



March 16, 2015

Ms. Jenny Newman
TMDL Unit Chief
Los Angeles Regional Water Quality
Control Board
320 W. 4th St. Suite 200
Los Angeles, CA 90013

Subject: Basin Plan Amendment to Revise the Los Angeles River TMDL Waste Load Allocations Based on SSO Study Results

Dear Ms. Newman:

TECS Environmental is pleased to submit comments on behalf of its municipal clients¹ regarding the proposed basin plan amendment affecting the Los Angeles River Metals TMDL, which calls for revising wet and dry weather waste load allocations (WLAs) for copper and lead. While the Site Specific Objective (SSO) study has resulted in less stringent WLAs for copper and lead, exceedances still have been detected for both dry and wet weather. Further, the SSO includes revisions of wet weather standards for Los Angeles River System reaches, which do not appear to be authorized under federal or state law. Federal regulations and state law only require compliance with ambient water quality standards (includes TMDLs) – but not wet weather standards. Subjecting Permittees to wet weather standards does nothing to protect beneficial uses while making compliance more labor intensive and expensive.

- **Summary**

My clients will only support the proposed basin plan amendment if: (1) the MS4 Permit is revised to prevent a violation in the event of a single, non-de minimis annual exceedance for the ambient (dry weather) standard; (2) the wet weather standard is eliminated; and (3) Reach 2 of the Rio Hondo be removed from the Los Angeles River Metals TMDL. It is also recommended that the metals TMDL for the Los Angeles River be reevaluated for its ability to protect fish as a beneficial. NGOs such as FOLAR and SCCWRP have concluded that the metals associated with the Los Angeles River Metals TMDL (LAR-MTMDL) do not pose a toxicity risk to fish. In light of this, the Regional Board should consider de-listing the metals from the 303(d) for the Los Angeles and San Gabriel Rivers.

¹Carson, Compton, Gardena, Irwindale, Lawndale, San Fernando, South El Monte, and West Covina.

- **SSO Increases WLAs But Cannot Prevent Exceedances**

The revision, in the main, facilitates compliance with each of the subject metals for both wet and dry weather but nevertheless exposes Permittees to violations. Despite the SSO increase for the copper WLA numeric target (which lowers the bar for compliance)² an exceedance for the wet weather target was detected at the Wardlow Mass Emissions Monitoring Station located in Long Beach. According to the MS4 Permit, a single exceedance detected in the receiving water or at the outfall or receiving water would constitute a violation subject to enforcement action.

Further, the SSO for the Arroyo Seco Reach of the Los Angeles River resulted in a more stringent numeric target for copper. The default value for the dry weather WLA for copper was set at 87ug/l (the higher the value the better). The SSO, however, resulted in a lower target: 29 ug/l. The SSO also resulted in a more stringent wet weather copper standard for Arroyo Seco. The default for the copper WLA set in the TMDL at 17 ug/l. But the SSO resulted in a revised value of 22 ug/l – making it more difficult to comply with. So where's the benefit?

Despite the SSO's relaxation of WLAs for metals, there is still the possibility that exceedances can occur. It is a well established fact that stormwater is highly variable and water chemistry in a receiving water during a significant storm event can change unpredictably to an irregular extent. The concern here is that the Los Angeles MS4 Permit is intolerant of TMDL violations in the receiving water or at the outfall. A single exceedance could place a permittee in a state of instant violation.

Recommendation:

The Regional Board should relax compliance requirements to tolerate at least one exceedance per year.

- **Reach 2 of the Rio Hondo Is Not 303(d) Listed for Any Metal**

The Los Angeles River Metals TMDL mistakenly applies dry and wet weather waste load allocations to Reach 2 of the Rio Hondo, which according to the 303(d) list does not identify any metal for this water body segment, as the table below illustrates.

Table I: 2010 303(d) List for Reach 2 of the Rio Hondo

Parameter	TMDL Status Date	Source	Category
Coliform Bacteria	2009	Nonpoint/Point Source	TMDL required list

²For Los Angeles River Reach 1 the wet weather standard went from 17 ug/l to 67 ug/l, thereby making compliance easier. The dry weather (ambient standard) went from 23 ug/l to 91 ug/l, also facilitating compliance.

Cyanide	2021	Source unknown	TMDL required list
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Only coliform and cyanide are 303 (d) listed.

The definition of the 303(d) list according to USEPA is as follows:

The term "303(d) list" is short for the list of impaired and threatened waters (stream/river segments, lakes) that the Clean Water Act requires all states to submit for EPA approval every two years on even-numbered years. The states identify all waters where required pollution controls are not sufficient to attain or maintain applicable water quality standards, and establish priorities for development of TMDLs based on the severity of the pollution and the sensitivity of the uses to be made of the waters, among other factors (40C.F.R. §130.7(b)(4)). States then provide a long-term plan for completing TMDLs within 8 to 13 years from first listing.

It is evident that no metal is on the 303(d) list for Reach 2 of the Rio Hondo. The Los Angeles Regional Board has attempted to justify elevating metals (copper, lead, zinc, and selenium) to TMDL status by claiming that Reach 2 of the Rio Hondo contains concentrations of metals that cause or contribute to downstream Reach 1 of the Rio Hondo, which is impaired by copper, lead, and zinc. However, nothing in the Clean Water Act under section 303(d) or any other provision thereunder mentions this as a TMDL determinant. Were that the case, then there would be no need to set TMDLs for each reach of a receiving water. It could, for example in the case of the Los Angeles River, set a TMDL for Reach 6 and simply apply it to each downstream reach. Further, Reach 2 and Reach 1 of the Rio Hondo are separated by the Rio Hondo spreading grounds, effectively making Reach 2 a separate sub-watershed, with its own water quality standards that are different from Reach 1. In addition to being incorrectly TMDL listed for metals, Reach 2 is also incorrectly listed for trash.

Another explanation advanced by the Regional Board supporting its contention that Reach 2 of the Rio Hondo is subject to the metals TMDL is that the tributary rule requires it. The tributary rule, however, only applies to unspecified water bodies such as tributary streams within a reach. It cannot be applied, by extension, from one reach to another -- especially given that the basin plan identifies specific beneficial uses for each reach. Were that not the case, the Regional Board could use the tributary rule to extend a TMDL to all downstream reaches that are not TMDL listed for beneficial use-impairments without the need to go through the 303(d) listing process required under the Clean Water Act.

A more likely explanation for treating Reach 2 as the same as Reach 1 is that TMDL staff was not aware of the difference between the two when it wrote the metals TMDL.

Recommendation: The Regional Board should cite state or federal legal authority to support its contention that it has the authority to extend a TMDL to a downstream or upstream reach that is not 303(d) listed. If it cannot, it should delete this requirement when it amends the basin plan to include the revised

waste load allocations. The Regional Board should also remove Reach 2 of the Rio Hondo as being subject to metals the next time it re-opens the Los Angeles MS4 Permit. In the meantime, my client cities will perform outfall stormwater monitoring to record metals exceedances to determine if they cause impairment to any of the beneficial uses specified for Reach 2. If exceedances result only to a non-de minimis extent, the cities shall notify the Regional Board and recommend that the exceeding metal be removed from the 303(d) list.

- Los Angeles River Metals TMDL is an Ambient Standard

The SSO study is in part based on the assumption that TMDLs are wet weather standard. They are not; all TMDLs are ambient standards as the California Toxic Rule (CTR) clearly states: *This final rule establishes ambient water quality criteria for priority toxic pollutants in the State of California.*³ CTR goes on to say:

... these criteria are ambient criteria that define attainment of the designated uses,⁴ their application to all water bodies will result in additional controls on dischargers only where necessary to protect the designated uses.⁵

The term, “ambient” as defined by USEPA is as follows:

*The natural concentration of water quality constituents prior to mixing of either point or nonpoint source load of contaminants.*⁶

A clearer definition ambient is provided by South Carolina’s Richmond County’s stormwater program:

*Ambient water quality monitoring involves testing of streams, rivers and lakes during normal flow conditions. Samples are taken and tested when the effect of runoff from rainfall events is not present. This provides information regarding the overall quality of the water at these locations. The natural water quality of our rivers, lakes and streams can be influenced by a variety of factors that are detected through ambient testing.*⁷

The following excerpt is taken from the Ohio EPA website further supports the federal definition of ambient water quality:

Under the Clean Water Act, every state must adopt water quality standards to protect, maintain and improve the quality of the nation's surface waters. These standards represent a level of water quality that will support the goal of "swimmable/fishable" waters. Water quality standards are ambient standards as opposed to discharge-type standards. These ambient standards, through a process of back calculation procedures known as total maximum daily loads or waste-load allocations form the basis of water quality based permit

³Federal Register/Vol. 65, No. 97 /Thursday, May 18, 2000 /Rules and Regulations, page 31683.

⁴Means the same as beneficial uses.

⁵Ibid., page 31687.

⁶See USEPA glossary <http://water.epa.gov/scitech/datait/tools/warsss/glossary.cfm>.

⁷Richland County Stormwater Management Division, Stormwater Monitoring: Pollutants Sources, and Solutions, page 1.

limitations that regulate the discharge of pollutants into surface waters under the National Pollutant Discharge Elimination System (NPDES) permit program.⁸

Beyond this, the Regional Board's Surface Water Ambient Monitoring Program (SWAMP), which conducted metals monitoring in 2005 only did so during dry periods, not during storm events.

Further, USEPA has issued guidance on *Aquatic Life Ambient Fresh Water Criteria for Copper, Lead, Zinc, and Selenium*. Please note that in addition to being clear that criteria for freshwater quality are expressed in ambient terms none of these guidance documents refers to wet weather to protect beneficial uses. So the question remains why is there a wet weather standard for metals?

In response to my argument that TMDLs can only be ambient and not wet weather standards, the consultant who conducted the SSO opined:

There is no exception for wet weather conditions in the CTR. Moreover, aquatic life is also present in wet weather conditions.

Actually, there is nothing in federal regulations or CTR that references wet weather standards to protect a beneficial use, including aquatic life. In fact, the State Water Resources Control Board has concluded in precedential Water Quality Order 2001-15 that: *There is no provision in state or federal law that mandates adoption of separate water quality standards for wet weather conditions.*

It is understood that fish might be caught in a receiving water during a significant storm event. Their fate is pretty much sealed: most of them are likely to perish. It is only those fish that take up residence in a habitat not threatened by a raging torrent in a receiving water that require protection. In this instance, the application of an ambient standard for a particular Los Angeles River system reach would be sufficient to achieve such protection against exposure to a metal.

The SSO does, to its credit, set an ambient standard for the Los Angeles River, which appears to be protective of aquatic life – fish in particular. This was done by using *C. dubia*, a flea test to determine sensitivity to metals. The ambient standard is based on the affects of stormwater after a storm event, where the aquatic habitats have returned to normal. Compliance for MS4s is determined by measuring stormwater outfall discharges against the ambient standard. For example, the revised SSO ambient standard for Compton Creek is 63 ug/l (up from 19 ug/l). If outfall monitoring from an MS4 outfall meets the ambient standard its discharges are deemed in compliance and serve to protect the aquatic life beneficial use.

⁸See <http://www.epa.state.oh.us/dsw/wqs/index.aspx>.

Recommendation:

The basin plan amendment should not include a wet weather WLA for any reach in the Los Angeles River. Elimination of this requirement would reduce monitoring and compliance costs associated with structural BMPs while not sacrificing beneficial use protection.

- Do Any of the TMDL Metals Really Impair Fish Populations in the Los Angeles River?

The LAR Metals TMDL which as adopted in 2010 and although appears to reference metals as having various beneficial use impacts on certain reaches it is primarily concerned with the protection of fish habitats. However, authoritative resources on this subject do not support this conclusion. Friends of the Los Angeles River (FOLAR) did not identify any of the TMDL metals as being toxic to fish. Nor did the Council on Watershed Health in answering the question is the river fishable?

- **Recommendation:**

The Regional Board should reconsider the Los Angeles River Metals TMDL given that several NGOs with expertise on water quality and pollution impacts on fish populations in the Los Angeles River, and in deed in Southern California in general, have concluded that metals toxicity to fish are not significant. The Regional Board should consider de-listing metals for the Los Angeles River from the 303(d) list based on these conclusions.

In conclusion, I would like to thank you for the opportunity to comment on this very important matter. Should you have any questions, please feel free to call me.

Sincerely,



Ray Tahir