

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

MEETING DATE: March 11, 2020

ITEM: 5
SUBJECT: **EXECUTIVE OFFICER'S REPORT**

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Staff Presentations and Publications

On February 3 and 4, Erica Kalve and Ross Steenson of the Groundwater Protection Division and Cheryl Prowell of the Toxics Cleanup Division participated in the Certified Unified Program Agencies (CUPA) conference. Under the CUPA program, CalEPA has certified 83 local government agencies to implement hazardous waste and hazardous materials management laws in a consistent manner. The annual CUPA conference allows State and local agencies to share new information. Staff gave four presentations and participated in the government-only roundtable as follows:

- Improving Risk-Based Decision Making at Vapor Intrusion Sites (joint presentation by Ross, Robbie Ettinger of Geosyntec Consultants, and Gina Plantz of Haley & Aldrich)
- ITRC's TPH Risk Evaluation Guidance (joint presentation by Ross, Roy Thun of GHD, Diana Marquez of Burns and McDonnell, and Usha Vedagiri of Wood)
- PFAS Soil and Groundwater Investigation (Erica)
- Evolving Vapor Intrusion Guidance (Cheryl)

Ross' joint presentation with two industry experts explored options for evaluating soil vapor cleanup levels based on site-specific conditions and for improving interpretation of indoor air data for evaluating whether vapor intrusion mitigation systems are properly and successfully operating. Cheryl's presentation gave an update on our region's guidance (Environmental Screening Levels, Vapor Intrusion Mitigation System Fact Sheet) and an overview of problems we have observed with vapor intrusion mitigation systems. Erica's presentation provided an overview of the history, use, nomenclature, and environmental concerns regarding per- and polyfluoroalkyl substances (PFAS). She summarized the overall status for sites that were issued investigation orders, discussed results of drinking water well testing, preliminary site investigations, San Francisco Bay monitoring, and presented our multi-pronged approach to source control, use of best management practices, and treatment.

There continues to be strong interest by local agency staff regarding vapor intrusion (VI). DTSC and the Water Boards discussed the CalEPA Supplemental Vapor Intrusion Guidance which was released as draft for public comment on February 14. The public comment period closes April 30, 2020.

On February 14, at the Los Angeles Regional Water Board (Region 4) office, Tamarin Austin (State Water Board attorney for Region 4) and Ross Steenson gave a training to cleanup staff regarding VI. The presentation described the Water Boards' authority for regulating VI, summary of existing guidance, detailed overview of the draft of the CalEPA supplemental VI guidance that focuses on VI screening, and options for site-specific evaluations. Discussion centered around Region 4 case studies and how to approach different situations (e.g., underground garage with overlying residences, appropriate use and review of mathematical models). The training was well received, and the presentations may be used to develop a Water Boards-wide VI training later this year.

Federal Energy Regulatory Commission (FERC) issues directive to drain Anderson Reservoir (Susan Glendening)

In 2012, the Santa Clara Valley Water District (Valley Water) initiated the [Anderson Dam Seismic Retrofit Project](#) in response to studies showing the dam could fail in a significant earthquake, endangering people and property downstream. Since 2009, Valley Water had been operating the reservoir behind the dam at lower than maximum capacity, and in 2017, Valley Water further reduced reservoir levels in view of the potential threat. Water Board and other agency staff have been coordinating with Valley Water on the project, which would replace the existing dam and take at least several years to construct. Complicating the project is that the reservoir plays a significant water supply role, so Valley Water needs to carefully manage its water supply resources during any period that storage at the reservoir is reduced. The seismic retrofit project is currently in the planning stage.

On February 20, due to a reevaluation of the potential threat of dam failure posed by an earthquake, FERC directed Valley Water to reduce the reservoir water level to deadpool (i.e., a level that would not discharge at any significant rate should the dam fail) by October 1, 2020, and to maintain it there until the seismic retrofit project has been completed. This directive was due in part to the limited capacity of the reservoir's existing low-level outlet. Now, when there are significant rains, reservoir levels can increase relatively rapidly. That can increase the potential threat should there be a significant earthquake. By maintaining the reservoir at deadpool, Valley Water will be minimizing that threat.

Valley Water has committed to complete an interim action that includes maintaining the low water levels. It has indicated its intent to construct a new, larger-capacity low-level outlet during this interim period, before the longer-term retrofit project is constructed. The increased low-level outlet capacity could allow better management of reservoir levels during the rainy season, which may result in FERC allowing Valley Water to maintain higher reservoir water levels ahead of the longer-term retrofit project. Valley Water is currently working on a project description and related information that would give the agencies a better idea of the details of the interim project.

Key potential interim project impacts that are under the Water Board's purview include ensuring the continued provision of sufficient appropriate-temperature and -quality water to protect fish, including steelhead, downstream of the dam in Coyote Creek. The work is also likely to result in the discharge of accumulated sediment from the reservoir downstream into Coyote Creek, and could result in the discharge of water with high temperatures and low dissolved oxygen concentrations. Those have the potential to result in impacts to beneficial uses, including impacts to steelhead, and exceedances of water quality objectives. Valley Water is preparing a dewatering effects memo to describe those potential effects and we will coordinate with them and project stakeholders, including the resource agencies, on next steps.

The proposed work will result in the discharge of dredge and fill material into waters of the United States, which will require the Water Board to consider issuance of a Water Quality Certification pursuant to Section 401 of the Clean Water Act. For certain FERC projects, the State Water Board is responsible to consider issuance of certification. As

we have already been coordinating with Valley Water, State Water Board staff, and project stakeholders on the longer-term retrofit project, staff is well-positioned to timely and efficiently consider an application for certification of the interim project, or to coordinate with State Water Board staff as they review an application.

During this interim project process, Valley Water intends to continue to work with the agencies on the longer-term seismic retrofit project.

Cannabis Program Rollout and Status

Proposition 64, a voter initiative to legalize the cultivation, possession, and use of cannabis in California became law in November 2016. In response, the State Water Resources Control Board (State Water Board) adopted the 2017 Cannabis Cultivation Policy (Cannabis Policy) to ensure that the diversion of water and discharge of waste associated with commercial cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, and springs.

To implement the Cannabis Policy, the State Water Board adopted the General Waste Discharge Requirements for Discharges Associated with Cannabis Cultivation Activities (Cannabis General Order) to prevent water quality impacts from commercial cannabis cultivation activities. "Commercial cultivation" means the cannabis will be sold in the medical or recreational marketplace. Commercial cannabis cultivators are required to obtain a cultivation license from the California Department of Food and Agriculture. To obtain a commercial cultivation license, a grower must also apply for, and receive, coverage under the Cannabis General Order.

The Cannabis General Order blends requirements from the State Water Board Division of Water Quality, the State Water Board Division of Water Rights, the California Department of Fish and Wildlife, the California Department of Pesticide Regulation, and the California Environmental Quality Act, and includes:

- Best management practices to protect water quality;
- Water rights, usage, conservation, and storage requirements;
- Protections for fish and wildlife and their habitats;
- Limitations on the usage of pesticides, fertilizers, and other agricultural chemicals; and
- Standards for tribal consultation, archeological remains, and human remains.

On January 2, 2018, San Francisco Bay Regional Water Quality Control Board (Regional Water Board) embarked on creating a Cannabis Cultivation Program to implement the Cannabis General Order. First steps involved recruiting and training several enthusiastic and talented staff including Yan Nusinovich, Sami Harper, and Josh Hoeflich in the Planning Division, and Jerry Xu in the Enforcement Section of the NPDES Division.

Implementation of our regional Cannabis Program through mid-2019 focused on enrollment, outreach, developing business rules, equipment procurement, and securing health and safety training for our staff. Yan, with support from Sami and Josh, created a series of standardized forms (e.g., cultivation termination, site inspection, etc.), and an internal database to track cannabis online applications and to document staff actions and decisions made. The database can pull information from online applications allowing us to efficiently process them. To date we have received applications from 226 growers, 177 of whom have paid and obtained coverage under the Cannabis General Order. Approximately 88 percent of the applications were received in 2018, the first year of cannabis legalization. Enrollment slowed in 2019 due to local government restrictions on cannabis cultivation permits, a more mature market, and competition from

unpermitted cultivators. Only three cultivators have terminated Cannabis General Order coverage.

In our region, roughly 80 percent of the cannabis cultivation permits are for indoor grows. "Indoor grows" means the cannabis is grown in a structure with a permanent roof and a relatively impermeable floor. Temporary structures do not meet the "indoor" definition and are treated as outdoor grows. Most of our indoor operations occur within city limits where water is supplied by a utility and waste is routed to the sanitary sewer. By contrast, outdoor cultivation is severely limited by non-permissive local ordinances. Of the nine Bay Area counties that comprise our region, only three allow outdoor cultivation and only six allow indoor cultivation.

In mid-2019, we directed resources towards inspecting permitted grow sites. Staff conducted 29 inspections and found the most common violations included:

1. Missing plans and reports;
2. Inadequate erosion and sediment controls to prevent sediment discharges to water bodies;
3. Unpermitted wastewater discharges to land;
4. Lack of secondary containment for fertilizers or pesticides in case of spills; and
5. Water supply systems requiring metering or improvements to prevent contamination.

Staff have worked to help potential Cannabis General Order applicants understand the requirements of the Cannabis General Order to facilitate compliance. Staff completed six compliance assistance visits for permitted cultivators and four for cultivators seeking permits.

Staff also inspected 18 outdoor operations that were illegally cultivating without a permit, in coordination with the North Coast Regional Water Quality Control Board, and found egregious sources of water pollution at many of them, such as in the following photographs:

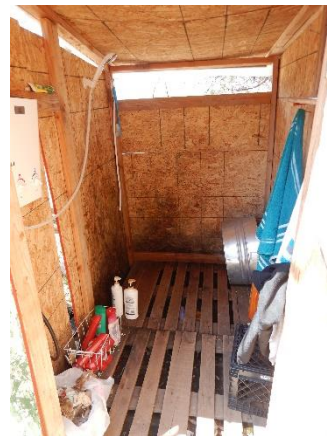


Photo 1: Trash and fertilizer were dumped into a pit about 75 feet from a creek.

Photo 2: The workers' shower drains onto a hillside approximately 25 feet from a creek.

Current and future Program enforcement efforts will include (1) coordination with law enforcement to eliminate unpermitted cultivation which threatens water quality through participation in the Watershed Enforcement Team, a California Department of Fish & Wildlife and Water Board joint inspection task force, and (2) analyzing satellite imagery to identify illegal grows in our region using the Cannabis Identification Prioritization System (CIPS).

The CIPS model was originally developed as a model to prioritize joint inspections in Northern California based on identified cannabis cultivation sites and a predefined set of criteria. However, it has since evolved into a cannabis cultivation site identification and mapping model. The current CIPS program receives spatial data from 39 million acres statewide. identifies probable cannabis cultivation sites and models their threat to water quality based upon seven scalable factors. The staff in the program (users) use this model to prioritize inspections, enforcement and outreach.

The program has the potential to be extremely useful in gaining the aid of local law enforcement for unpermitted cannabis cultivation enforcement. However, the model utilizes open source satellite imagery from 2018 or earlier. With rapid turnover in illegal cannabis cultivation sites, grows are often utilized for a season and then abandoned. For this model to be used effectively, the user needs to identify sites that have a history of repeated use and cross reference the location with more recent Google Earth Imagery. Our intention is to utilize this method, identifying the most likely to currently exist grow sites, and submit our findings to local law enforcement to move forward with enforcement.

Program permitting efforts will concentrate on working with permittees to acquire water quality data on cannabis tailwater and other process-related wastewaters, to inform our drafting of waste discharge requirements (WDRs) for these process waters. Currently, permittees whose operations do not have access to a publicly owned treatment works are required to dispose of waste water, at a permitted facility, via a tank and haul methods. WDRs that would allow for the application of cannabis wastewater to land in a manner protective of water quality would ease operational burdens on permittees and help insure proper disposal of wastewaters.

Memorandum of Understanding (MOU) with the State Of California Department of Fish And Wildlife, Office of Spill Prevention and Response, for Coordination During Oil Spill Response (David Elias, Tamarin Austin)

This statewide MOU contains the elements needed to efficiently and effectively coordinate oil spill response regulatory oversight. In December I signed this MOU along with the Executive Officers from all of the State's Regional Water Boards, State Water Board Executive Director Eileen Sobeck, and Department of Fish and Wildlife's Office of Spill Prevention and Response (DFW) Administrator Thomas Cullen. This is an important milestone for all the signatory agencies.

The Lempert-Keene-Seastrand Oil Spill Prevention and Response Act requires the DFW to enter into an MOU with the State Water Board and Regional Water Boards to address discharges, other than dispersants, incidental to or directly associated with the response, containment, and cleanup of an existing or threatened oil spill.

The original MOU was finalized in 1995. This 2020 revised MOU expands the scope of the 1995 MOU to address response coordination utilizing the Standardized Emergency Management System, the National Incident Management System, and the Incident Command System and specifies training to help ensure the spill response personnel work efficiently and effectively together when responding to an oil spill into or threatening waters of the State. Confidentiality and information sharing pursuant to this MOU are also addressed, which is important for efficient, coordinated and formal enforcement.

The drafting of the MOU was a team effort between DFW and San Francisco Bay Regional Water Board staff who sought to memorialize coordination "lessons learned" during responses to a number of large oil spills to San Francisco Bay including the Cosco Busan (2007) and Dubai Star (2009). The MOU has been utilized successfully in its draft form at many other spills, including the Refugio oil spill in Santa Barbara County (2015) and more recently at four separate tanker-truck accidents that discharged petroleum to creeks within Region 2, as were discussed in last month's Executive Officer's Report.

The [MOU can be found here](#) and it includes a useful primer for anyone wishing to learn more about oil spill emergency response, including a definitions list of critical terminology used in a formal response action.

It is important to acknowledge this milestone as another excellent example of our staff providing leadership on an important statewide issue. Finally, I also would like to acknowledge our State Water Board partner Steve McMasters and his team who facilitated taking the final draft MOU over the finish line with signatures and support from every region in the State.

In-house Training (Carrie Austin)

Our February training topic was Groundwater / Surface Water Interaction. Keith Roberson reminded us that even our U.S. Supreme Court recognizes, “groundwater and surface water are physically interrelated as integral parts of the hydrologic cycle” (1976 Cappaert v. U.S. decision to protect Devils Hole pupfish). Executive Officer Michael Montgomery reminded us of the importance of accurate site conceptual models. He presented a case study from Hawaii of wastewater injection into groundwater that resurfaced in the ocean. Environmental groups sued for impact to the reefs and need for increased regulation. The case will soon be heard in U.S. Supreme Court (Maui County vs. Earthjustice). Ross Steenson addressed the need for close spacing of wells in irregular geology to find preferential pathways particularly at the Bay margin. Ralph Lambert described the importance of seasonality and timing of sampling in creeks to detect contamination from a groundwater plume. Cal State East Bay professor Jean Moran presented her work on, “Using Radon and Other Geochemical Tracers to Examine GW/SW Interaction in the East Bay.” The training was organized by the Groundwater Protection Division (David Tanouye).

March 2020 Enforcement Actions (Brian Thompson and Jessica Watkins)

The following tables show the proposed and settled enforcement actions since February's report. In addition, enforcement actions are available on our website at http://www.waterboards.ca.gov/sanfranciscobay/public_notices/pending_enforcement.shtml

Proposed Settlements			
The following are noticed for a 30-day public comment period. If no significant comment is received by the deadline, the Executive Officer will sign an order implementing the settlement.			
Discharger	Violation(s)	Proposed Penalty	Comment Deadline
Sonoma Valley County Sanitation District	Unauthorized discharge.	\$427,600 ¹	March 9, 2020
Monterey Mushrooms, Inc.	Unauthorized discharges	\$911,800 ²	March 30, 2020

- 1 Includes \$213,800 towards an Enhanced Compliance Action (ECA) to identify and eliminate sources of inflow and infiltration into the District's collection system, thus reducing wet weather sanitary sewer overflows.
- 2 Includes \$440,364 towards a Supplemental Environmental Project (SEP) for the Santa Clara Valley Open Space Authority to restore approximately 3.5 acres of riparian habitat along Fisher Creek in the Coyote Valley Watershed.

Settled Actions			
On behalf of the Board, the Executive Officer approved the following:			
Discharger	Violation(s)	Imposed Penalty	Supplemental Environmental Project
DAmbrosio 8 Acres, Napa	Failure to submit an annual construction stormwater discharge report for 2017/2018 by September 1, 2018.	\$1,000	None.
Sewerage Agency of Southern Marin	Discharge limit violations.	\$24,000	None.
Sausalito-Marín City Sanitary District	Discharge limit violations.	\$6,000	\$6,000
Sonoma Valley County Sanitation District	Discharge limit violations.	\$9,000	None.
Vulcan Materials Company, Pilarcitos Quarry	Discharge limit violation.	\$3,000	None.
Vishay Intertechnology, Gould Electronics, Inc., Monsanto Company, and GlaxoSmithKline PLC	Discharge limit violations.	\$9,000	None.
Las Gallinas Valley Sanitary District	Discharge limit violations.	\$9,000	\$9,000
Lehigh Southwest Cement Company and Hanson Permanente Cement, Inc.	Discharge limit violations.	\$6,000	None.
Burlingame Point, LLC	Discharge limit violation.	\$3,000	None.
Alameda Housing Associates, LP, Marea Alta	Discharge limit violations.	\$12,000	\$12,000
Spring Hill Jersey Cheese, Inc.	Failure to obtain industrial stormwater permit coverage.	\$6,200	\$3,100

Settled Actions			
On behalf of the Board, the Executive Officer approved the following:			
Discharger	Violation(s)	Imposed Penalty	Supplemental Environmental Project
Lennar Homes of California, Inc., Newark Gateway	Discharge limit violations.	\$12,000	None.

401 Water Quality Certification Applications Received (Abigail Smith)

The table below lists those applications received for Clean Water Act section 401 water quality certification from January 17 through February 12, 2020. A check mark in the right-hand column indicates a project with work that may be in BCDC jurisdiction.

Project Name	City/Location	County	May have BCDC Jurisdiction
Zone 7 Phase 3 Channel Bank Repairs	Dublin	Alameda	
Kiani Residence - Creek Restoration	Oakland	Alameda	
Marsh Drive Bridge Replacement Over Walnut Creek	Concord	Contra Costa	
MOTCO Barge Pier Repair and Small Craft Berthing	Concord	Contra Costa	✓
SFPP LS-72 and LS-47 Pipeline Washout Repair	Vine Hill	Contra Costa	
15 Boardwalk Foundation Repair	Larkspur	Marin	✓
6847 Lucas Valley Road Bridge Replacement	Nicasio	Marin	
Schoonmaker Point Marina Maintenance Dredging	Sausalito	Marin	✓
Calistoga Riverside Ponds Relocation	Calistoga	Napa	
HDV Streambank Erosion Control and Restoration	Napa	Napa	
George III Conn Creek Repairs	Rutherford	Napa	
Upper York Creek Ecosystem Restoration and Aquatic Habitat Enhancement	St. Helena	Napa	
India Basin Open Space and 700 Innes Development	San Francisco	San Francisco	✓

Project Name	City/Location	County	May have BCDC Jurisdiction
NOAA Greater Farallones National Marine Sanctuary Pier Repairs	San Francisco	San Francisco	✓
Pier 1.5 Public Dock Expansion	San Francisco	San Francisco	✓
Mindego Ranch Ponds Enhancement	La Honda	San Mateo	
Runways 10L-28R and 10R-28L Trestle Repair	Millbrae	San Mateo	✓
Emergency Culvert Clearing Polhemus Creek	San Mateo	San Mateo	
Regnart Creek Trail	Cupertino	Santa Clara	
Alamitos Road at Alamitos Creek Bridge Replacement	New Almaden	Santa Clara	
Santa Clara Bridge Scour - Proposed Rock Slope Protection At 4 Bridges	Santa Clara	Santa Clara	
San Tomas Aquino Creek Stabilization	Saratoga	Santa Clara	
City of Petaluma Maintenance Dredging	Petaluma	Sonoma	
Petaluma Marina and Upper Petaluma Federal Navigation Channel	Petaluma	Sonoma	