

**State of California
California Regional Water Quality Control Board
Santa Ana Region**

June 14, 2019

ITEM: 13

SUBJECT: Executive Officer's Report

- 1. Public Workshops to Solicit Comments on Regional Board Staffs' Proposed Basin Plan Amendment to Adopt Copper Total Maximum Daily Loads (TMDLs) and Non-TMDL Action Plans for other Metals for Newport Bay** – Water Board staff held two public workshops on May 9 and 10, 2019, to obtain additional public comments on the proposed Basin Plan Amendments (BPAs) to include changes to Total Maximum Daily Loads (TMDLs) for copper (Cu) and include Non-TMDL Action Plans for zinc (Zn), mercury (Hg), arsenic (As), and chromium (Cr) in Newport Bay. The first workshop was held on May 9 in the evening at the Marina Park Community Center on the Balboa peninsula. Approximately thirty-five people attended. The second workshop was held the next day in the late morning at the Newport Beach Central Library, with at least 32 people in attendance. Both workshops were facilitated by Gita Kapahi, the Director of the Office of Public Participation from the State Water Board. In addition to an initial Water Board staff presentation by Dr. Linda Candelaria of the Coastal Planning Unit, representatives from the California Department of Pesticide Regulation (DPR) presented information and addressed questions on DPR's new regulations on Cu antifouling paints (Cu AFPs). A court reporter recorded both proceedings.

Workshop attendees included agency staff from the County of Orange, City of Newport Beach (and their consultants), the Cities of Santa Ana and Huntington Beach, and U.S. Environmental Protection Agency - Region 9 (USEPA); a representative for Assemblywoman Petrie-Norris; a representative from The Irvine Company (and their consultant); and representatives from boating organizations, yacht clubs, marinas, shipyards, boat paint retailers, a boat hull cleaner, the Port of San Diego, John Wayne Airport, OC Register, private citizen boatowners and non-boat owners, and students from the University of California at Irvine and Orange Coast College.

Water Board staff provided an overview of USEPA's existing 2002 TMDLs (for Toxic Pollutants, San Diego Creek and Newport Bay Watershed, USEPA June 2002) and staff's proposed revisions to the Cu TMDLs and recommendations for non-TMDL Action Plans for Zn, Hg, As, and Cr. Staff discussed the recommended Implementation Plan for the Cu TMDLs and what responsible parties would need to do to comply. **Prior comments received on the proposed Cu TMDLs indicated that several parties assumed that the Cu TMDLs would require that boats be converted to alternative (non-Cu) AFPs. The proposed Implementation Plan does not require boat owners to convert their boats to alternative AFPs.** Instead, it requires responsible parties, including the City of Newport Beach and County of Orange, to submit their own proposed implementation plans, which must identify strategies that are expected to achieve the Cu reductions from boats needed to attain the TMDLs and, thereby, applicable water quality objectives. The responsible parties would be required to implement their proposed implementation plans upon approval by the Water Board or its Executive Officer. The initial proposal is that the City of Newport Beach and County of Orange will take the lead in developing and implementing these plans on behalf of boat owners and other responsible parties.

Copies of staff's presentation, the fact sheet distributed at the workshops, and additional information on the proposed Cu TMDLs and metals Action Plans can be found on our web site at: https://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/tmdl_metals.html.

Department of Pesticide Regulation (DPR) staff then provided an overview of DPR's new regulation that established a maximum leach rate for dissolved Cu from Cu AFPs of 9.5 $\mu\text{g Cu/cm}^2/\text{day}$. Leach rates for current use Cu AFPs range from below 9.5 $\mu\text{g Cu/cm}^2/\text{day}$ to above 13.4 $\mu\text{g Cu/cm}^2/\text{day}$. The regulation went into effect on July 1, 2018. DPR staff discussed how the leach rate was developed and emphasized the fact that the leach rate assumes that in-water hull cleaning will be performed with the California Professional Diver's Association best management practices (BMP) cleaning method, which utilizes soft-pile carpet, and that hull cleaning will not occur more frequently than once a month. DPR's expectation is that the combination of the maximum leach rate, BMP cleaning method, and reduced cleaning frequency will bring individual marinas with 1,270 boats or less into continuous compliance with the California Toxics Rule (CTR) chronic criterion for Cu of 3.1 $\mu\text{g/L}$. Additional measures may be needed to bring the largest marinas (>1,270 boats) into compliance with the CTR criterion. It was noted that DPR's new leach rate only applies to recreational vessels, not commercial boats. Also discussed was DPR's new study, which will investigate the effectiveness of the new Cu leach rate in meeting the CTR chronic criterion for Cu. This year (2019) is the baseline year for the study, which will include marinas in Newport Bay and elsewhere in southern California. The study is anticipated to last six-seven years with sampling occurring every other year. DPR is coordinating the study with Water Board staff and City of Newport Beach staff. DPR's presentation can be found on the DPR website at https://www.cdpr.ca.gov/docs/emon/surfwtr/presentations/presentation_149_copper_afp.pdf.

Comments from the public were received at both workshops. The boating community is primarily concerned with being regulated and with the associated costs that may come with regulation, such as the cost to convert to non-Cu AFPs and potential fines for Cu exceedances in the Bay, which would make boating more expensive and less viable for many families. They also expressed concerns that DPR's new lower Cu AFP leach rate regulations only apply to recreational boats, not commercial vessels, which spend most of their time in the harbor (e.g., harbor tours and dinner cruises), not out in the open ocean. Racing boat owners were concerned that the recommended cleaning frequency (not more frequently than monthly) that is part of DPR's new Cu leach rate is not practical; they need to clean their boat hulls every two weeks to maintain competitiveness.

City of Newport Beach staff commented that Cu should be handled on a statewide basis and coordinated at the State level (including diver training and certification to use DPR's recommended hull cleaning methods) and that the Water Board should wait until DPR's study on the effectiveness of the new Cu AFP leach rate paints is completed before adopting revised TMDLs. City staff believe that Cu is not a problem in the Bay - they believe many areas are meeting the CTR criterion; the compliance schedule should provide more time to meet the TMDLs (more than 12 years); and proposed future dredging projects should improve water circulation and decrease Cu concentrations in the Bay. City staff also stated that they cannot prevent boat owners from having their boats repainted outside of California where DPR's regulations do not apply.

Orange County Coastkeeper and students from the University of California at Irvine and Orange Coast College expressed concerns that Cu continues to exceed the CTR criterion and that the proposed TMDL compliance schedule is too long, especially for Upper Newport Bay, which is an ecological reserve and marine protected area (MPA).

Santa Ana Water Board staff is currently addressing the comments received in August 2018, in meetings held with major dischargers, and at the two May 2019 public workshops. Staff is also finalizing the proposed Cu TMDLs and Action Plans (i.e., BPA documents), the Substitute Environmental Documentation (CEQA document), and responses to the August 2018 comments. Responses to comments received in October 2016 have been completed. Staff expects to post all documents in early June 2019 and is proposing to schedule a Board adoption hearing in August or September 2019. Responses to comments received at the public workshops will be completed prior to the public hearing.

2. Ford Aeronutronics – May 2019 Public Meetings for the former Ford Aeronutronic Site in Newport Beach – In May 2019, Water Board staff hosted five community meetings regarding the volatile organic compounds (principally trichloroethene, a carcinogen) present in soil vapor beneath some residential and commercial properties at the former Ford Aeronutronics site in the City of Newport Beach. The meetings were held as follows:

- One meeting on Tuesday, 5/28/2019; 4-5:30 pm at the Newport Beach Public Library
- Two meetings on Wednesday, 5/29/2019; 4-5:30 and 6:30-8 pm at the Newport Beach Civic Center
- Two meetings on Thursday, 5/30/2019; 4-5:30 and 6:30-8 pm at the Newport Beach Civic Center

Each meeting was open to the public but were geared toward one to two specific communities, for a total of nine communities, to address specific investigation details for each community. The multiple meetings with focused format allowed ample time to address specific questions and concerns pertaining to each community. The nine communities included: One Ford Road (location of the former Ford facility); Bayridge Park; Belcourt Terrace; Belcourt Hill; Sea Island; Newport North Apartments; Corsica Villas; Belcourt Masters; and Belcourt Park. All five meetings had identical content presented, with additional information included for each specific community. The sessions were moderated by Marina Perez of the SWRCB Office of Public Participation. Craig Communications, Ford's communication consultant, was in charge of distributing notifications for the public meeting, reserving the venue and signing in the attendees. The total number of attendees for the five sessions was about 125.

Each session started with a 30-minute presentation by Jessica Law of the Site Cleanup Program, with Power Point slides. This presentation was revised from previous meetings to more effectively convey the results of the soil gas and indoor air sampling and explain the next steps of the investigation to the public. Each presentation was followed by an expert panel discussion. The panel included Jessica Law and Nick Amini (Water Board staff), Amanda Palumbo (OEHHA), and three representatives of Wood, the consultant to Ford Motors: Mike Barnes (5/28), Daniela Hamann-Nazaroff (5/29 & 5/30), and Kenn Conner. The audience was able to write down their questions during the presentation on flashcards, which were read out loud and answered by the panel. This style of question and answer proved to be very effective in addressing a wide variety of the audience's concerns. After each panel discussion, the audience members were given the chance to discuss any questions or concerns one-on-one with individual panelists. The overall feedback from the attendees was positive. The pace of the investigation is proceeding in an expedited manner, with consideration for maintaining the integrity and quality of data.

The main questions and concerns expressed by the attendees were related to property values, health risks, and any mitigation or remediation measures necessary. There were also attorneys

from two different law firms present at three of the meetings. The attorneys are considering a potential class action lawsuit to ensure the investigation is being conducted appropriately. Water Board staff had previously requested that corporate staff from Ford Motors attend the meetings and provide a response to homeowners' concerns regarding property value. However, corporate staff from Ford Motors declined the request, having stated that they had no new information or updates regarding the perceived decline in property values caused by the presence of contaminants in soil vapor.

Dr. Palumbo of OEHHA addressed questions regarding health risks. Mr. Conner with Wood explained potential types of interim remediation or mitigation measures to protect the occupants of the homes.

The next public meeting, which will focus on interim remediation or mitigation measures at the former Ford site, is tentatively scheduled for November 2019 at the Newport Beach Civic Center. Staff will continue to keep the Board advised about this matter.

- 3. Children's Water Education Festival** – Water Board staff participated in the 19th Annual Children's Water Education Festival" at the University of California at Irvine campus on March 27-28, 2019. The Festival is sponsored by the Orange County Water District, Disneyland Resort, National Water Research Institute, Municipal Water District of Orange County, and the Orange County Water District Groundwater Guardian Team. This Festival attracts more than 6,000 students annually and is recognized nationally as the largest event of its kind. The purpose of the Festival is to provide participants with a better understanding of what each one can do to protect our natural resources with a focus on water quality protection, water pollution prevention, and water conservation.

Water Board staff has participated in the Festival since 1996. In recent years, more than 300 classes from schools in 24 different cities in the Orange County area have participated in the Festival, with a total attendance of over 7,000 students, teachers, and parents. The children attending the two-day Festival are from grades 4, 5, and 6. The Water Board's recent presentations included discussing with the students about "How to Keep our Waters Clean." During 20-minute sessions, staff talked about how trash (especially plastic trash), pet waste, and other wastes from homes harm beaches, streams, and lakes. After these talks, staff divided the classes into two teams and played a game to reinforce the discussion concepts. About 350 students attended staff's presentations over twelve sessions. These presentations have been well received by students and teachers over the past 19 years.

Each year staff continually strives to improve the presentations to make them more interactive and interesting for the students. This year the Santa Ana Water Board received a \$2,000 grant from the Municipal Water District of Southern California for purchasing educational outreach items, which will be incorporated into the presentations for next year.

This Festival is one of the Water Board's biggest outreach activities and is listed in this year's Nonpoint Source Work Plan for the Water Board. The Festival continues to be an opportunity for staff to interact with many students, parents, and teachers.

4. Status report regarding the City of Beaumont's compliance with order no. R8-2015-0026, NPDES NO. CA105376, and compliance with the Executive Officer's Water Code 13267 Investigation Order – At the July 29, 2016, February 3, 2017, March 23, 2018, and September 7, 2018 Regional Board meetings, Board staff provided updates on the City's efforts to comply with their Permit requirements, their Salt Management Plan Maximum Benefit Program, and the August 25, 2016 Water Code section 13267 Investigation Order. The issues identified and discussed during those prior Board meetings included:

- a. Waste Flow Exceedances
- b. Desalting Facility
- c. The City's Compliance with the EO's 13267 Investigative Order
- d. Status of the City's California Code of Regulations Title 22 Engineering Report
- e. The City's *Final Wastewater Treatment Plant and Brine Line Design, Financing Plan, and CEQA* document submittals.

The City has addressed the above-referenced items including requirements to comply with all requirements listed in the 13267 Investigative Order as detailed in **Table A** below. The 13267 Investigative Order was issued to ensure that the City's wastewater treatment plant (WWTP) and Brine Line construction projects remained on schedule. On October 29, 2018, the City received the Notice to Proceed with the construction of the WWTP expansion and Brine Line projects.

The purpose of this report is to provide the Board with an update on the City's WWTP and Brine Line construction activities. Please note that Board staff have a photolog of construction activities which can be presented at a future Board meeting.

WASTEWATER TREATMENT PLANT CONSTRUCTION

The final design plans for the WWTP and Brine Line include Facility expansion from the current 4.0 MGD to 6.0 MGD by the year 2020. Board staff accepted the City's proposed WWTP and Brine Line design plans, and the City began pre-construction activities on October 30, 2018. The construction of the WWTP is well underway, with weather being the only major issue resulting in construction delays. The City has stated that inclement weather impacts have resulted in a loss of 38 construction workdays. The budget for the WWTP project portion is approximately \$65.5 million (see **Table B** budget details).

BRINE LINE CONSTRUCTION

- a. The City's salt mitigation plan includes the implementation of reverse osmosis (RO) facility as well as construction of a 23-mile long brine line commencing at the Beaumont Facility and terminating at the City of San Bernardino's connection point to the Inland Empire Brine Line for exporting excess salt. Brine Line construction began on October 30, 2018 and the pipeline is being constructed in two separate portions, designated as Reaches 1 and 2, at a cost of \$40.5 million (see **Tables C and D** for Brine Line and permitting budget details).
- b. Reach 1 of the Brine Line includes the points commencing at the City of Beaumont WWTP and terminates at the intersection of San Timoteo Canyon and Alessandro Roads. Prior to the installation of the Brine Line pipe, a series of potholes must be completed along the entire 23-mile long right-of-way, in order to determine if subsurface conditions are acceptable for pipe placement. The City has indicated that the average pothole takes an estimated 30 minutes to complete. For Reach 1, approximately, 104 potholes have been completed to date with an estimated 6 plus remaining. In addition, the Brine Line construction also requires several permits from various agencies as detailed in **Table D**. The project permitting

requirements and potholing activities have impacted project progress. The weather has also played a significant role in delaying construction activities, with a total of 33 inclement weather days recorded to date. For Reach 1, approximately 18,035 linear feet of Brine Line has been installed to date.

- c. Reach 2 of Brine Line begins at the intersection of San Timoteo Canyon Road and Alessandro Road, and will terminate at the Inland Empire Brine Line connection. This portion of the Brine Line is approximately 10 miles long. 191 potholes have been completed for this portion of project with approximately 24 plus remaining. Weather has also impacted this portion of the project with 12 inclement weather days recorded to date. For Reach 2, approximately 14,425 linear feet of Brine Line has been installed to date.
- d. The City is installing approximately 23 miles of Brine Line (121,440 linear feet). Total installation to date is 32,460 linear feet, which represents about 25% of the line.

OTHER ACTIVITIES

Title 22 Engineering Report

Status of the City's Title 22 Engineering Report - Submittal of a Title 22 Engineering Report to and approval by the State Water Board's Division of Drinking Water (DDW) is required prior to the City providing its recycled water for groundwater recharge or non-potable uses (e.g. irrigation). The City retracted the previously submitted Title 22 application in anticipation of re-initiating the process soon after the construction of the new WWTP. The City plans to submit the revised Title 22 report in September of 2019 in conjunction with the revised report of waste discharger for the new NPDES permit. This report will reflect the operations of the new plant. The City is also in discussions with the Beaumont Cherry Valley Water District for distribution of recycled water.

Pretreatment Program

Beaumont City Council approved the Pre-Treatment Program in August of 2018. The new Pretreatment Program and enforcement policy are driven by requirements from the Santa Ana Watershed Project Authority (SAWPA) and the Orange County Sanitation District (OCSD) to qualify future discharges to the Inland Empire Brine Line. On August 8, 2018, Beaumont City staff hand-delivered Pretreatment Program Documents to the Santa Ana Regional Board's office. Board staff is currently completing review of the documents.

Non-construction Activities

In addition to the WWTP and Brine Line construction, the City has completed, or is in the process of completing, the following tasks:

- Hired a Chief Plant Operator – October 2018
- Hired full-time wastewater staff to replace contract staff – January 2019
- Hired a new sludge hauler – April 2019
- Secured capacity in the Inland Empire Brine Line – March 2019
- Received conditional approval from OCSD for the Brine Line – October 2018
- Finalized agreements with SAWPA on the transfer of the Inland Empire Brine Line Capacity – March 2019
- Working with SAWPA on OCSD conditions and permitting – ongoing
- New permit application submittal by September 2019 – ongoing

Project Schedule

The City of Beaumont has experienced a number of setbacks during the WWTP and Brine Line construction projects, with the most notable issue being inclement weather. To date, the City has lost a project-combined total of 81 working days due to weather. As a result, the City of Beaumont has informally requested an additional 6 months to complete the project. Considering the effort that the City has expended to complete the WWTP and Brine Line construction by the March 2020 deadline, Board staff will work with the City to evaluate their extension request.

**Table A
13267 Investigation Order Compliance**

| Item | Compliance Task | Status |
|-------------|---|---|
| 1 | By May 30, 2017, conduct an inflow and infiltration study. | Completed on May 22, 2017. |
| 2 | By October 17, 2016, provide an accurate estimate of future dwelling units. | Completed on October 17, 2017. |
| 3 | Provide a complete list of existing and proposed commercial and industrial facilities by December 15th and June 15th beginning December 15, 2016. | Completed on December 10, 2016, the City submitted the list of commercial and industrial users within the City's service area. |
| 4 | By December 31, 2016, submit an Exceedance Prevention Capacity report. | Completed on January 3, 2017. |
| 5 | By December 31, 2016, submit a Feasibility Study for expansion of the WWTP. | Completed on January 3, 2017. |
| 6 | By May 31, 2017, complete a preliminary design for either option 1 or option 2 and submit that design to the Regional Board. | Completed on December 15, 2016. |
| 7 | By December 31, 2017, provide a financing plan for the final plant expansion. | Completed on September 27, 2019. |
| 8 | By December 31, 2017, develop and submit to the Regional Board the final plant expansion project design. | Completed on December 29, 2017. |
| 9 | By December 15th and June 15th of each year beginning in December 2016, submit the City's Average Dry Weather Flow Report. | In Compliance: The City has submitted the required reports from the period of September 2016 through December 2018. |
| 10 | On a monthly basis and commencing on September 15th, 2016, provide 12 months of influent continuous pH and electrical conductivity (EC) readings. | In Compliance: The City has submitted the requested monthly influent and EC data from the period of September 2016 through May 2019. |

**Table B
WWTP Project Accounting**

| WWTP | Budget Amount | Paid to Date | Remaining |
|-------------------------|------------------------|------------------------|------------------------|
| Design | \$2,709,798.23 | \$2,556,649.26 | \$153,148.97 |
| Construction Management | \$5,308,585.72 | \$925,208.01 | \$4,383,377.71 |
| Equipment | \$252,906.00 | \$210,793.50 | \$42,112.50 |
| Permits | \$324,776.76 | \$43,168.36 | \$281,608.40 |
| Construction | \$53,910,737.00 | \$8,871,884.86 | \$45,038,852.14 |
| Contingency | \$4,000,000.00 | \$87,656.60 | \$3,912,343.40 |
| Total | \$66,506,803.71 | \$12,695,360.59 | \$53,811,443.12 |

**Table C
Brine Line Project Accounting**

| Brine Line | Budget Amount | Actual | Remaining |
|-------------------------|------------------------|------------------------|------------------------|
| Design | \$2,082,357.37 | \$1,713,919.39 | \$368,437.99 |
| Construction Management | \$3,436,471.38 | \$822,291.83 | \$2,614,179.55 |
| Permit | \$508,240.25 | \$227,181.09 | \$281,059.16 |
| Construction | \$31,884,226.35 | \$11,047,778.22 | \$20,836,448.13 |
| Contingency | \$2,600,000.00 | \$1,319,196.63 | \$1,280,803.37 |
| Total | \$40,511,295.35 | \$15,130,367.16 | \$25,380,928.20 |

**Table D
Brine Line Permits and Cost**

| Agency | Description | Amount |
|------------------------------------|---|---------------------|
| City of San Bernardino | Brine Line Encroachment Permit | \$682.50 |
| Riv. County Tax Collection | Permit for Brine Line | \$2,000.00 |
| Union Pacific Railroad (UPRR) | Pipeline Crossing Agreement & Encroachment Permit | \$98,655.00 |
| San Bernardino Flood Control | Brine Line Encroachment Permit | \$9,539.00 |
| City of Redlands | Plan Check Fees | \$2,500.00 |
| City of Loma Linda | Plan Check Fee for Brine Line | \$13,000.00 |
| SAWPA | Brine Line Encroachment Permit Deposit | \$20,000.00 |
| County of San Bernardino | CEQA Environmental Filing Fee | \$50.00 |
| Riverside County | Permit for Brine Line - Supplemental Inspection | \$45,460.00 |
| CA Department of Fish & Wildlife | 1602 Permit | \$5,145.75 |
| Water Board | 401 Water Quality Certification | \$24,197.00 |
| Various monitoring required by EIR | Paid Hourly | \$250,000.00 |
| Southern California Edison | Permit | \$6,951.84 |
| Total | | \$478,181.09 |