

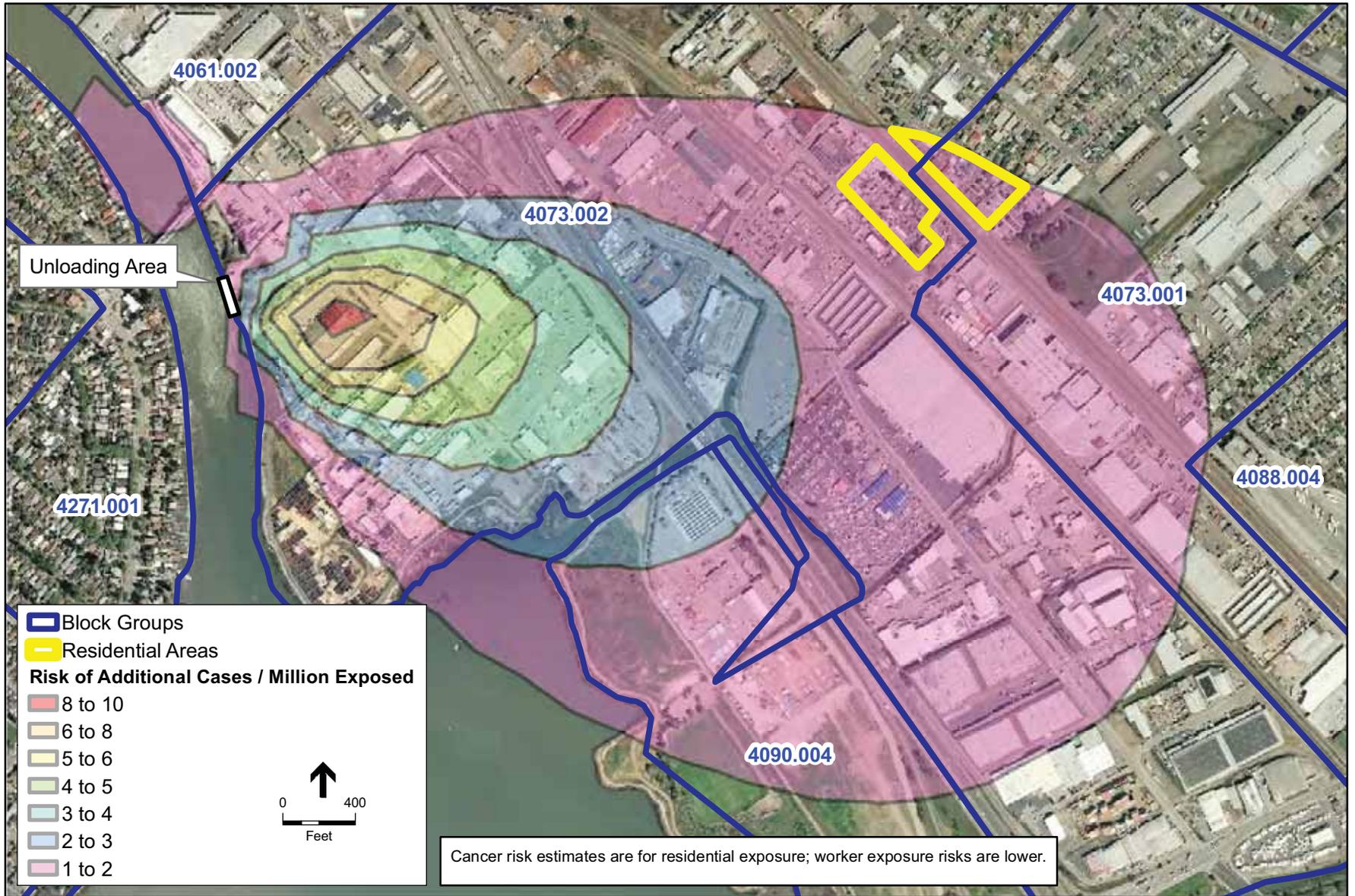
SOURCE: ESRI 2008

**Figure 5-2**  
Ratio of Mean Household Income to Federal Poverty Guideline by Block Group

1 In Figure C-4, the innermost area, representing increased risk of additional cancer  
2 cases at a rate of 10 additional cancer deaths per million, covers industrial land uses  
3 only. However, the outermost area, representing an increased risk at a rate of one to  
4 two cancer deaths per million, covers some residences. Other areas between the  
5 innermost and outermost areas do not cover any residences. Figure 5-3 shows these  
6 areas, superimposed on an aerial photograph of the vicinity.

7 The impact represented by the outermost area is well below the CEQA threshold of  
8 significance for toxic air emissions established by the Bay Area Air Quality Management  
9 District (BAAQMD) which was in effect when the Project Notice of Preparation was  
10 issued and which is used in this EIR as the threshold for toxic air contaminants. This  
11 EIR uses the BAAQMD's 1999 CEQA Air Quality Guidelines (BAAQMD 1999).  
12 BAAQMD adopted new CEQA Guidelines which reduce the significance threshold for  
13 health risk to one additional cancer death per million in areas that are most heavily  
14 impacted by toxic air emissions (BAAQMD 2010). Such areas include the Oakland  
15 Tidewater offloading site and its surroundings. Consistent with the CSLC's  
16 Environmental Justice Policy, which includes a commitment to work with Federal, State,  
17 regional, and local agencies to ensure consideration of disproportionate impacts on  
18 relevant populations, by instant or cumulative environmental pollution or degradation,  
19 this EIR examined the vicinity of the Oakland Tidewater offloading site to determine if  
20 the population is either low-income or high-minority relative to its Community of  
21 Comparison, which is the city of Oakland. That vicinity, referred to here as the Oakland  
22 Offloading Vicinity, covers portions of two Census block groups. Table 5-1 compares  
23 these two Census block groups to the city of Oakland as a whole, in terms of minority  
24 population. Table 5-2 makes the same type of comparison, in terms of household  
25 income as it relates to the 2008 Federal poverty guideline. The Federal poverty  
26 guideline amount varies with the number of persons per household, so the amount can  
27 vary from block group to block group. Therefore, for this comparison, in each block  
28 group, the average number of persons per household was used to determine a poverty-  
29 guideline income level applicable to that block group.

30 In summary, if the new BAAQMD CEQA criteria are considered, the minority population  
31 levels in the Oakland Tidewater Offloading Vicinity do not present an environmental  
32 justice issue, because the proportion of minority residents in each of the two block  
33 groups is not significantly more than in Oakland as a whole. However, with regard to  
34 income level, block group 4073.001 has a significantly higher percentage of households  
35 below the Federal Poverty Guideline (as it applies to that block group) than does the city  
36 of Oakland. Therefore, the CSLC Environmental Justice Policy would apply to this block



**Figure 5-3**  
Incremental Cancer Risk from Continued Operations  
at Oakland Tidewater Offloading Site

1 **Table 5-1. Minority Populations in Oakland Offloading Vicinity**

	Population			Number of Residential Buildings in Vicinity <sup>1</sup>	Contains Significant Minority Populations in Vicinity? <sup>2</sup>
	Total	Minority	Percent Minority		
<b>City of Oakland</b>	<b>406,417</b>	<b>289,792</b>	<b>71.3%</b>	---	---
Census Block Group 4073.001	1,331	1,020	76.6%	15	No
Census Block Group 4073.002	1,182	736	62.3%	40	No

<sup>1</sup> Counts are based on aerial photos taken in early 2007.

<sup>2</sup> Block groups with potentially significant minority populations are those having a percentage minority population more than 1.2 times that of the Community of Comparison, and residential buildings within the Area of Concern.

Source: ESRI 2008

2 **Table 5-2. Low-Income Households in Oakland Offloading Vicinity**

	Households			Number of Residential Buildings in Vicinity <sup>1</sup>	Contains Significant Low-Income Households in Vicinity? <sup>2</sup>
	Total	Number Below Federal Poverty Guideline	Percent Below Federal Poverty Guideline		
<b>City of Oakland</b>	<b>152,364</b>	<b>28,628</b>	<b>18.8%</b>	---	---
Census Block Group 4073.001	335	99	29.6%	15	Yes
Census Block Group 4073.002	360	77	21.4%	40	No

<sup>1</sup> Counts are based on aerial photos taken in early 2007.

<sup>2</sup> Block groups with potentially significant low-income populations are those having a percentage of low-income households more than 1.2 times that of the Community of Comparison, and residential buildings within the Area of Concern.

Source: ESRI 2008

3 group, if the new BAAQMD significance threshold for toxic air contaminant health risk  
4 were applicable to this Project.

5 Analyses described in Section 4.5, Air Quality, found that, in addition to offloading at the  
6 Oakland Tidewater offloading site, the extraction process itself could, under certain  
7 circumstances, subject one portion of the city of San Francisco to levels of diesel  
8 emissions that may approach one additional cancer death per million individuals. These  
9 levels would occur in certain portions of the Presidio of San Francisco, as shown in  
10 Figure C-2 in Appendix C; some residences exist in the impacted area. From an  
11 environmental justice standpoint, this could be an issue if the census block group within  
12 the Presidio where these levels occur is a low income or high minority region.

13

1 The ESRI Demographic Update data were used to investigate this question. Table 5-3  
 2 summarizes the outcome, for both the minority and income criteria. The Presidio (which  
 3 is a single census block group, in its entirety) is not a low income or high minority  
 4 region.

5 **Table 5-3. Minority and Low-Income Households in the Presidio of San Francisco**

	Population			Households		
	Total	Minority	Percent Minority	Total	Number Below Federal Poverty Guideline	Percent Below Federal Poverty Guideline
<b>City of San Francisco</b>	<b>788,197</b>	<b>443,596</b>	<b>56.3%</b>	<b>336,613</b>	<b>39,559</b>	<b>11.8%</b>
Census Block Group 601.001	2,310	681	29.5%	844	44	5.2%

<sup>1</sup> Block groups with potentially significant minority populations are those having a percentage minority population more than 1.2 times that of the Community of Comparison, and residential buildings within the Area of Concern.

<sup>2</sup> Block groups with potentially significant low-income populations are those having a percentage of low-income households more than 1.2 times that of the Community of Comparison, and residential buildings within the Area of Concern.

Source: ESRI 2008

### 6 5.2.3 Relationship to Alternatives

7 None of the alternatives under consideration would involve the extraction and offloading  
 8 of more sand than in the proposed Project. They do not involve extraction from locations  
 9 or use of offloading sites other than those designated in the proposed Project. The  
 10 Clamshell Dredge Mining Alternative would involve a method of mining that is less  
 11 efficient than that proposed, which could result in more time spent in mining operations,  
 12 and therefore increased diesel emissions. This could increase the concentration of toxic  
 13 air contaminants in locations downwind of the emissions plumes. As discussed in Section  
 14 4-5, Air Quality, the only community expected to be impacted by diesel emissions from  
 15 mining operations (as opposed to offloading operations) is the Presidio of San  
 16 Francisco, which is not an environmental justice community. None of the other  
 17 alternatives present more environmental justice issues than the proposed Project.  
 18 Because the Reduced Project Alternative would not change the level of diesel  
 19 emissions compared to baseline conditions, the exposure of people to air toxics during  
 20 off-loading and mining would be the same as baseline conditions.

1 **5.2.4 Cumulative Projects Policy Analysis**

2 As noted above, the proposed Project is essentially a continuation of existing sand  
3 mining operations, with some modification of the quantities that are permitted to be  
4 extracted. Hence, no cumulative effect on high-minority or low-income populations  
5 would occur when considering this Project in combination with other cumulative projects  
6 described in Section 3.0, Alternatives and Cumulative Projects.

7