

Shirley Birosik 4-448
changes made 2/25/05

Changes from Region 4 August 2004 submittal package for LA/LB Harbor based on revised sediment quality guidelines in the final Listing Policy. S. Birosik

115

- Los Angeles Harbor – Cabrillo Marina
Mercury (sediment)

Do not list for mercury in sediment. Only three of 24 sediment core samples exceeded the sediment quality guideline.

- ① • Los Angeles Harbor – Cabrillo Marina
Chrysene (sediment)

List for chrysene in sediment. Four out of 23 (17%) sediment core samples exceeded sediment quality guidelines.

- ② • Los Angeles Harbor – Cabrillo Marina
Phenanthrene (sediment)

List for phenanthrene in sediment. Two of 12 (17%) sediment core samples exceeded sediment quality guidelines.

- ③ • Los Angeles Harbor – Cabrillo Marina
Pyrene (sediment)

List for pyrene in sediment. Four of 16 (25%) sediment core samples exceeded sediment quality guidelines.

- Los Angeles Harbor – Cabrillo Marina
Low molecular weight polycyclic aromatic hydrocarbons (sediment)

List for LPAH in sediment. Two of 13 (15%) sediment core samples exceeded sediment quality guidelines.

- Dominguez Channel Estuary (unlined portion below Vermont)
Benzo(a)anthracene (sediment)

List for benzo(a)anthracene in sediment. Eight out of 41 (20%) sediment core samples exceeded sediment quality guidelines.

- ~~Dominguez Channel Estuary (unlined portion below Vermont)
Benzo(a)pyrene (sediment)~~

~~List for benzo(a)pyrene in sediment. Seven out of 41 (17%) sediment core samples exceeded sediment quality guidelines.~~

- ~~Dominguez Channel Estuary (unlined portion below Vermont)
Chrysene (sediment)~~

~~List for chrysene in sediment. Eight out of 41 (20%) sediment core samples exceeded sediment quality guidelines.~~

- ~~Dominguez Channel Estuary (unlined portion below Vermont)
Phenanthrene (sediment)~~

~~List for phenanthrene in sediment. Nine out of 41 (22%) sediment core samples exceeded sediment quality guidelines.~~

- ~~Dominguez Channel Estuary (unlined portion below Vermont)
Pyrene (sediment)~~

~~List for pyrene in sediment. Thirteen out of 41 (32%) sediment core samples exceeded sediment quality guidelines.~~

Corrections/clarifications:

- NR Fact sheets previously submitted under "San Pedro Bay (outside breakwater)" should be entitled "San Pedro Bay Near/Off Shore Zones". The parenthetical "outside breakwater" term had been added originally to make it clear the listing was not referring to the Outer Harbor which is inside the breakwater. Listings associated with San Pedro Bay were not re-evaluated since the focus of the August 2004 evaluation was on harbor areas with new data.
- There is no separate "Los Angeles Harbor Inner Breakwater" waterbody listing. The fish advisories for PCBs and DDT that were part of that listing apply to all of the Inner Harbor area, the Outer Harbor, and to the San Pedro Bay Near/Off Shore Zones (the latter two cover all the breakwater areas) so there is no reason to list just the LA Harbor breakwater separately. Data which led to the old PAH listing (based on background levels) for inner breakwater are now part of the larger dataset for LA/LB Outer Harbor which does not have enough data points above sediment quality guidelines to warrant any PAH listings.
- NR As mentioned in an E-mail on February 3, 2005, the waterbody "Dominguez Channel (lined portion from Vermont to Estuary)" as shown on previously submitted fact sheets should be referred to as "Dominguez Channel (lined portion above Vermont)" to make it clear it's not part of the estuary.

This is background and summary information I used in-house. S. Birosik

Based on re-evaluation of Hg, PCBs, and PAHs data at State Board's request due to new sediment quality guidelines in 2004 listing policy including guidelines for individual PAHs where previously none existed (rows highlighted in blue show where the re-evaluation led to a different recommendation based on the new guidelines)

Hg guideline = 2.1 ug/g (up from 0.7 ug/g)

	On 2002 list?	Proposed 2004 listing from last summer	Current proposal based on data re-evaluation	Data summary	Comments
LA Harbor - Consolidated Slip	Yes	Continue listing	Continue listing	Went from about 20% exceeding guidelines to 15% exceeding guidelines with 155 samples	Now at cutoff point for listing (15%) but multiple other pollutants found at sites as well as toxicity and impaired biota; toxicity was generally not found below 13% exceedances while occurring above 17% exceedances
LA Harbor - Cabrillo Marina	Not explicitly	New listing	Do not list	Went from 25% of samples exceeding guidelines to 13%; out of 24 samples, only three (all from the earliest year, 1995) exceeded the guideline	Samples from 1998 and 2001 had mostly lower concentrations than those from 1995
LA Harbor - Fish Harbor	No	New listing	List	Of ten samples in 1992 and 1999, seven exceeded guidelines	All exceedances were from 1999
Dominguez Channel Estuary	No	New listing	List	Of 44 sediment cores collected in 2002, 13 (30%) exceeded guidelines	Went from about 50% to 30% exceedances with new guidelines; virtually all the exceedances were in the top half foot

PCBs guideline = 400 ng/g (up from 180/188.8 ng/g)

	On 2002 list?	Proposed 2004 listing from last summer	Current proposal based on data re-evaluation	Data summary	Comments
LA Harbor – Consolidated Slip	Yes	Continue listing	List	Of 161 samples, 88 (55%) exceeded guidelines	Very high concentrations for PCBs – many two to three times the guideline
LA Harbor – Cabrillo Marina	Not explicitly	Do not list	Do not list	Of 11 samples collected, none exceeded the guidelines	
LA Harbor – Fish Harbor	Yes	Continue listing	List	Out of 13 samples, six exceeded guidelines	Exceedances occurred in 1999 but not in earlier years (1992 and 1995)
Dominguez Channel Estuary	No	New listing	List	15 out of 42 core samples taken in 2002 exceeded the guidelines (36%)	
LA/EB Inner Harbor	Yes, some separate parts	Do not list	Do not list	Went from 13% exceeding guidelines to about 5% (out of 626 samples)	

PAHs guidelines:

- (1) Total PAHs – 1,800,000 ng/g (up from 16,771/44,792 ng/g)
- (2) 2-methylnaphthalene – 201.28 ng/g
- (3) phenanthrene – 543.53 ng/g
- (4) low molecular weight PAHs – 1,442 ng/g
- (5) benz(a)anthracene – 692.53 ng/g
- (6) benzo(a)pyrene – 763.22 ng/g
- (7) chrysene – 845.98 ng/g
- (8) dibenzo(a,h)anthracene – 260 ng/g
- (9) pyrene – 1397.4 ng/g
- (10) high molecular weight PAHs – 9,600 ng/g

	On-2002 list?	Proposed 2004 listing from last summer	Current proposal based on data re-evaluation	Data summary	Comments
LA Harbor – Consolidated Slip	Yes	Continue listing	List	Exceedances of individual PAHs ranged from 17 – 54% of about 150 samples	The only area where one sample exceeded the new total PAHs guideline
LA Harbor – Cabrillo Marina	Not explicitly	Do not list	List	4 of the 10 PAH measurements exceeded guidelines by 15% or greater out of about 24 samples	No exceedances for total PAHs or HPAH
LA Harbor – Fish Harbor	Yes	Continue listing	List	Except for 2-methylnaphthalene and total PAHs, all other PAHs (out of about 12 samples) exceeded guidelines in 50% or more of samples	Medium not defined in 2002 list but assume it was sediment; no total PAHs exceedances and only one 2-methylnaphthalene exceedances (out of 9 samples)

PAHs (continued)

<p>Dominguez Channel Estuary</p>	<p>Yes</p>	<p>Do not list</p>	<p>List</p>	<p>Several individual PAHs had exceedances out of 41 samples – up to 31% of pyrene samples exceeded guidelines; several other PAHs were at 17% of samples exceeding guidelines</p>	<p>Last summer's data review revealed only 4% of samples exceeded the old total PAHs guideline</p>
<p>LA/LB Inner Harbor</p>	<p>Yes, some parts</p>	<p>Do not list</p>	<p>Do not list</p>	<p>One PAH (2-methylnaphthalene) had 17% of 349 samples exceeding the guideline; other PAHs ranged from 5 – 12% of samples exceeding the guidelines. These other PAHs also had a larger sample size (~680)</p>	<p>HPAH and LPAH had 5% and 7% of ~680 samples exceeded, respectively; last year's proposal to "do not list" was based on less than 5% of samples exceeding the old total PAHs guidelines. Most of the exceedances noted (particularly 2-methylnaphthalene) occurred at sites at refinery berths tested for dredging. Random EMAP style sites had much lower concentrations.</p>
<p>LA/BB Outer Harbor</p>	<p>No</p>	<p>Do not list</p>	<p>Do not list</p>	<p>Exceedances ranged from 0 – 7% of about 75 samples for all PAHs</p>	<p>Highest percentage of exceedances for 2-methylnaphthalene</p>