant	Acute	Chronic	Carcinogenic
Acetaldehyde	Yes, 1- and 8-hour	Yes	Yes
Arsenic	Yes, 1- and 8-hour	Yes	Yes
Antimony	No	No	No
Beryllium	No	Yes	Yes
Cadmium	No	Yes	Yes
Chromium, hexavalent	No	Yes	Yes
Copper	Yes	No	No
Formaldehyde	Yes, 1- and 8-hour	Yes	Yes
Hydrogen chloride	Yes	Yes	No
Hydrogen fluoride	Yes	Yes	No
Lead	No	No	Yes
Mercury	Yes, 1- and 8-hour	Yes	No
Nickel	Yes, 1- and 8-hour	Yes	Yes
Selenium	No	Yes	No
Chlorinated dibenzodioxins and furans (expressed as 2,3,7,8 TCDD equivalents)	No	Yes	Yes
Polycyclic aromatic hydrocarbons (PAHs) [expressed as benzo(a)pyrene equivalent]	No	No	Yes

NOTE: Based on information from the California Office of Environmental Health Hazard Assessment.¹⁸

A TAC emitted by a crematory may not result in a significant health risk even though it poses one or more types of health risk. This is because health risks are based on the amount of TACs emitted by a crematory and the resulting concentrations at sensitive receptors.

Using information developed by BAAQMD for a proposed crematory in San Lorenzo, approximately 2,275 cremations would result in cancer risks that exceed BAAQMD's threshold.¹⁹ For this same crematory, 556 cremations would result in health hazards exceeding the acute threshold. This example illustrates a key point. For crematories, a smaller number of cremations triggers the acute health risk threshold compared to the cancer threshold. For this proposed crematory, it would take four times as many cremations to exceed the carcinogenic risk threshold as compared to the acute hazard threshold.

For any individual crematory, the acute health threshold is typically triggered by a lower number of cremations as compared to the carcinogenic threshold. However, the total number of cremations that triggers the thresholds can vary widely based on several factors. These include:

- Emission rates, which are a function of the number of cremations performed per hour, per day and per year,

¹⁸ Office of Environmental Health Hazard Assessment, 2014. Air Toxicology and Epidemiology. Available at: http://oehha.ca.gov/air/toxic_contaminants/index.html

¹⁹ BAAQMD, 2009. Draft Engineering Evaluation Report, Grissom's Chapel and Mortuary.

- Site topography,
- Meteorological conditions,
- Distance to sensitive receptors, and
- Crematory specific emission parameters such as exhaust stack height, exit velocity, and exhaust temperature.

Air Quality Regulatory Requirements Applicable to Crematories in the San Francisco Bay Area

BAAQMD regulates air emissions within the eight counties of the SFBAAB, which includes Alameda County and the City of Oakland. As part of its air quality responsibilities, BAAQMD has developed regulations that apply to crematories. These regulations apply in two ways: through air permitting and through the California Environmental Quality Act (CEQA).

Air Permitting

Prior to construction, an applicant wishing to install a crematory must first prepare and submit an Authority to Construct (ATC) permit application as required by BAAQMD's Regulation 2, Rule 2 – New Source Review. BAAQMD then reviews the ATC application to ensure that the project will comply with established air emission rules and regulations. Crematories must demonstrate that they will comply with BAAQMD's Regulation 6, which limits particulate matter emissions, and Regulation 8, which limits POC emissions.

The ATC typically requires a health risk screening analysis (HRSA) to ensure that the project would not cause or contribute to significant health risks. For the HRSA, BAAQMD multiplies the emission factor for each TAC (pounds of TAC per body cremated) by the number of bodies cremated per year to determine the total pounds of TAC that would be emitted per year. The pounds per year value is compared to the BAAQMD's trigger level for that TAC. If the trigger levels are exceeded for one or more TACs, BAAQMD conducts a toxic risk screening analysis.²⁰

Table 4 shows a hypothetical HRSA assuming 1,500 bodies cremated per year. To obtain the estimated pounds per year, the emission factors are multiplied by 1,500. As shown in Table 4, the HRSA trigger levels would be exceeded for arsenic, chromium, and mercury. Consequently, a crematorium that plans on cremating 1,500 bodies per year would trigger BAAQMD's toxic risk screening analysis. BAAQMD would then use dispersion modeling to determine whether the project would result in ambient TAC concentrations that exceed the acute or chronic hazard indices of one or the cancer risk threshold of 10 in a million.

²⁰ BAAQMD, 2010. BAAQMD Air Toxics NSR Program Health Risk Screening Analysis (HRSA) Guidelines.

**TABLE 4
HYPOTHETICAL HEALTH RISK SCREENING ANALYSIS**

TAC Compounds	Emission Factors (pounds per body)	Crematory Emissions Pounds/Year (assumes 1,500 bodies cremated per year)	Trigger Levels (pounds per year)
Acetaldehyde	1.3E-4	1.95E-01	7.20E+01
Arsenic	3.0E-5	4.50E-02*	2.50E-02
Antimony	3.0E-5	4.50E-02	7.70E+00
Beryllium	1.4E-6	2.10E-03	1.40E-02
Cadmium	1.1E-5	1.65E-02	4.60E-02
Chromium, hexavalent	1.4E-5	2.10E-02*	1.30E-03
Copper	2.7E-5	4.05E-02	4.60E+02
Formaldehyde	3.4E-5	5.10E-02	3.30E+01
Hydrogen chloride	7.2E-2	1.08E+02	1.40E+03
Hydrogen fluoride	6.6E-4	9.90E-01	1.10E+03
Lead	6.6E-5	9.90E-02	1.60E+01
Mercury	1.1E-2	1.65E+02*	5.80E+01
Nickel	3.8E-5	5.70E-02	7.30E-01

* Denotes emissions that exceed trigger levels.

BAAQMD's HRSA guidelines state that any HRSA shall be completed by following procedures described in the OEHHA Guidelines adopted in 2003 and updated in 2009.^{21,22,23} OEHHA's guidelines contain several sections that identify the overall methodology, the exposure assessment assumptions and procedures, and the health effects data (cancer potency factors and acute and chronic RELs).

To obtain the ATC permit from BAAQMD, a typical crematory project would also need to determine whether it is subject to best available control technology (BACT) or toxics BACT (T-BACT). BACT is required if emissions of PM10, POC, NOx, CO, or SO₂ emissions exceed 10 pounds per day. For NOx, and SO₂, BAAQMD requires as BACT that crematories use natural gas as an auxiliary fuel. For PM10, POC, and CO, BAAQMD considers BACT for crematories to be BAAQMD approved design and operation, which typically involves secondary chamber combustion of greater than 1500°F.²⁴ T-BACT is required for projects that result in an incremental cancer risk of more than one, but less than ten in a million. T-BACT would be required to reduce the cancer risk to 10 per million or less.

²¹ OEHHA, 2003. OEHHA Health Risk Assessment Guidelines for Air Toxics Hot Spots Program.

²² OEHHA and CARB, 2003. Air Resources Board Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk

²³ OEHHA, 2009. Technical Support Document for Cancer Potency Factors: Methodologies for derivation, listing of available values, and adjustments to allow for early life exposures.

²⁴ BAAQMD. Undated. BAAQMD Permit Handbook and BACT/TBACT Workbook on the Web. Available: <http://hank.baaqmd.gov/pmt/bactworkbook/>

In addition, if total crematory facility emissions of POC and NOx are less than 10 tons per year, emission offsets are not required. Otherwise, the crematory applicant would need to purchase emission offsets.

If crematory projects are considered to be ministerial under BAAQMD's Regulation 2-2-311, then they are not subject to CEQA review by BAAQMD. The determination of whether a project is ministerial consists of an engineering review to determine if the project requires only the application of standard permit conditions and standard emission factors and therefore is not discretionary as defined by CEQA.²⁵ A crematory, however, may still be subject to CEQA if it would be subject to discretionary permitting authority by another public agency, such as a city or county.

After BAAQMD has issued the ATC permit, the crematory can be constructed. If the project is subject to CEQA, however, BAAQMD will not issue the ATC permit until the project obtains CEQA clearance. Once the ATC permit has been issued, and the project has been constructed, BAAQMD conducts a review to ensure that the constructed crematory is consistent with the ATC permit. If the project as installed is consistent with the ATC permit, then BAAQMD then issues the permit to operate (PTO).

CEQA

BAAQMD has developed thresholds and guidance for conducting health risk assessments under CEQA.^{26,27} **Table 5** lists those thresholds. The City of Oakland's adopted threshold for cancer risks at existing sensitive receptors when siting a new (single) stationary source is 10 in one million, consistent with BAAQMD's standard. BAAQMD will not issue a permit for a new stationary source operator if, after incorporation of TBACT, the risk exceeds 10 in one million. Although BAAQMD's thresholds include a cumulative health risk assessment for CEQA, BAAQMD does not require an evaluation of cumulative health risks to obtain an air permit.

To evaluate whether a project would result in significant health risks under CEQA, BAAQMD recommends used a phased approach for evaluating a project's health risks. A Tier 1 screening level analysis is conducted first. If the screening analysis shows significant health risks, more complex Tier 2 and 3 analyses can be conducted. Under each level of analysis, TAC concentrations and resulting health risks are estimated and compared to the thresholds shown in **Table 5**. If the most refined analysis shows significant health risks, then mitigation measures can be used to reduce risks. Under CEQA, a crematory with health risk thresholds exceeding the values shown in **Table 5** would be considered significant and would need to be mitigated.

²⁵ BAAQMD, 2009. Draft Engineering Evaluation Report, Grissom's Chapel and Mortuary.

²⁶ BAAQMD, 2011. BAAQMD CEQA Air Quality Guidelines, Updated May 2011.

²⁷ BAAQMD, 2012. Recommended Methods for Screening and Modeling Local Risks and Hazards. May. Version 3.0.

**TABLE 5
BAAQMD'S CEQA RISK AND HAZARDS THRESHOLDS**

Risk Type	Cancer Risk	Chronic Hazard Index	Acute Hazard Index	Ambient PM2.5 Increase
Project Specific – Construction and Operational	Exceeds 10 in a million	Exceeds 1.0 Hazard Index	Exceeds 1.0 Hazard Index	Exceeds 0.3 $\mu\text{g}/\text{m}^3$ (annual average)
Cumulative – Construction and Operational	Exceeds 100 in a million	Exceeds 10.0 Hazard Index	None	Exceeds 0.8 $\mu\text{g}/\text{m}^3$ (annual average)

NOTE: BAAQMD recommends the use of a 1,000-foot radius zone of influence from the property line of the source or receptor for both project specific and cumulative analyses. As part of its risk and hazards thresholds, BAAQMD also allows for the development of a Community Risk Reduction Plan. Non-compliance with a qualified (BAAQMD-approved) Plan is also considered a significant impact using BAAQMD's standards. To date, Oakland has not developed a Community Risk Reduction Plan.

Mitigation to Reduce Health Risks from Crematory Air Emissions

Several mitigation measures can be used to reduce emissions and associated health risks from crematories.

Extract Teeth

One mitigation measure involves removing amalgam fillings prior to cremation. This option would eliminate the primary source of crematory health risk. This option is controversial because under certain circumstances, amalgam removal can be considered illegal mutilation of a corpse. Additionally, removal of dental fillings is extremely difficult and outside the skillset of most morticians.

After a funeral home receives a body for cremation, it can be embalmed for showing during a funeral service or cremated immediately. If a body is prepared for viewing, the timing of tooth removal becomes a concern because any action that disrupts the structure or circulatory system of the face can impair embalming. Removing teeth before embalming can:

- create points where embalming or other fluids might leak,
- disturb the skin and capillaries that results in facial swelling or discoloration,
- leave spaces in the mouth that cause the cheeks to sink.

Tooth removal after embalming is also complicated because the jaw is typically wired shut for the viewing.²⁸

²⁸ Tetra Tech EM Inc. 2007. Pollution Prevention Crematoria Project Final Report. Prepared for Colorado Department of Public Health and Environment.

Require Buffer Zones

For new crematory facilities, one mitigation option involves locating cremation facilities in a commercial or industrial area with at least a 1,000-foot buffer between the facility and the closest sensitive receptor locations such as residences, schools, or hospitals. A larger buffer area may be required for proposed crematories that include several retorts with a high cremation capacity. The extent of the buffer area would depend on several factors, including the number of cremations per day, the site-specific meteorological conditions, and the emission stack parameters for each crematory retort.

Modify Operating Hours

Another option involves limiting crematory operating hours through air permit limits or CEQA mitigation. This strategy can be used to reduce hourly, daily, and/or annual emissions and associated health risks.

For example, during cremation, mercury emissions are assumed to be released during the first hour of cremation. Consequently, a permit limit or CEQA mitigation strategy that requires cremations to be offset by one hour would reduce the one-hour acute health risks associated with mercury. This option can only be used for crematories with more than one retort.

Also, limiting the number of annual cremations will reduce health risks from TACs that pose long-term chronic or carcinogenic risks.

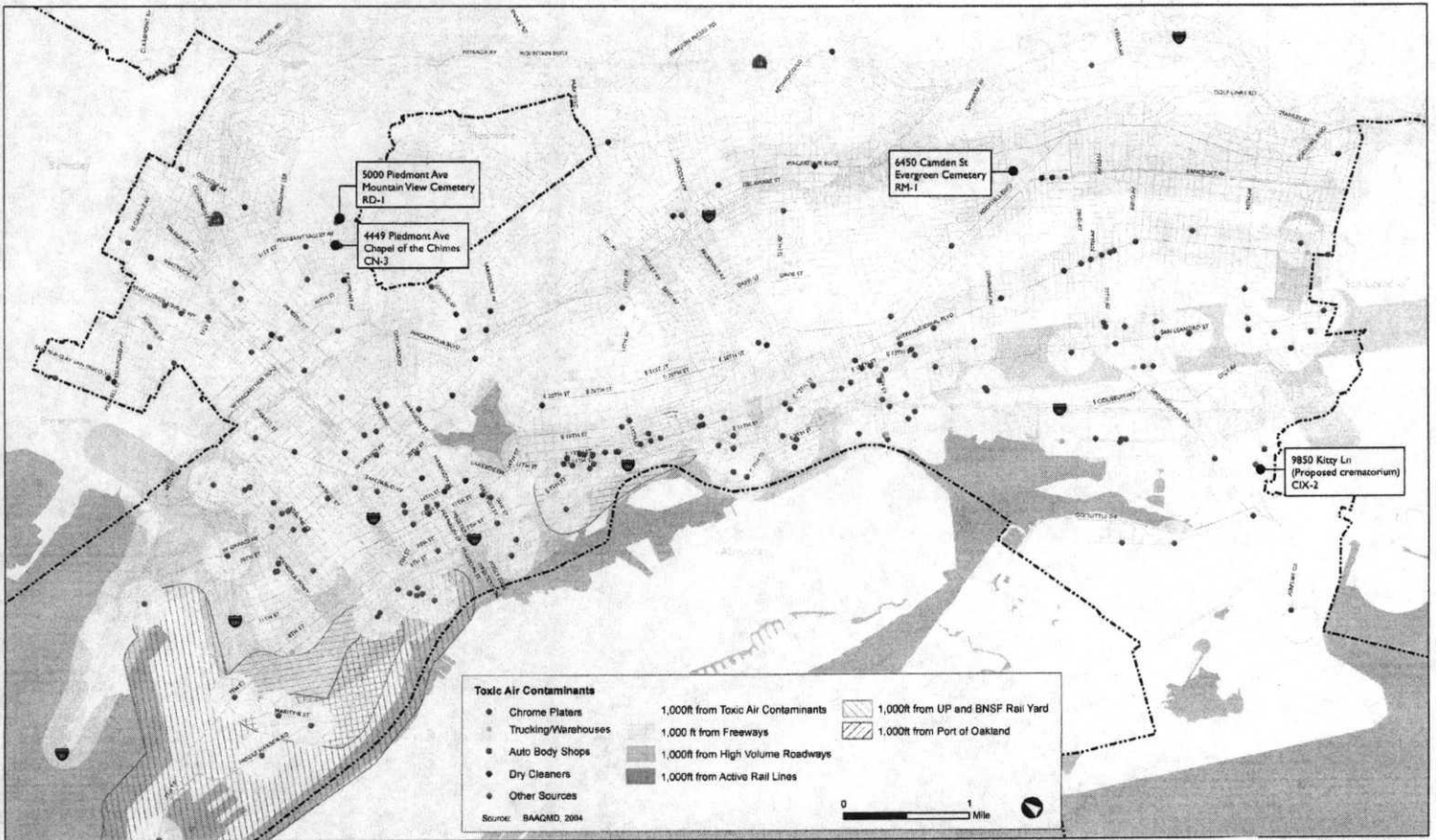
Modify Exhaust Stacks

In certain locations, crematory exhaust stacks can be relocated, stack heights can be increased, or exhaust velocity can be increased. By moving the emission stacks, the distance can be increased between emission release points and sensitive receptors, resulting in additional dispersion of pollutants. Similarly, by increasing stack heights and/or stack exhaust velocity, additional pollutant dispersion can be obtained, effectively reducing downwind pollutant concentrations and associated health risks.

Install Filtering Systems

In the United Kingdom and other European countries, crematories are commonly fitted with an adsorption and/or filtration system to capture mercury and other TACs prior to release from the stack. These systems are expensive, ranging from \$500,000 and higher. The average cost of a cremation furnace is approximately \$150,000.²⁹ To date, only a few filtration systems have been installed on crematories in the United States. The lack of such systems in the U.S. is due to their high cost and the lack of regulatory requirements.

²⁹ Mortuary Management, 2010. News Updates for the Week of October 13, 2010. Available at <http://mortuarymanagement.com/Rahill.html>.

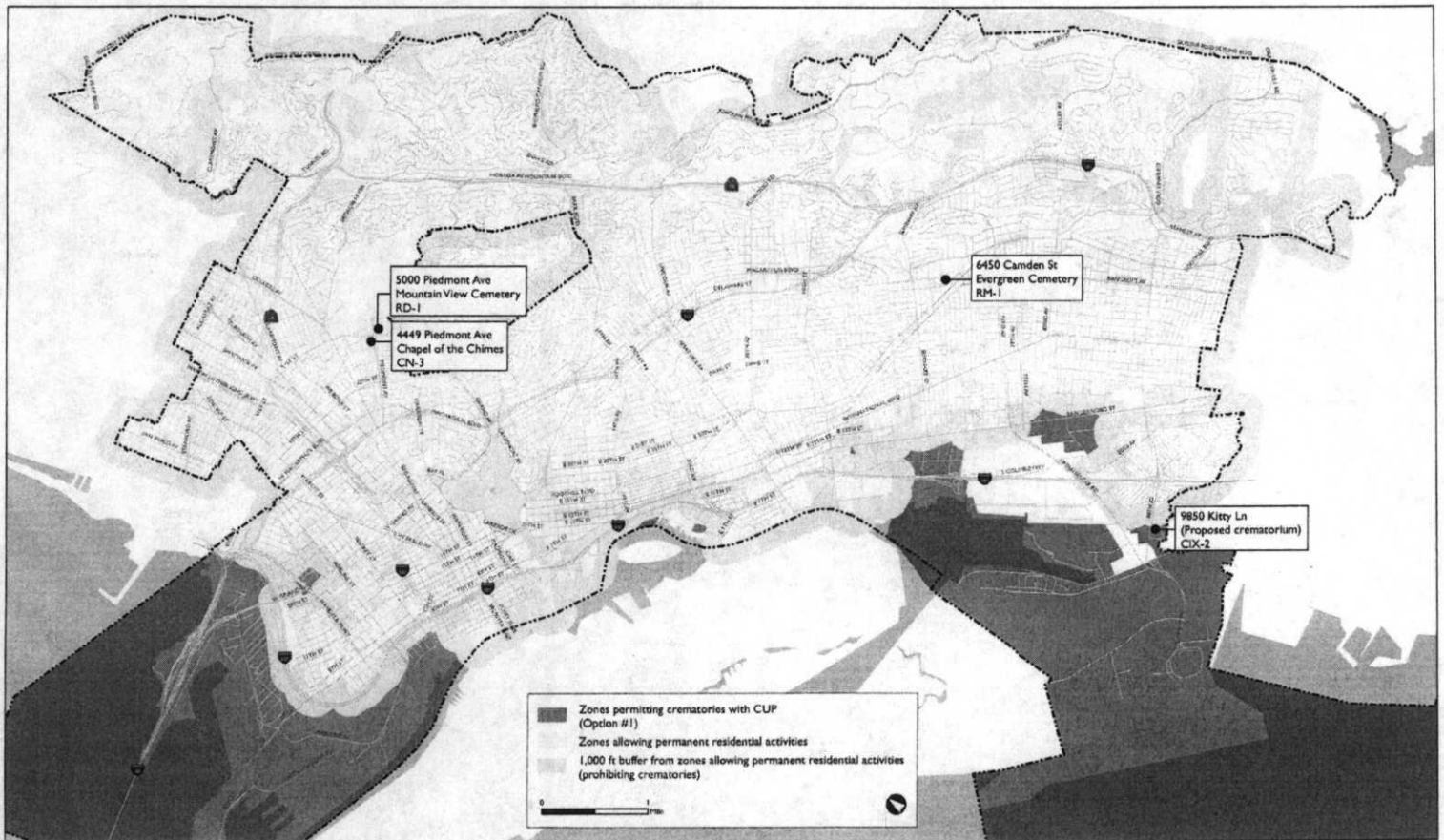


Planning & Building Department
October 2013



Toxic Air Contaminants

ATTACHMENT D



Proposed Zoning Regulations (Option #1) & Existing Crematoriums

ATTACHMENT E

"Cumulative Impacts in East Oakland: Findings from a Community-Based Mapping Study" (2008)

Foreword



Muntu Davis, MD., MPH
County Health Officer and Public Health Department Director
Alameda County

Imagine living in a city where you need a special public process to get permit approval to put in a community garden, something that will benefit health and well-being, but a business can get a city permit to open a business that will potentially expose residents to toxins throughout the year without any public process at all. Unfortunately, this is the exact situation facing East Oakland. A crematorium poised to be one of the biggest in the region received a permit from the City of Oakland to build in East Oakland with no notification or public process and no consideration of the health impact on the surrounding community. Crematoria emit a number of criteria¹ and toxic air pollutants known to exacerbate chronic respiratory conditions such as asthma and have been linked to cancer.² East Oakland is already overburdened by toxic pollution with residents suffering from one of the highest asthma rates in the State of California. The impact of an additional source of pollution is potentially devastating for the health and well-being of East Oakland residents.

Every community should be designed and built to promote and protect the health and well-being of its residents. Despite the ties between land use planning and health outcomes, processes determining how land is used can take place devoid of any consideration or review of public health impacts. This report by Communities for a Better Environment (CBE), "Cumulative Impacts in East Oakland: Findings from a community-based mapping study (2008)," lays out all of the existing threats assaulting East Oakland residents, underscoring the urgency behind community demands for stronger public processes and collaboration toward a healthier, sustainable and equitable future. It is imperative to consider health

¹ Criteria pollutants are six common air pollutants regulated by the US Environmental Protection Agency through the Clean Air Act. They are ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead and they have numerous human health effects, including respiratory symptoms, heart or lung diseases hospitalizations and premature death. More information available at:

<http://www.epa.gov/air/urbanair/>

Toxic air pollutants, also known as hazardous air pollutants, are pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. More information available at:

<http://www.epa.gov/air/toxicair/newtoxics.html>

² California Air Resources Board. 2009. Air Pollution and Health Fact Sheet. <http://www.arb.ca.gov/research/health/fs/fs1/fs1.htm>

and well-being, cumulative health impacts, environmental justice, equity and accountability as core values in development and include communities, particularly low income communities of color, in decisions that will impact them first and foremost.

We know that low-income communities of color bear the brunt of toxic pollution in East Oakland, Oakland and Alameda County. East Oakland is 93% people of color and a high poverty community (20% or more of the population live below poverty level) with pockets of higher concentration of poverty (30% or more of the population live below poverty level) and average household income of \$52,992.³ The concentration of health risks and low-income people of color in one place is the legacy of policies and practices, such as redlining, that limited people of color to living near sources of pollution. It is the legacy of planning processes that either excluded community voices or ignored them altogether, allowing a divide between land use and public health, and the results show in highways to break-up neighborhoods and harmful industrial uses near houses. It is the result of planning processes that permit pollution without public engagement.

These historic and present day practices are creating neighborhood conditions that leave residents facing many barriers and little access to opportunities to lead a healthy life. Neighborhoods are surrounded by industry, diesel truck routes, the international airport, and the 880 freeway. These sources produce air pollution, noise, and vibrations that may trigger asthma and exacerbates existing chronic health conditions.

East Oakland also has a lack of social and economic conditions needed for good health and well-being. On top of poverty and the associated difficulties just meeting basic needs for housing and transportation, East Oakland households face a high concentration of fast food, lack of access to fresh, affordable healthy foods, low graduation rates, and a crime and violence epidemic gravely impacting youth.

CBE's report shows that residents in the "Hegenberger Corridor" of East Oakland (a 1.5 square-mile area) are disproportionately burdened by pollution. CBE Staff and Community Leaders identified over 200 hazards, many that are considered "small" by regulatory thresholds, but add up to a significant impact on the health of residents and workers, particularly children under 5 years, seniors and people with existing health conditions. CBE also found land use incompatibilities that result in industrial pollution, particularly diesel particulate matter, sited in close proximity to residences, schools, parks, senior centers and churches. Pollution sources are literally next door neighbors with families.

Additionally, East Oakland is identified by the Bay Area Air Quality Management District as suffering some of the highest health risks from toxic air contaminants and is in the top 5% of statewide zip codes that are disproportionately burdened by multiple sources of pollution and vulnerability by the California Office of Environmental Health Hazard Assessment and the California Environmental Protection Agency.

Taken together, these and other health risks are called cumulative health impacts, and they are driving high rates of chronic health conditions and shortened lives. For instance, the rate of Emergency Department (ED) visits for asthma in East Oakland are 2.5 times higher than the Alameda County rate and one of the highest in the county and state, and among children under five years of age, the asthma

³ Alameda County Community, Assessment, Planning, Education and Evaluation Unit (CAPE). Source: Census 2010, American Community Survey 2007-11, American Community Survey 2009-11.

ED visit rate in East Oakland is more than two times the County rate.⁴ East Oakland has higher death rates than both Oakland and Alameda County for coronary heart disease deaths, stroke deaths, and lung cancer deaths, which are all linked to high outdoor air pollution levels.⁵ Financial stress has a physical, mental and emotional toll and can exacerbate disease and hypertension.⁶ The cumulative health impacts of these threats to health in East Oakland and the disease they drive are preventable hospitalizations and premature death. Our analysis shows that East Oakland residents have an average life expectancy of 75.7 years in East Oakland compared to 81.6 years in the Alameda County.

Given the existing cumulative health impact, the need for action to change current conditions and prevent present and future suffering is urgent. I commend CBE on their dedication to raising awareness of environmental justice and working to bring about change for East Oakland residents, like the "No [Diesel Engine] Idling" signs posted on San Leandro Street.

Our Department will continue to provide data, analyses, recommendations, and robust services to meet the health needs of communities like East Oakland. But that is not enough if we are to achieve our vision of an Alameda County where all people, regardless of who they are or their race, income, or neighborhood, have the same opportunities to be healthy.

This report shows that gaps in how regulators and decision-makers are tracking and monitoring pollution sources are driving cumulative health impacts. Furthermore, the permitting processes that are meant to protect health not rubber stamp pollution do not take into account the existing burden of disease. The presence of a disproportionate concentration of pollution, along with people with asthma, chronic lung disease, congestive heart failure, and other chronic conditions that are exacerbated by air pollution must factor into making evidenced-based decisions to create healthier communities. We will continue our partnership with CBE to improve the health and quality of life for East Oakland residents and hope others will join us in working towards a more equitable future for all. We will keep using our data to educate decision-makers to change systems and pass policies, like those recommended in this report, to consider health early on, to prevent harm, to better protect the public's health by reducing cumulative health impacts.

With gratitude and in unity,



Muntu Davis, MD, MPH

⁴ For Zip codes 94621 & 94603, the rate of asthma ED visits is 1,230 per 100,000 residents; the Alameda County rate is 553 per 100,000. The asthma ED visit rate for children is 2,048 per 100,000 (0-4 year-olds) compared to the Alameda County rate of 1,301 per 100,000. Asthma inpatient hospitalization rate is 339 per 100,000 residents; the county rate is 147 per 100,000. The childhood asthma hospitalization rate is 908 per 100,000; the county rate is 477 per 100,000. Source: ACPHD CAPE Unit with 2008-2010 data from California Office of Statewide Health Planning and Development (OSHPD).

⁵ For Zip codes 94621 & 94603 (East Oakland), the mortality rate of coronary heart disease is 143 per 100,000 residents; 116 per 100,000 in Oakland and 102 per 100,000 in Alameda County. The mortality rate of stroke in East Oakland is 65 per 100,000 residents; 47 per 100,000 in Oakland and 39 per 100,000 in Alameda County. The mortality rate of lung cancer in East Oakland is 52 per 100,000 residents; 40 per 100,000 in Oakland and 35 per 100,000 in Alameda County. Source: ACPHD CAPE Unit with 2008-2010 data from California Office of Statewide Health Planning and Development (OSHPD). These deaths are caused by multiple factors including stress, diet, physical activity, and indoor and outdoor air quality. High outdoor air pollution levels, from motor vehicles, refineries, and power plants, increase coronary heart disease deaths and stroke deaths, and increase lung cancer rates. Because lung cancer has such a high fatality rate, air pollution thus contributes to increased lung cancer deaths as well.

⁶ Choi, Laura. 2009. Financial Stress and Its Physical Effects on Individuals and Communities. Community Development Investment Review. Federal Reserve Bank of San Francisco. Vol. 5 (3): 120-122. Available at: http://www.frbsf.org/community-development/files/cdreview_issue3_09.pdf



Appendix: East Oakland Existing Cumulative Health Impacts

October 30, 2013

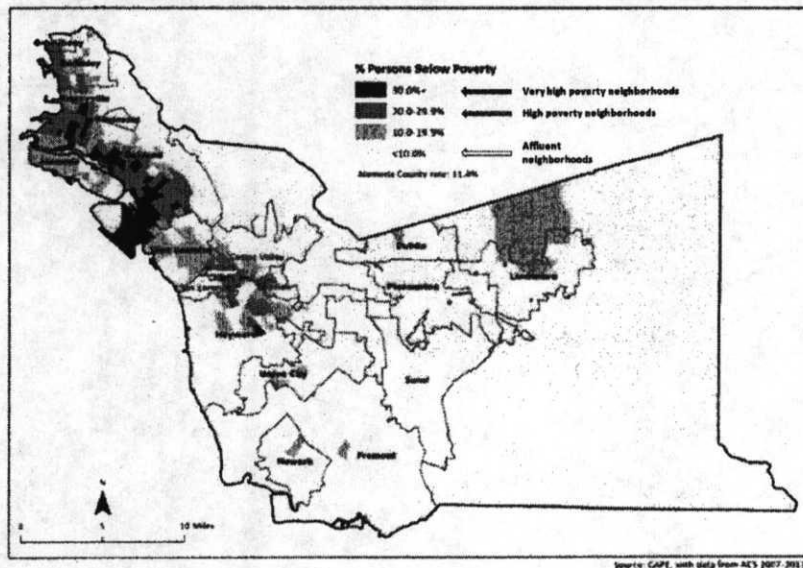
Alameda County Public Health Department

We know that East Oakland is suffering from existing cumulative health impacts. This appendix provides a more in depth look at the data summarized in the forward. It includes the most recent health information for East Oakland, especially as it relates to air quality issues. We begin by showing that it is low-income people of color who are most impacted by the cumulative health impacts in East Oakland.

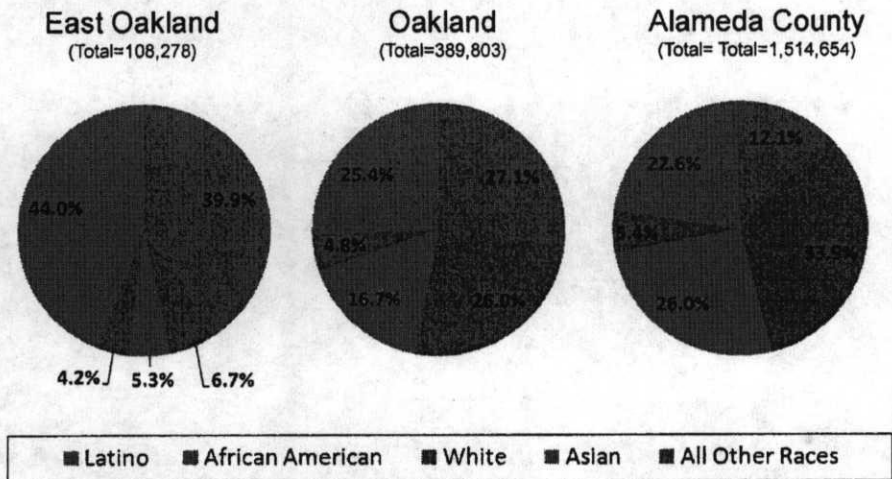
This handout was developed by the Alameda County Public Health Department CAPE Unit with help from the Place Matters Initiative.

Poverty High in East Oakland

In Alameda County, the highest levels of poverty – areas where 30% or more of residents live in poverty – are concentrated in certain places, including parts of West Oakland, East Oakland, and Hayward.



East Oakland Racial/Ethnic Composition



4
Source: Census, 2010

Health Risks Concentrated in Low Income Communities of Color

- In low-income communities of color like East Oakland, there is a lack of access to resources important for health, like grocery stores, and increased exposures to health risks, like dirty trucks.
- There is a long history of policies and practices in the US that led to the current situation facing low-income communities of color.
- Because this difference in access to opportunities for healthy living, people of color disproportionately suffer from chronic disease complications and deaths.
- The crematorium issue is one of the latest examples of a practice that increases East Oakland residents' exposure to toxics that harm health.

Example of Unfair Health Risk in Low-Income Communities of Color

Compared to people living in affluent neighborhoods of Alameda County, residents of very high poverty neighborhoods are:



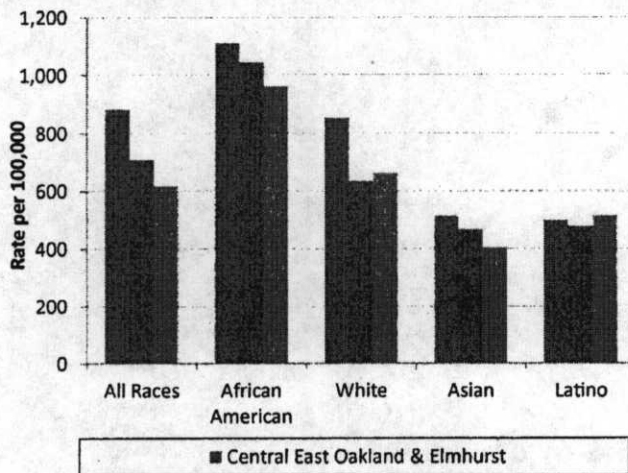
BURDENED BY A 4X HIGHER DENSITY OF
INDUSTRIAL CHEMICAL AND FUEL RELEASE SITES
THAT POLLUTE GROUNDWATER AND SOIL

83	Industrial chemical and fuel release sites per 100,000 residents in affluent neighborhoods
332	Industrial chemical and fuel release sites per 100,000 residents in very high poverty neighborhoods

Low-income neighborhoods and communities of color are unjustly burdened by a disproportionate number of hazardous facilities that pollute the ground water and soil with toxic contaminants, as described in Communities for a Better Environment's report "Cumulative Impacts in East Oakland: Findings from a Community-based Mapping Study" (2008).

The following slides include health data for East Oakland as compared to Alameda County. The following data shows the existing unfair cumulative health impacts in East Oakland.

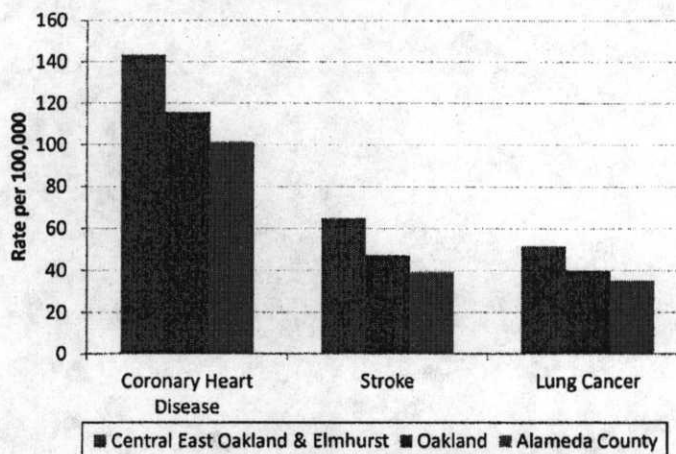
All-Cause Deaths by Race/Ethnicity in East Oakland



- East Oakland has higher death rates than both Oakland overall and Alameda County overall for most racial/ethnic groups. Its rates are 1.2 times the rate for Oakland overall, and 1.4 times the rate for Alameda County overall.

- Within East Oakland, Oakland overall, and Alameda County overall, African Americans have the highest all-cause death rates, 1.3 to 2.2 times the rate for other major racial/ethnic groups.

Increased Deaths in East Oakland Related to Air Pollution

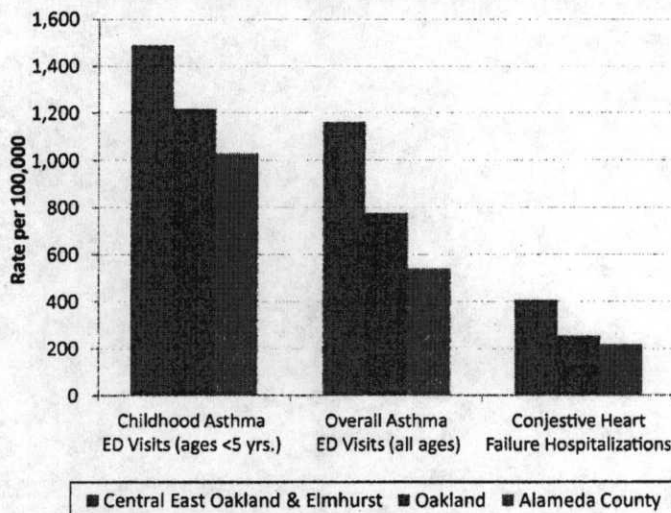


Source: Alameda County Vital Statistics Files, 2008-2010

- East Oakland has higher death rates than both Oakland and Alameda County for coronary heart disease deaths, stroke deaths, and lung cancer deaths.

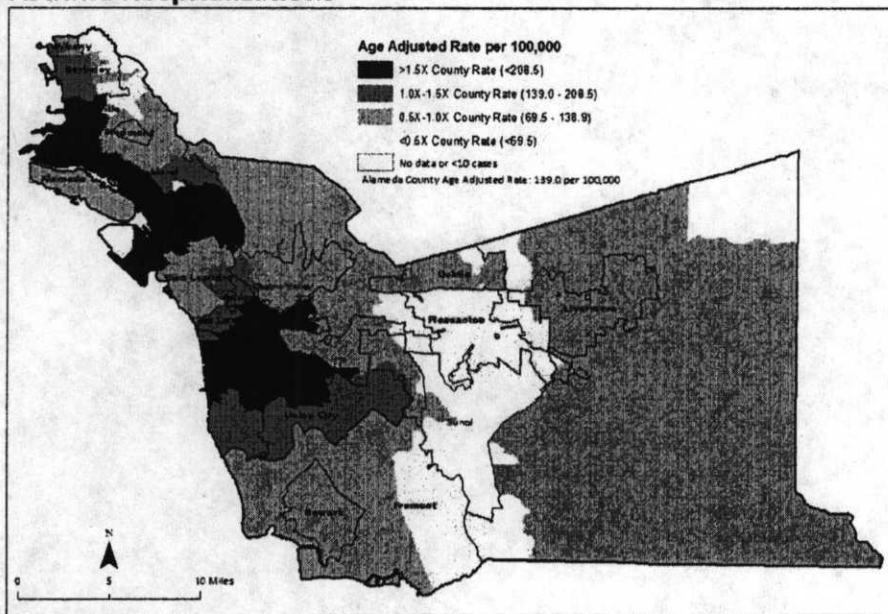
- These deaths are related to multiple factors including stress, access to healthy foods, opportunities to engage in physical activity, and indoor and outdoor air quality. High outdoor air pollution levels, from motor vehicles, refineries, and power plants, increase coronary heart disease deaths and stroke deaths, and increase lung cancer rates. Air pollution contributes to increased lung cancer deaths as well.

Higher Emergency Department (ED) Visits and Hospitalizations in East Oakland



East Oakland has higher Emergency Department and hospitalization rates than both Oakland overall and Alameda County overall for causes that are linked to air pollution, including childhood asthma, overall asthma, and congestive heart failure. Air pollution affects the cardiovascular system and pulmonary system by causing inflammation, blood clotting, reduced immune function, and cell damage through oxidative stress.

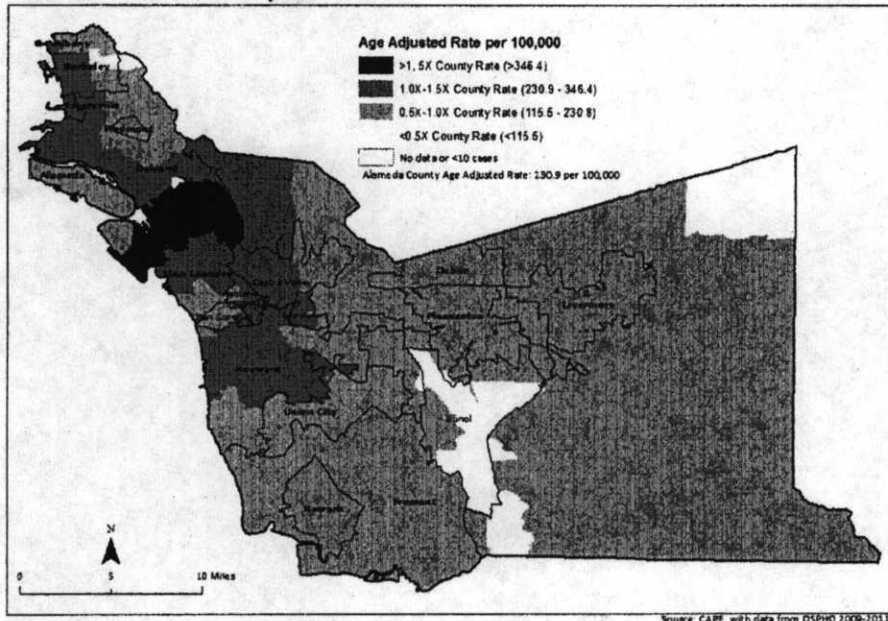
Asthma Hospitalizations



Asthma Hospitalizations

- The dark reddish-brown color represents the highest rates of asthma hospitalizations, and the darker orange-brown represents the next highest rates.
- Parts of East Oakland have some of the highest rates in the county.
- Over 2,100 asthma hospitalizations in Alameda County - 3rd highest rate in California and AC 50% above California rate
- We also know that Oakland ranked 39th "least healthy" out of 44 of the nation's largest metro areas in study by the National Center for Healthy Housing (2009) – 60% of housing units showed one or more health-related problems
- Air pollution contributes to increased asthma hospitalizations. In children, air pollution has been linked to onset of asthma and could negatively affect the long term development of the lungs. In adults and children, air pollution has been linked to increased asthma exacerbations, leading to emergency department visits and hospitalizations. Air pollution affects the pulmonary system by causing inflammation, reduced immune function, and cell damage through oxidative stress.

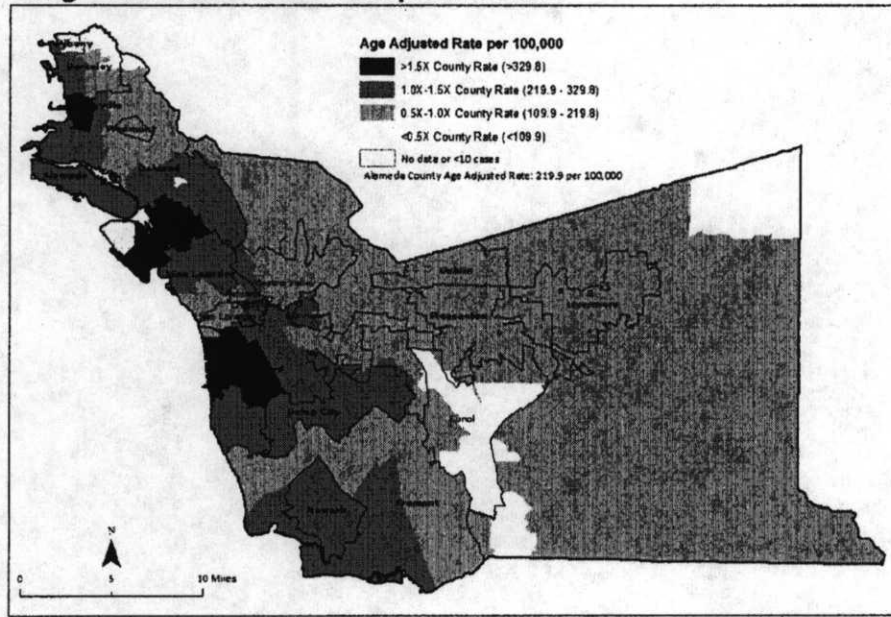
Stroke-Related Hospitalizations



Stroke-related Hospitalizations

- The dark reddish-brown color represents the highest rates of stroke-related hospitalizations, and the darker orange-brown represents the next highest rates. As we see, parts of East Oakland have some of the highest rates in the county.
- Air pollution contributes to increased stroke-related hospitalizations. Air pollution affects the cardiovascular system by causing blood clotting, and cell damage through oxidative stress.

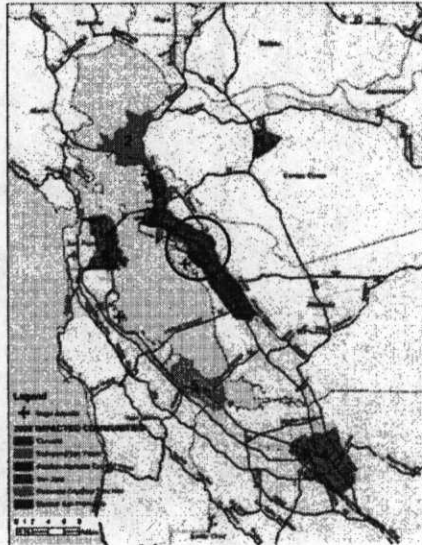
Congestive Heart Failure Hospitalizations



Congestive Health Failure Hospitalizations

- The dark reddish-brown color represents the highest rates of congestive heart failure hospitalizations, and the darker orange-brown represents the next highest rates. As we see, parts of East Oakland have some of the higher rates in the county.
- Air pollution contributes to increased congestive heart failure hospitalizations. Air pollution affects the cardiovascular system by causing blood clotting, and cell damage through oxidative stress.
- Note that congestive heart failure is a condition in which the heart is unable to provide sufficient pump action to maintain blood flow to meet the needs of the body. The heart is weakened to this state by a number of factors. One of these factors may be a preceding heart attack (which happens when blood flow to a part of the heart is blocked for a long enough time that part is damaged or dies), which high air pollution levels also contribute to through blood clotting.

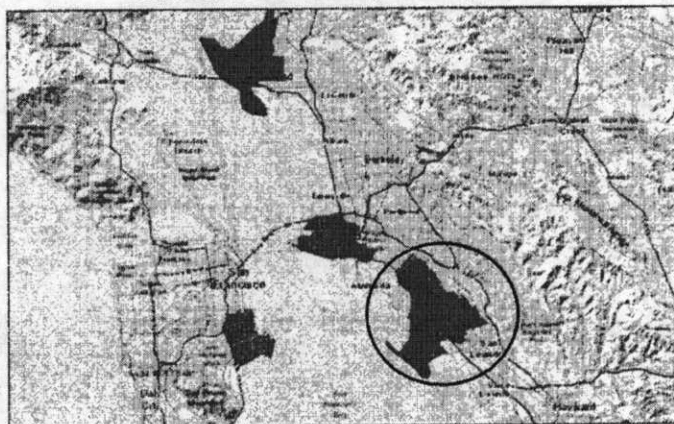
Community Air Risk Evaluation - communities with the highest health risks in the Bay Area



- This map shows identified communities that are likely to face the highest health risks from toxic air contaminants by the Bay Area Air Quality Management District's (BAAQMD or District), an air pollution control agency, Community Air Risk Evaluation (CARE) program. The circle represents in East Oakland.
- The methodology is based on identifying areas that (1) are close to or within areas of high Toxic Air Contaminant emissions, (2) have sensitive populations, defined as youth and seniors, with significant TAC exposures, and (3) have significant poverty.

Communities identified with highest burden of pollution in the State

CalEnviroScreen 1.1 Results: Highest Scoring ZIP Codes



- This is a partial map of the top 5% of statewide Zip codes (in blue) and the top 6-10% of statewide zip codes (in orange) that are disproportionately burdened by multiple sources of pollution.
- The circle represents the area in East Oakland.
- The Cal Enviro Screen tool is by the California Office of Environmental Health Hazard Assessment in Cal EPA.

All of these health outcomes add up to shortened lives.

Compared to a White child born in the affluent Oakland Hills...



...an African American child born in East Oakland can expect to live 15 fewer years.

Photo Source: The California Endowment, Health Happens Here

We Want to Work with You to achieve Our Vision of Health Equity



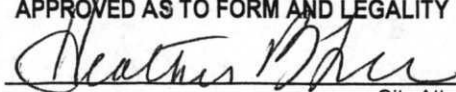
**Everyone in Alameda County –
no matter who you are, where you live,
how much money you make,
or the color of your skin –
has opportunities to lead
a healthy, fulfilling, and productive life.**

For questions or more information:

Anna Lee
Local Policy Coordinator
Alameda County Public Health Department
anna.lee@acgov.org
510-267-8019

FILED
OFFICE OF THE CITY CLERK
INTRODUCED BY COUNCIL MEMBER _____

APPROVED AS TO FORM AND LEGALITY


City Attorney

2014 JUL 10 PM 12:39

OAKLAND CITY COUNCIL

ORDINANCE NO. _____ C.M.S.

**AN ORDINANCE, RECOMMENDED BY THE PLANNING COMMISSION,
AND AS DIRECTED BY CITY COUNCIL UNDER EMERGENCY
ORDINANCE NO. 13222 C.M.S., TO AMEND THE PLANNING CODE TO
ESTABLISH PERMANENT REGULATIONS PERTAINING TO
CREMATORIES WITHIN THE CITY OF OAKLAND**

WHEREAS, on May 15, 2012, the City Council adopted Emergency Ordinance Number 13115 C.M.S., to establish interim controls for crematoria, requiring a Major Conditional Use permit to establish a crematorium for a period of one year until May 10, 2013 or until permanent regulations are adopted regulating crematories; and

WHEREAS, on May 7, 2013, the City Council adopted Emergency Ordinance Number 13158 C.M.S., to extend interim controls for crematories ("Interim Controls"), requiring a Major Conditional Use permit to establish a crematorium for a period of 180 days until November 3, 2013 or until permanent regulations are adopted regulating crematories and directed staff to bring forth proposed permanent regulations pertaining to crematories; and

WHEREAS, on October 15, 2013, the City Council adopted Emergency Ordinance Number 13196 C.M.S., to extend interim controls for crematories, requiring a Major Conditional Use permit to establish a crematorium for a period of one year until April 13, 2014 or until permanent regulations are adopted regulating crematories and directed staff to bring forth proposed permanent regulations pertaining to crematories; and

WHEREAS, on April 1, 2014, the City Council adopted Emergency Ordinance Number 13222 C.M.S., to extend interim controls for crematories, requiring a Major Conditional Use permit to establish a crematorium for a period of 180 days year until September 24, 2014 or until permanent regulations are adopted regulating crematories and directed staff to bring forth proposed permanent regulations pertaining to crematories; and

WHEREAS, currently crematories are classified as General Manufacturing Industrial Activities pursuant to Section 17.10.570 of the Planning Code, and are outright permitted activities within the M-30 General Industrial Zone, M-40 Heavy Industrial Zones, and IG General Industrial Zones. Crematoria are outright permitted within the CIX-1 and CIX-2 Commercial Industrial Zones if outside of 300 feet from a residential zone. No discretionary planning permits or public notice are required prior to issuance of a building permit for a crematorium within these industrial zones. Only if located within 300 feet of a residential zone in the CIX-1 and CIX-2 zones is a conditional use permit required.; and

WHEREAS, the issue of whether it is appropriate to allow crematories as an outright permitted

use within industrial zones under the use classification of General Manufacturing activities has been raised in the context of public exposure to certain types of pollutants and emissions and the ability to review those impacts; and

WHEREAS, except as provided in the Interim Controls, the City permits outright, without any discretionary planning review, crematories under the classification of a General Manufacturing Industrial activity, within the M-30 General Industrial Zone, M-40 Heavy Industrial Zones, and IG General Industrial Zones. Crematoria are outright permitted within the CIX-1 and CIX-2 Commercial Industrial Zones if outside of 300 feet from a residential zone; and

WHEREAS, crematories emit particulate matter falling under the category of toxic pollutants; and

WHEREAS, on May 15, 2012, the City Council received, and on August 29, 2012 the Planning Commission and City staff received a letter from the Alameda County Public Health Department stating that cremators used within crematories emit a number of criteria air pollutants such as particulate matter, nitrogen compounds, sulfur compounds, carbon monoxide and precursor organic compounds and toxic emissions such as acetaldehyde, arsenic, beryllium, cadmium, hexavalent chromium, copper, formaldehyde, hydrogen chloride, hydrogen fluoride, lead, mercury, nickel, selenium, chlorinated dibenzodioxins and furans, and polycyclic aromatic hydrocarbons/ benzo (a) pyrene equivalents; and

WHEREAS, a cremation center can displace commercial activities and negatively affect the economic revitalization of any community in which a crematorium would locate; and

WHEREAS, a crematorium in any part of Oakland has the potential to impact the health of our neighborhoods, many of which already suffer from highly disproportionate rates of illness related to air pollution in comparison to the rest of Alameda County; and

WHEREAS, the provisions of the California Environmental Quality Act (CEQA) have been satisfied and the proposal relies on the following environmental documents to satisfy any requirements under the California Environmental Quality Act (CEQA): the previously certified Final Environmental Impact Report for the Land Use and Transportation Element of the General Plan, adopted in 1998 (General Plan EIR); and

WHEREAS, as a separate and independent basis, the proposal is also exempt from CEQA under several CEQA Guidelines: section 15061(b)(3), known as the "General Rule," that states a project is exempt from CEQA if there is no possibility that the activity in question will have a significant effect on the environment; and

WHEREAS, on June 18, 2014, at a duly noticed public hearing, the Planning Commission recommended approval of proposed Planning Code Amendments; and

WHEREAS, after a duly noticed public meeting on July 22, 2014 the Community and Economic Development Committee voted to recommend the proposal to the City Council; and

WHEREAS, the City Council held a duly noticed public hearing on July 29, 2014 to consider the proposal; now therefore

THE COUNCIL OF THE CITY OF OAKLAND DOES ORDAIN AS FOLLOWS:

Section 1. The City Council finds and determines that the forgoing recitals to be true and correct and hereby makes them a part of this ordinance.

Section 2. Prior to adopting this Ordinance, the City Council independently finds and determines that this action complies with the California Environmental Quality Act (CEQA) because the City is relying on the previously certified Final Environmental Impact Report (EIR) for the Land Use and Transportation Element of the General Plan (1998); the Oakland Estuary Policy Plan EIR (1998); the EIRS for the West Oakland Central City East, Coliseum and Oakland Army Base Redevelopment Areas and no further environmental review is required under CEQA Guidelines sections 15162 and 15163. On a separate and independent basis, this proposal is also exempt under Sections 15061(b)(3), 15183, and/or Section 15273 of the State CEQA Guidelines. The Environmental Review Officer is directed to cause to be filed a Notice of Exemption/Determination with the appropriate agencies.

Section 3. This Ordinance shall be effective in accordance with Section 216 of the Oakland City Charter, which provides that an ordinance shall be effective immediately upon final adoption upon receiving the affirmative vote of at least six (6) members of the City Council or, if it does not receive six (6) affirmative votes, it shall be effective upon the seventh day after final adoption. A zoning application for which vested rights have been obtained pursuant to State law prior to final passage of this Ordinance shall be processed under this Ordinance only if the applicant chooses so to do.

Section 4. The Oakland Planning Code is hereby amended to include the zoning text amendments contained in *Exhibit A*, attached hereto and hereby incorporated by reference.

Section 5. Nothing in this Ordinance shall be interpreted or applied so as to create any requirement, power, or duty in conflict with any federal or state law.

Section 6. If any section, subsection, sentence, clause or phrase of this Ordinance is held to be invalid or unconstitutional, the offending portion shall be severed and shall not affect the validity of the remaining portions which shall remain in full effect.

Section 7. That the record before this Council relating to this Ordinance includes, without limitation, the following:

1. the application, including all accompanying papers;
2. all final staff reports, decision letters and other documentation and information produced by or on behalf of the City;
3. all oral and written evidence received by the City staff, Planning Commission and City Council before and during the public hearings on the application;
4. all matters of common knowledge and all official enactments and acts of the City, such as (a) the General Plan and the General Plan Conformity Guidelines; (b) Oakland Municipal Code, including, without limitation, the Oakland real estate regulations, Oakland Fire Code; (c) Oakland Planning Code; (d) other applicable City policies and regulations; and, (e) all applicable state and federal laws, rules and regulations.

Section 8. That the custodians and locations of the documents or other materials which constitute the record of proceedings upon which the City Council's decision is based are

respectively: (a) Community & Economic Development Agency, Planning & Zoning Division, 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, CA.; and (b) Office of the City Clerk, 1 Frank H. Ogawa Plaza, 1st floor, Oakland, CA.

IN COUNCIL, OAKLAND, CALIFORNIA, _____

PASSED BY THE FOLLOWING VOTE:

AYES- BROOKS, GALLO, GIBSON MCELHANEY, KALB, KAPLAN, REID, SCHAAF, and PRESIDENT KERNIGHAN

NOES-

ABSENT-

ABSTENTION-

ATTEST: _____

LaTonda Simmons
City Clerk and Clerk of the Council
of the City of Oakland, California

DATE OF ATTESTATION: _____

EXHIBIT A: PROPOSED CHANGES TO THE PLANNING CODE

Items that are underlined are insertions, while items that appear in ~~strikeout~~ are deletions. All changes are to the Planning Code.

17.10.240 Extensive impact civic activities.

Extensive Impact Civic Activities include the activities typically performed by, or the maintenance and operation of, the following institutions and installations:

- A. Airports, heliports, and helistops;
- B. Cemeteries, mausoleums, ~~and columbariums,~~ and crematories;
- C. Colleges, junior colleges, and universities, but excluding business schools operated as profit making enterprises;
- D. Detention and correction institutions;
- E. Docks and wharves operated by a public agency;
- F. Electric transmission lines;
- G. Garbage dumps;
- H. Golf courses and driving ranges;
- I. Major mail-processing centers;
- J. Military installations;
- K. Public and public utility corporation or truck yards;
- L. Radio and television transmission stations;
- M. Railroad and bus terminals;
- N. Railroad rights-of-way and yards and bus storage areas;
- O. Reservoirs and water tanks;
- P. Sewage disposal tanks;
- Q. Stadiums, sports arenas, auditoriums, and bandstands;
- R. Truck terminals operated by a public agency;
- S. Zoological gardens and wildlife preserves;
- T. Campgrounds;
- U. Stormwater detention ponds and facilities;
- V. Facilities supervised by or under contract with the State Department of Corrections, including alternative sentencing and community work release programs.

This classification also includes certain activities accessory to the above, as specified in Section 17.10.040.

Article II Civic Activities

17.103.020 Special Health Care Civic Activities.

17.103.025 Crematories

17.103.025 Crematories.

Additional Use Permit Criteria. A conditional use permit for any conditionally permitted Crematorium and an Extensive Impact Civic Activity may only be granted upon determination that the proposal conforms to the general use permit criteria set forth in the conditional use permit procedure in Chapter 17.134, to any and all applicable use permit criteria set forth in the particular individual zone regulations, and to all of the following use permit criterion:

- A. Any proposed new or expanded crematorium must submit a Health Risk Assessment that shows that there is no significant health risk to the surrounding community.

FILED
OFFICE OF THE CITY CLERK
OAKLAND

2014 JUL 10 PM 12:39

NOTICE AND DIGEST

PUBLIC HEARING FOR AN ORDINANCE, RECOMMENDED BY THE PLANNING COMMISSION, AND AS DIRECTED BY CITY COUNCIL UNDER EMERGENCY ORDINANCE NO. 13222 C.M.S., TO AMEND THE PLANNING CODE TO ESTABLISH PERMANENT REGULATIONS PERTAINING TO CREMATORIES WITHIN THE CITY OF OAKLAND

The proposed amendments to the Oakland Planning Code would establish new regulations for crematories within the City of Oakland. Under the proposed regulations no crematorium could be established or expanded without first obtaining a Major Conditional Use permit.