

Date: June 30, 2010

To: Technical Advisory Committee

From: Peter Kozelka, USEPA

Re: Allocations workgroup, minutes from teleconf. call on June 22, 2010

Participants: Andrew Jirik (POLA), Matt Arms (POLB), Kirsten James (Heal the Bay), Lial Tischler (EXXON-MOBIL), Mike Wang (WSPA), Steve ?? (WSPA), Ying Poon (EVEREST CONSULTANTS), Elaine Darby (ANCHOR ENVIRONMENTAL), Youn Sim (LA County), Peter Kozelka (EPA), Katherine Curtis (POLA),

PK led discussion by going through the draft allocations memo which is arranged by waterbody (WB) and pollutant group (e.g. metals, PAHs, etc). For readers benefit, I have included the relevant outline sections followed by DISCUSSION SUMMARY as well as identify any **action items**.

## **5 TMDLS AND ALLOCATIONS**

### **5.1 TMDLs**

#### **5.2 Freshwater toxicity and Diazinon TMDLs in DomChannel**

1. Freshwater toxicity and elevated diazinon are impairments of concern.
2. TMDLs will be conc-based for water column, specifically Diazinon in wet weather.
3. Synergistic effects will be considered and may require allocations to be lower than NTs.
4. Toxicity allocations will be addressed similar to other freshwater TMDLs – see CCK toxicity.
5. MS4, construction and industrial stormwater will receive WLAs.
6. LAs – do we have any NPS, will any be included?

NO ADDITIONAL DISCUSSION

#### **5.3 Metals TMDLs in DomCh and greater Harbor waters**

Dominguez Channel

1. Freshwater metals TMDLs within Dominguez Channel are based on CTR water column levels for Cu, Pb, Zn in wet weather.
2. Similar approach to existing freshwater metals TMDLs, NTs are hardness dependent and expressed in total concentrations; acute NTs apply to wet weather.
3. Mass-based WLAs for combined stormwater sources = MS4, Caltrans, General Construction and General Industrial; (maybe further refined or individualized based on available information/data)

4. Conc-based WLAs for non-stormwater discharges; e.g., minor, general and future minor NPDES
5. Do any refineries discharge into DomCh freshwater?
6. LAs – do we have any NPS?
7. Sediment metal TMDLs and allocations will be conc-based (TECs) for Torrance Lateral

MINIMAL DISCUSSION, NO REFINERIES DISCHARGE INTO DOMCH FRESHWATERS.

DomCh estuary & greater Harbor

8. Marine water metals TMDLs apply to DomCh estuary, ConSlip, Inner Harbor, Fish Harbor, LAR estuary (SGR metals already defined for Cu in SGR estuary)
9. TMDLs will be defined for CTR chronic water conditions (will also achieve acute WQOs)
10. Mass-based WLAs for combined stormwater sources = MS4, Caltrans, General Construction and General Industrial; (maybe further refined or individualized based on available information/data, such as possible separate Port MS4 allocations, not for individual tenants)
11. To extent feasible, individual mass-based WLAs for contributing PS will be identified; e.g., refineries, Terminal Island WWTP, power generating stns
12. Conc-based WLAs for non-stormwater discharges; e.g., minor, general and future minor NPDES
13. LAs will include direct deposition and existing bed sediments.
14. Sediment TMDLs will be utilize SQOs/triad approach thereby identifying conc-based bulk sediment allocations for total metals along with sediment toxicity and benthic indices included.
15. Reductions are anticipated for sediment metal levels, although may not be required for water column since existing data shows occasional exceedances (are these seasonal?).

DISCUSSION OF IRREGULAR STORMWATER DISCHARGES BY REFINERIES, WHO EMPHASIZED THEIR CURRENT STRATEGY IS TO HOLD AS MUCH STORMWATER ON SITE AS POSSIBLE AND THEN REDIRECT THIS STORMWATER TO TREATMENT PLANTS IN BETWEEN STORMS, THEREFORE 'OVERFLOW' DISCHARGE IS RARE (ONCE IN SEVEN OR MORE YEARS, DISCHARGE ONLY TWICE IN PAST 10 YEARS), SOME MONITORING RESULTS AVAILABLE FOR THOSE TWO DISCHARGE EVENTS, REFINERIES BELIEVE TECHNOLOGY DOES NOT EXIST FOR IMMEDIATE TREATMENT OF STORMWATER, THUS PREFER MASS-BASED ALLOCATIONS, POSSIBLY BASED ON SOME SORT OF DESIGN FLOW, REITERATE THE DISCHARGE OFF SITE IS PRIMARILY STORMWATER (NOT MUCH PROCESSED WATER).

QUESTION - REGARDING WHICH REFINERIES REDIRECT FLOW TO TERMINAL ISLAND TREATMENT PLANT VS. WHITE'S POINT OUTFALL? (because contributions to TITP would eventually be discharged into Outer Harbor)

**\*\*REFINERIES/WSPA – will summarize discharge information from 2000-2010 and provide available monitoring results from stormwater discharge events,**

## 5.4 PAHs TMDLs in DomCh estuary and greater Harbor waters

1. TMDLs for PAHs in sediments apply to DomCh estuary, ConSlip, Inner and Fish Harbor and Cabrillo Marina.
2. (yes apply to LAR estuary and eastern San Pedro Bay as sediment toxicity observed)
3. Mass-based WLAs for combined stormwater sources = MS4, Caltrans, General Construction and General Industrial; (maybe further refined or individualized based on available information/data, maybe possible separate POLA & POLB MS4 allocations, not for individual tenants)
4. To extent feasible, individual WLAs for contributing PS will be identified; e.g., refineries, Terminal Island WWTP,
5. Conc-based WLAs for non-stormwater discharges; e.g., minor, general and future minor NPDES
6. LAs will include direct deposition and existing bed sediments.
7. Sediment TMDLs will be utilize SQOs/triad approach thereby identifying conc-based bulk sediment allocations for LoMW, HiMW and total PAHs along with sediment toxicity and benthic indices included.
8. Reductions are anticipated for sediment PAH levels.

MORE DISCUSSION OF CONC. BASED VS. MASS-BASED ALLOCATIONS BOTH FOR REFINERIES AS WELL AS PORTS, WITH MASS-BASED BEING PREFERRED BY BOTH TYPES OF STAKEHOLDERS. POLB WILL DREDGE IR-SITE 7 IN COMING MONTHS AND THERE WILL BE MUCH FOLLOW UP MONITORING TO SHOW REMAINING SURFACE SEDIMENT CONCENTRATIONS. POLA INDICATED THEY WERE PLANNING TO DREDGE SOME PARTS OF CABRILLO MARINA TO MAINTAIN NAVIGABLE DEPTH, THERE WILL BE FOLLOW UP MONITORING.

QUESTION REGARDING ALLOCATIONS FOR EXISTING BED SEDIMENTS....WILL THE COMPLIANCE INCLUDE SOME ASPECT OF BIOLOGICAL INFORMATION (SEDIMENT TOXICITY AS WELL AS BENTHIC COMMUNITY AND NOT BE SOLELY BASED ON CHEMISTRY?)

QUESTIONS REGARDING THE QUANTIFICATION OF PAHS FROM IN WATER AND HARBOR/PORT ACTIVITIES SOURCES; THAT IS, DO WE HAVE ANY ESTIMATES OF DIESEL EMISSIONS FROM BOATS, SHIPS, TRAINS AND TRUCKS FOR SOURCE ANALYSIS

ADDITIONAL DISCUSSION REGARDING MODELING OF 'DIRECT DEPOSITION' WHICH REFERS TO AIR DEPOSITION OF POLLUTANTS FROM THE SKY DIRECTLY ONTO THE WATER SURFACE (not indirect air deposition which falls on land/soils and then transferred via runoff into the surface waters). PK CLARIFIED THAT WE WILL ESTIMATE OF SURFACE AREA OF WATERBODIES AND UTILIZE THE AIR MONITORING DATA THAT SCCWRP (2006) COLLECTED IN LOCAL AREA TO QUANTIFY THE LOAD ALLOCATION OF DIRECT DEPOSITION.

**\*\*POLB – will coordinate with air colleagues to learn more about available data for estimating diesel emissions from sources...however may or may not be feasible to yield approximations from these emission sources to deposition onto the surface waters; i.e., uncertainty about fate and transport due to weather conditions. POLB will reply.**

## **5.5 Organochlorine TMDLs in DomCh estuary and most greater Harbor waters**

1. Chlordane TMDLs apply to DomCh estuary, ConSlip Fish Harbor, LAR estuary and eastern San Pedro Bay.
2. Dieldrin applies to DomCh estuary, ConSlip; Toxaphene applies to ConSlip only.
3. DDT and PCBs (total) apply to all estuarine and marine waters in greater Harbor area, including eastern San Pedro Bay.
4. Mass-based WLAs for combined stormwater sources = MS4, Caltrans, General Construction and General Industrial; (maybe further refined or individualized based on available information/data, maybe possible separate POLA & POLB MS4 allocations, not for individual tenants)
5. To extent feasible, individual WLAs for contributing PS will be identified; e.g., refineries, Terminal Island WWTP, Superfund site(s)
6. Conc-based WLAs for non-stormwater discharges; e.g., minor, general and future minor NPDES
7. LAs will include direct deposition and existing bed sediments.
8. Sediment TMDLs will be utilize SQOs/triad approach thereby identifying conc-based bulk sediment allocations for dieldrin, chlordane and DDT along with sediment toxicity and benthic indices included.
9. PCBs TMDLs will require lower sediment levels (than ERLs = benthos) to attain human health protection from fish consumption, suggest sediment target = 3.6 ug/kg dry wt. total PCBs (Gobas and Arnot, 2010)
10. Toxaphene TMDLs will be based on fish tissue levels (and correlated to sediment, if feasible)
11. Reductions are anticipated for most organochlorine sediment levels.

PK REMINDED FOLKS THAT SEDIMENT ALLOCATIONS WILL BE INTENDED TO ACHIEVE FISH TISSUE TARGETS FOR THESE BIOACCUMULATIVE POLLUTANTS. AND LOWER PCBs SEDIMENT TARGET IS PRESENTED ABOVE. AGAIN PREFERENCE INDICATED BY STAKEHOLDERS FOR MASS-BASED ALLOCATIONS. DISCUSSION ON POSSIBLE USE OF 'ACTIVE SEDIMENT LAYER' (20 cm) TO DEFINE THE VOLUME OF POLLUTED SEDIMENTS. QUESTION REGARDING THIS POSSIBLE ACTIVE LAYER VS. SEDIMENT SURFACE LAYER (5 cm) WHICH IS REQUIRED IN MONITORING FOR SQOs.

## **5.6 Sediment Toxicity TMDLs in DomCh estuary and many greater Harbor waters**

1. Sediment toxicity TMDLs apply to: DomCh estuary, ConSlip, Inner, Fish, Outer Harbor, LAR estuary and eastern San Pedro Bay. (does not apply to Cabrillo Marina nor Cabrillo Beach)
2. Sediment toxicity TMDLs will be identified via either sediment toxicity targets or sediment triad approach and attaining assessment levels of unimpacted or likely

unimpacted categories. (for example, San Pedro Bay has sediment toxicity as problem pollutant so it might be achieved via improved toxicity results only)

3. Is it feasible to make toxicity allocations?

**\*\*EPA/RWQCB – will discuss option of compliance via biological effects (toxicity and community) in lieu of meeting sediment chemistry targets or allocations.**

### **5.7 Benthic Community Effects TMDLs in DomCh estuary, ConSlip, Inner and Fish Harbor**

1. BCE TMDLs apply to DomCh estuary, ConSlip and Inner Harbor.
2. Benthic community effects TMDLs will be identified only via sediment triad approach and attaining assessment levels of unimpacted or likely unimpacted categories.