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California Regional Water Quality Control Board
Los Angeles Region
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Subject: Comment Letter – Revisions to the Los Angeles Region (303(d)

The City of Gardena (City) appreciates the opportunity to comment on the revised 2016 303(d) Integrated Report for the Dominguez Channel. The City also welcomes the proposed "de-list" and "do not list" of pollutants, particularly metals and toxics. These pollutants are the basis for the Dominguez Channel Harbor Toxics TMDL (DCHT-TMDL), which is derived from the 2010 303(d) list. The elimination of these pollutants should effectively eliminate the need for the DCHT-TMDL, which the Dominguez Channel Watershed Management Program was created to comply with.

I. 2010 303(d)/2016 303(d) List Dominguez Channel, Reaches 1 and 2

This list, on which the DCHT-TMDL was developed, contains the following toxics for Reach 1 and 2 as shown in the tables presented below. The tables also show the status of toxic pollutants, including metals, which the 2016 303(d) list revises in terms of the following categories: (1) list; (2) de-list; and (3) don't de-list.

II. Reach 1 Dominguez Channel (unlined portion below Vermont)

2010 303(d) List Toxics/Metals	List Status	2016 303(d) List Toxics/Metals	List Status
1. Benzo(a)pyrene (PAH[1])	List	1. Benzo(a)pyrene (PAH)	Don't de-list
2. Benzo(a)anthracene (PAH)	List	2. Benzo(a)anthracene (PAH)	Don't de-list
3. Chlordane (tissue)	List	3. Chlordane (tissue)	Don't de-list
4. Chryslene (PAH)	List	4. Chryslene (PAH)	Don't de-list
5. Copper (not listed)[2]	?	5. Copper	Don't de-list
6. DDT(tissue and sediment)	List	6. DDT(tissue and sediment)	Don't de-list
7. Dieldren (tissue)	List	7. Dieldren (tissue)	List

[1]This pollutant is a polyaromatic hydrocarbon (PAH), along with benzo(a)anthracene, chryslene, phenathrene, and pyrene (total of 6).
[2]Copper for Reach 1 of the Dominguez Channel was not listed on the 2010 303(d) List. However, according to the 2012 303(d) List, copper is not to be de-listed. There is a disconnect between the listings that requires resolution.

8. Lead (tissue)	List	8. Lead (tissue)	Don't de-list
9. Methylnaphthlene 2	List	9. Methylnaphthlene 2	**Don't list**
10. Polychlorinated Bi-phenyls (PCBs)	List	10. Polychlorinated Bi-phenyls (PCBs)	Don't de-list
11. Polyaromatic Hydrocarbons (PAHs)	Not listed	11. Polyaromatic-Hydrocarbons (PAHs)	**De-list**
12. Phenanthrene (PAH)	List	12. Phenanthrene (PAH)	Unknown
13. Pyrene (PAH)	List	13. Pyrene (PAH)	Don't de-list
14. Sediment Toxicity	List	14. Sediment Toxicity	Unknown
15. Toxicity	List	15. Toxicity	Don't de-list
16. Zinc (sediment)	List	16. Zinc (sediment)	**De-list**

In sum, the 2016 303(d) list for toxics and metals proposes to de-list PAHs and zinc (in sediment) and not list Methylnaphthalene 2. However, because PAHs are to be de-listed, Chryslene, Phenanthrene, and Pyrene must also be de-listed because they are specific types of PAHs. Thus, the total number of toxics to be eliminated from the 2016 303(d) list is 8. Copper should be de-listed as well because: (1) it was not listed on the 2010 303(d) Integrated Report for toxics and metals for Reach 1 of the Dominguez Channel; (2) the 2012 303(d) list recommended that copper not be listed;" and (4) SWAMP data (2003) for all reaches of the Dominguez Channel resulted in only a few slight exceedances for dissolved copper (but not for total recoverable copper, which is the California Toxics Rule (CTR) compliance standard). Should the Regional Board insist on retaining copper on the 2016 303(d) list, it should provide sampling data based on the CTR for establishing ambient water quality standards.

Excluding the aforementioned metals and toxics from the 2016 303(d) list eliminates 9 of them – 56% of the total. On this basis alone, the DCHT-TMDL should be voided. As discussed below the metals and toxics on the proposed 2016 303(d) list that have not been de-listed for Reach 1 of the Dominguez Channel should be de-listed.

1. *Chlordane*

This toxic should be de-listed for the following reasons: (1) no justificaCTRtion to list chlordane was provided in Decision ID 20199 of the proposed 2016 303(d) Integrated Report in keeping with 303(d) Listing Policy; (2) the 2016 303(d) list proposes that chlordane be de-listed for Reach 2 of the Dominguez Channel (); and (3) SWAMP data (2003), based on multiple grab samples for both reaches, resulted in non-detects for chlordane.

2. *DDT (tissue/sediment)*

This toxic should be de-listed for the following reasons: (1) no justification was provided in Decision ID 19790 of the proposed 2016 303(d) list to list DDT in keeping with 303(d) Listing Policy; (2) DDT is de-listed for Reach 2 of the Dominguez Channel; (3) SWAMP data (2003), based on multiple grab samples for both reaches, resulted in non-detects for DDT; and (4) DDT is a legacy pollutant that has been banned for several decades.

3. *Dieldrin (tissue)*

Dieldrin (tissue) should be de-listed for the following reasons: (1) no 303(d) listing policy justification for was provided in Decision ID 34645 of the proposed 2016 303(d) list to list dieldrin; (2) the proposed 2016 303(d) list recommends that dieldren be de-listed for Reach 2 of the Dominguez Channel (despite the fact that the two reaches are connected); (3) dieldrin is a legacy pollutant; and (4) SWAMP data (2003) based on multiple grab samples for both Dominguez Channel reaches resulted in non-detects for dieldrin.

4. *Lead (including tissue)*

Lead (tissue) should be de-listed for the following reasons: (1) no justification to list lead was provided in Decision ID 34645 of the proposed 2016 303(d) Integrated Report in keeping with 303(d) Listing Policy; (2) SWAMP data (2003), based on multiple grab samples for both reaches, resulted in no exceedances for dissolved lead in Reach 1 of the Dominguez Channel; (3) according to the DCHT-TMDL, the samples taken for lead do not comply with the federal California Toxic Rule (CTR), in that they were not based exclusively on ambient samples and incorrectly used a hardness default value of 49 mg/l[3]); and (4) lead as legacy pollutant has been significantly reduced in the environment as a result of de-leaded fuels).

5. *Polychlorinated Bi-phenyls (PCBs*

PCBs should be de-listed for the following reasons: (1) no justification to list was provided in Decision ID 33063 of the proposed 2016 303(d) Integrated Report in keeping with 303(d) Listing Policy (does not conform to the binomial distribution requirement contained in Section 3.1 of the policy); (2) PCBs are de-listed for Reach 2 of the Dominguez Channel; (3) PCBs are legacy pollutants that have been banned for decades; and (4) SWAMP data (2003) based on multiple grab samples for both reaches resulted in non-detects for PCBs.

6. *Toxicity*

Toxicity should be de-listed for the following reasons: (1) no justification to list was provided in Decision ID 43000 of the proposed 2016 303(d) Integrated Report in keeping with 303(d) Listing Policy (does not conform to the binomial distribution requirement contained in Section 3.1 of the

[3]CTR sets ambient (dry weather) receiving water quality standards. Nevertheless, the DCHT-TMDL mentions that wet weather standards were set in accordance with CTR. Any wet weather standard based on this misinterpretation of CTR should be voided. Further, the hardness value that was used (according to the DC/Harbor Toxics TMDL) was 49 mg/l, which is an average based on samples taken from 2002-2010 (presumably during storm events from Dominguez Channel). This value is too low and is inconsonant with CTR. Hardness influences calculating CTR standards. The higher the hardness value, the higher the target for a toxic or metal. The higher the number, the less difficult it is to comply with. CTR specifically requires an actual hardness a value (using calcium carbonate as an adjustment parameter) to be determined by sampling and analysis at the same time samples are taken for toxics and most metals. CTR cautioned that the use of the 100 mg/l hardness value is intended only as an illustrative factor for calculating CTR standards using a required formula. The Regional Board's SWAMP abides by this requirement when it conducts ambient water quality monitoring.

policy)[4]; (2) SWAMP data (2003) based on multiple grab samples for both reaches resulted in non-detects for most toxics (both Dominguez Channel reaches); and a few detects but no exceedances; and a very few exceedances for metals; and (3) the 2016 303(d) list proposes to de-list toxics affecting Dominguez Channel R1 and R2 that contribute to toxicity[5] (there can be no toxicity if many of the toxics are to be de-listed).

7. *Sediment Toxicity*

Sediment toxicity cannot be commented on because it is not addressed in the 2016 303(d) listing report, although it is listed in both the 2010 and 2012 303(d) reports. It is not certain if the Regional Board intended to de-list sediment toxicity or to carry it over.

Against this background it is recommended the all of following toxics and metals be eliminated from the proposed 2016 303(d) Integrated Report for Reach 1 of the Dominguez Channel:

1. Benzo(a)pyrene (PAH)
2. Benzo(a)anthracene (PAH)
3. Chlordane (tissue)
4. Chryslene (PAH)
5. Copper
6. DDT(tissue and sediment)
7. Dieldren (tissue)
8. Lead (tissue)
9. Methylnaphthlene 2
10. Polychlorinated Bi-phenyls (PCBs)
11. Polyaromatic-Hydrocarbons (PAHs)
12. Phenanthrene (PAH)
13. Pyrene (PAH)
14. Sediment Toxicity
15. Toxicity
16. Zinc (sediment)

Eliminating all of these toxics/metals should be sufficient justification for eliminating or significantly revising the DCHT-TMDL.

III. Reach 2 Dominguez Channel (lined portion above Vermont)

2010 303(d) List Toxics/Metals	List Status	2016 303(d) List Toxics/Metals	List Status

[4]The DCHT-TMDL appears to replace CTR-derived toxics standards with a TUc (toxic unit chronic). According to the DCHT-TMDL, this numeric toxicity objective was created because the Basin Plan's narrative toxicity objective does not allow acute or chronic toxicity in any receiving waters. However, CTR resolves this problem by providing a formula that translates acute or chronic toxicity in dissolved and total recoverable values. Further, other TMDLs adopted by the Regional Board do not resort to a TUc. If the TUc standard is used to meet the binomial distribution requirement under 303(d) Listing Policy Section 3.1 that data, along with the null hypothesis, should be made available.

[5]Chlordane, dieldren, diazinon, DDT, PCBs, and PAHs with the justification that copper, lead, and zinc should also be de-listed.

1. Copper	List	1. Copper	Don't de-list
2. Diazinon	List	2. Diazinon	**De-list**
3. Lead	List	3. Lead	Don't de-list
4. Toxicity	List	4. Toxicity	Don't de-list
5. Zinc	List	5. Zinc	Don't de-list
		6. Benthic-Macroinvertebrate Bioassessment	**List (new)**

The 2016 303(d) list proposes to carry-over from the 2010 303(d) all of the toxics except diazinon, which is de-listed. Copper, lead, zinc, and toxicity should be de-listed for the same reasons for de-listing Dominguez Channel R1 metals and toxics.

The 2016 (303d) list also adds "Benthic-Macroinvertebrate Bioassessment" (BMB), which should not be listed for the following reasons:

- BMB is not a pollutant.

- BMB is used to evaluate the health of wadeable streams using a scoring system. Reach 1 of the Dominguez Channel is not wadeable. The Los Angeles County Flood Control District forbids entry into this and other flood control channels.

- The Index of Biotic Integrity (IBI) score of 40, on which the BMB is justified, is considered to be on the edge of "poor" to "fair." But it was based only on 3 samples, taken in 2006, 2007, and 2008. Not only is the sample size not statistically significant, and therefore not in keeping with the 303(d) Listing Policy, but the data is not current.

- BMB decision ID, 83960, also uses as lines of evidence toxicity, which is associated with copper, lead, zinc, and diazinon. However, copper, lead, zinc, and toxicity should not be listed on the proposed 2016 303(d) list for the same reasons they should not be listed for Reach 2 of the Dominguez Channel. Further, the 2016 303(d) list proposes to de-list diazinon, a toxic.

- According to the Southern California Coastal Water Research Project (SCCWRP), Technical Report 88, which is a bioassessment study concluded in 2015, metals, toxicity, and pyrethroids were only weakly or rarely associated with poor stream health in the Southern region.

- Biota, including fish, located in Reach 1 or Reach 2 of the Dominguez Channel has not been specifically identified as being impaired by metals or toxics. The Regional Board has not been able to demonstrate that fish and other wildlife have been impaired. Admittedly, this would be difficult given that Dominguez Channel is a non-perennial stream; it only flows when it rains. There are no studies that have identified the number and species of fish in the Dominguez Channel during storm events. If there were any fish

in the channel traveling from up-stream they would probably perish when moving from a freshwater to a saltwater environment.

III. Conclusions

In the final analysis, each of the metals and toxic pollutants on the proposed 2016 303(d) list for Reaches 1 and 2 of the Dominguez Channel should be de-listed. The bases for the de-listings are, in the aggregate, defective because:

1. The data supporting the listings are out-dated (in some cases by almost 15 years). It is unclear why more current water quality data is not available, especially given that each MS4 in the State is required to pay an annual SWAMP surcharge along with its regular annual MS4 Permit fee to the State. Unlike most non-SWAMP monitoring (sampling and analysis), the Regional Board's SWAMP unit conducts monitoring in accordance with USEPA guidance and State policy. The data SWAMP generates is accurate, objective, and extremely useful. Had SWAMP been allowed to conduct monitoring on a regular basis, the DCHT-TMDL may not have been necessary.

2. Over the past two decades, water quality undoubtedly has improved. Many toxic pollutants are no longer in the environment (e.g., DDT, various pesticides, cleaning solvents, lead in gasoline, etc.). Substantial credit should also be given to municipalities. Since the Los Angeles County MS4 program began in the nineties, cities have dutifully implemented best management practices (BMPs) that have been effective in source-controlling pollutants and reducing them from outfalls through post-construction runoff pollution mitigation controls. Community sensitivity to mitigating runoff pollution is another factor attributable to MS4 public education and outreach programs.

3. The pollutant listings claim to be based on water quality standards developed in conformance with CTR, but they are not. CTR standards for metals and toxics are intended to be ambient standards, derived from dry weather sampling and analysis from receiving water. Instead, they were derived from wet weather conditions. Further, CTR requires an actual hardness value to calculate water quality standards. Many of the 303(d) pollutants were CTR calculated using average hardness values or in some cases the hardness factor of 100 mg/l. According to CTR, this factor was intended only to be used for illustrative purposes when calculating ambient standards for metals and toxics.

4. The pollutant listings, with the exception of those based on the Regional Board's Surface Water Ambient Monitoring Program (SWAMP), do not comply with the State's 303(d) Listing Policy's requirement of meeting the statistical frequency test using a binomial distribution in accordance with a null hypothesis.

It should be noted that the DCHT-TMDL was based on faulty 303(d) metals and toxic pollutant listings. What is regrettable is that the costly Dominguez Channel EWMP is based on the DCHT-TMDL.

In closing, the City once again appreciates the opportunity to comment on this important proposition. Should you have any questions, please feel free to contact me.

Best Regards,

Mitchell G Lansdell

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MGL:nw

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