

Central Valley Regional Water Quality Control Board
18/19 February 2021 Board Meeting

Response to Comments
for the
California Department of Corrections and Rehabilitation
Mule Creek State Prison Facility
Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order

The following are Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff responses to comments submitted by interested parties regarding the proposed settlement agreement and stipulation for entry of an administrative civil liability order for the California Department of Corrections and Rehabilitation (Discharger or CDCR) Mule Creek State Prison (Facility). On 10 July 2020, both the Discharger and the prosecution team of the Central Valley Water Board reached Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order R5-2020-XXXX (Order) to address a specific set of discharges which occurred over 79 days between 18 January 2018 and 10 April 2019, totaling 1,119,746 gallons of contaminated stormwater which was discharged to surface water.

The proposed Order was issued for a 30-day public comment period on 20 July 2020 with comments due by 19 August 2020. The Central Valley Water Board received public comments regarding the proposed Order by the due date from the United States Environmental Protection Agency (USEPA), Amador County, the Amador County District Attorney, the California Sportfishing Protection Alliance (CSPA), and Mr. David Anderson

The submitted comments were accepted into the record, and are summarized below, followed by Central Valley Water Board staff responses.

Grouped Comments and Responses:

Lack of Requirements for Corrective Action to Address Known Issues in the Stormwater and Sewer Systems and Prevent Future Discharges of Wastewater to Mule Creek

A concern voiced by USEPA, CSPA, Amador County, and the Amador County District Attorney is that while the Order penalizes the illicit discharges cited, it does not require CDCR to complete any work that will prevent future discharges in violation of the Clean Water Act from the stormwater system.

Response: The Order is not intended to be the regulatory mechanism by which those repairs will be required. Identifying and eliminating sources of waste constituents in the stormwater system is essential to coming into compliance with the Clean Water Act and the Municipal Separate Storm Sewer System's General Order (MS4 General Order), and therefore specific actions associated with that process will be required under a separate enforcement action. Staff has reviewed CDCR's Revised Storm Water Collection System Investigation Findings Report and has conveyed their analysis and recommendations to Executive Management in the 7 December 2020 Review of Revised Storm Water System Investigation Findings Report, which was

transmitted to CDCR and all interested parties on 17 December 2020. The document contains Board staff's review of the findings of the investigation efforts, Board staff's analysis of these findings, both CDCR and Board staff's conclusions, and most importantly Board staff's recommendations for corrective actions that the Discharger must take to come into compliance with all requirements of the MS4 General Order, Sanitary Sewer System General Order, Waste Discharge Requirements, Industrial Stormwater General Permit, and the Clean Water Act. These recommendations include:

1. Discontinuing the discharge of stormwater containing waste constituents to Mule Creek that impact beneficial uses or are in violation of the MS4 General Order and the Clean Water Act;
2. Enhanced monitoring of the discharge, especially for dry weather flows;
3. Surface water monitoring in Mule Creek;
4. Development of a workplan to address identified leaks in the sanitary sewer and stormwater systems; and
5. The installation of additional groundwater monitoring devices.

Item 1 has been communicated numerous times. Items 2 and 3 have been addressed through a 13383 Order for enhanced monitoring under the MS4 program, which was issued on 6 August 2020 and amended on 22 December 2020. Item 4 is currently being addressed through the Sanitary Sewer System General Order, including a review of the Sanitary Sewer Maintenance Program, Emergency Response Plan, and maintenance records. The Discharger has already submitted a workplan for Item 5, which Board staff approved in March of 2018. Board staff is working with CDCR to get the work described in that plan completed.

Ongoing monitoring and analysis of new data will be required to ensure the corrective actions implemented are effective and CDCR maintains compliance with its Waterboard permits and the Clean Water Act.

The intent of this Order is solely to establish a penalty for reported discharges of contaminated stormwater to Mule Creek during the time period between their discovery by Board staff and when the Facility was covered under the MS4 General Order. As CSPA points out, the 2017 Enforcement Policy states the purpose of an enforcement action is to identify and correct violations. While the Order alone does not accomplish identifying all violations and corrective actions, it is one component of ongoing enforcement actions that involves several regulatory mechanisms across multiple Waterboard programs to achieve that goal. Therefore, no change is necessary.

Insufficient Monitoring Requirements and Impact Assessments

USEPA, the Amador County District Attorney, and CSPA are concerned that the Order does not require additional monitoring of waste parameters and that no assessments are required for parameters that are known to have exceeded Basin Plan Objectives. They both suggest that continued monitoring with additional parameters is necessary to properly characterize the discharge and collect information necessary to correcting the issues causing the discharge of waste constituents to Mule Creek.

Response: Board staff agree with this sentiment, and the Regional Board has every intention of continuing monitoring for coliforms and other parameters at this Facility and entering Mule Creek for the foreseeable future. Currently, the Facility is covered under the MS4 General Order to monitor discharge from the Facility to Mule Creek. On 6 August 2020, as amended on 22 December 2020, the Assistant Executive Officer issued a Water Code 13383 Order to Monitor Discharges to Surface Water which require CDCR to monitor the discharges to Mule Creek with increased frequency and additional parameters than normally required under the MS4 General Order. Future monitoring, subsequent assessments, and enforcement (as needed) for this discharge will be handled under that permit. Therefore, no change is necessary.

Enhanced Compliance Actions (ECAs) Will Not Stop Discharge of Wastewater to Mule Creek

USEPA, Amador County, Amador County District Attorney, and CSPA are concerned that the Stormwater Microbiological Study may be duplicative of other studies already conducted at the Facility, does not address the many other constituents of concern (see above response to Insufficient Monitoring Requirements), and will not lead to compliance with the Clean Water Act.

Response: The information gained by the Stormwater Microbiological Study may be useful in narrowing down the source of the fecal coliforms in the discharge, allowing for a more targeted corrective action approach with a higher chance of success. However, Board staff has consulted with State Board's Environmental Laboratory Accreditation Program regarding these specific methods for biomarker analysis, and concur with their assessment that because the methods have not been reviewed or approved by the EPA it is not consistent with Board Policy to use data gathered with these methods as a basis for determining compliance. Additionally, the Basin Plan objective is for all fecal coliforms, regardless of source, so the results of a biomarker analysis does not provide the information needed to determine compliance. This has been made clear to CDCR numerous times. Regardless, this study could produce a line of evidence to assist in identifying possible sources of fecal coliforms which CDCR could then target with corrective actions or best management practices to reduce the coliform concentrations in the discharge which flows to Mule Creek. Therefore, no change is necessary.

CSPA and Amador County are concerned that the ECA for the Irrigation Repair is not appropriate here as it does not directly address the source of the waste contaminants in the stormwater system. This is partially true, as Board staff believe many of the waste constituents detected are thought to be coming from indirect cross connections between the sewer and stormwater systems. The Revised Storm Water Collection System Investigation Findings Report provides evidence supporting this theory, and states that the condition and proximity of the sanitary sewer and stormwater systems provide an opportunity for these indirect cross connections to form. However, these indirect cross connections are exacerbated by the artificially high groundwater beneath the prison which is at least partially caused by the leaking pressurized irrigation system. Repair of this system will, to some extent, lower the local water table resulting in a reduction of the severity of indirect cross connections. Additionally, the treated water pumped into the irrigation system contains low levels of disinfection byproducts from the water

treatment process. Eliminating this water from discharges to Mule Creek will prevent disinfection byproducts from impacting water quality. While this ECA does not completely solve the issues with the discharges described in the Order, it does provide an increase in water quality protection. Therefore, no change is necessary.

Development of Factors Used in Penalty Calculation

Several comments from Amador County, CSPA, and Mr. Anderson focused on the validity of specific factors used in the penalty calculation. While Regional Board staff understands the reasoning behind these comments, the factors used in the penalty calculation were selected based on available data, documented events, confidential settlement discussions, and other information. Additionally, the selected values for the factors are consistent with previous enforcement actions adopted by the Board for similar violations and discharges. Regional Board staff assert the factors used for purposes of settlement are fair and consistent, and therefore no change is necessary.

Limited Scope of Violations

Amador County and USEPA are concerned that the enforcement action has a limited scope of violations. The action only covers the calculated “non-stormwater” portion of these discharges and not the entire comingled discharge. Amador County is specifically concerned that the action does not include violations for discharges from the sprayfields or violations of the Industrial Stormwater General Permit related to industrial activities.

Response: This Order was intended to solely focus on the “non-stormwater” portion of the discharges from the stormwater system to Mule Creek within the time period described in the Order. Other enforcement actions are ongoing related to the other Waterboard permits mentioned. On 23 September 2020, a Notice of Violation was issued to CDCR for three illegal discharges to Mule Creek from the sprayfields and collection system. Discharges from the industrial processes to the sanitary sewer system are required to be identified and eliminated under the MS4 General Order. This Order is focused on the violations described within it, but is not the only enforcement action the Board is undertaking regarding the various violations that have occurred and are ongoing at the Facility. Therefore, no change is necessary.

Individual Comments and Responses:

Concerns with Coliform Concentrations Exceeding Basin Plan Objectives

CSPA cites the Sacramento-San Joaquin Basin Plan Objective of 200 MPN/100 ml for fecal coliform, and points out that many discharges of comingled flows from the Old Prison to Mule Creek far exceed this value, and even the laboratory upper quantification limit, which has impacted designated beneficial uses.

Response: Board staff agrees with this statement, and has used this line of evidence in the development of this Order. This issue has also been cited several times in Board staff’s correspondences with CDCR since the onset of the investigation in January 2018. Therefore, no change is necessary.

Concerns with Calculation of Non-Stormwater Discharge Flows Estimate

Mr. Anderson is concerned with the calculation of the estimated volume discharged to be 14,174 gallons per day of non-stormwater flows. He is concerned that this average flow is calculated based on only periods of dry weather. He accurately asserts Board staff used these time periods when no rainfall had occurred for extended periods of time in order to estimate the amount of flow in the stormwater system not associated with rainfall. He is also concerned that this value does not take into account potential seasonal aspects of the non-stormwater flows in the stormwater system.

Response: This calculation is not intended to include the total comingled flow. Based on the available flow data, there is little evidence that significant variations in non-stormwater flow in the system exist. While total volume of flow varies significantly with rainfall, dry weather flows are relatively consistent, particularly since the perimeter stormwater system upgrade has been completed which replaced the open ditches with underground pipe, reducing evaporation. Therefore, no change is necessary.

Discrepancy Between Penalty Volume and Office of Emergency Systems (OES) Reports

Mr. Anderson is concerned with the fact that the calculation is based off of only the estimated non-stormwater flows and not the total comingled discharge volumes as reported to OES. These total flows as reported include both stormwater and non-stormwater. Because these comingled flows contain waste constituents diluted by stormwater, the violations are for the total volume of the discharges.

Response: Board staff agree that the full volume should be used in the penalty calculation. However, for purposes of settlement, the Regional Board has conceded to only penalize CDCR for the estimated volume that constitutes non-stormwater flows which would contain the undiluted waste constituents. Therefore, no change is necessary.

Calculation of Days of Violation

Mr. Anderson cites that the first OES report listed in Table 2 of the Order, OES Control Number #18-0502 on 23 January 2018, is not included as a day of violation in the total. He cites that Finding 27 of the Tentative Order states: "The number of days that discharges occurred is based on the time the gates were open as reported in the Office of Emergency Services reports, with any fraction of a day counted as one day." Inclusion of this day would raise the total from 79 days of violation to 80.

Response: That specific OES report was called in by Mule Creek staff in response to Regional Board staff alerting them that lab results for samples collected from the stormwater system earlier that month indicated that waste constituents were present in the stormwater, and therefore the discharge was required to be contained, properly treated, and disposed of. The OES report states that the discharge from the stormwater system to Mule Creek had been occurring intermittently (and unmonitored) essentially since the Old Prison was constructed up to 23 January 2018 when the slide gates were

closed. It is unclear when waste constituents began appearing in this discharge as there was no monitoring data collected prior to January 2018. As part of this settlement agreement, CDCR and Board staff have agreed to not count that initial report as a day of violation for purposes of the penalty calculation, meaning the total days of violation shall remain 79.

Economic Benefit Calculation

Mr. Anderson is concerned that the Economic Benefit calculation significantly underestimates the cost of compliance. He contends that the Interim Disposal Plan was impossible to implement successfully and therefore should not be used as a basis for this calculation.

Response: Board staff agree that it would be difficult to implement the concept of rental tanks and portable pumps to the scale necessary to prevent the discharge of comingled wastes to Mule Creek during rain events. However, this is the corrective action which CDCR chose to pursue. It is technically possible that they could have contained, adequately treated, and properly disposed of all the comingled flows using this method had they implemented to the scale necessary. Therefore, this corrective action was used as the basis for the calculation of the economic benefit for purposes of settlement and no changes are necessary.

Mr. Anderson is also concerned that the costs of sewer cleaning are not relevant here.

Response: The costs of implementing the Sanitary Sewer Maintenance Program (SSMP) was included in this calculation because if CDCR been performing routine sewer inspections and cleaning as required, the many defects in the sanitary sewer systems would have been discovered and subsequently repaired. Foregoing the required maintenance caused the issues to worsen to the point we see described in the Revised Findings Report. Therefore, the costs associated with implementation of the SSMP including cleaning and repairs (slip lining) should be included in the Economic Benefit analysis as avoided costs. Therefore, no changes are necessary.

Mr. Anderson is also concerned that the cost of slip lining the entire sanitary sewer system would be significantly higher than what is presented in Attachment D of the Order.

Response: This estimate was developed by an economic specialist from the State Water Board and is based off of industry standard reference documents and values which are consistently utilized for settlement agreements such as this Order.

Concerns with Enforcement Approach and Application of the 2017 Enforcement Policy

CSPA comments that Section IX of the Enforcement Policy states that the non-waived portion of the administrative civil liability penalty must be more than the economic benefit obtained by non-compliance, plus ten percent.

Response: Regional Board staff concur with CSPA and acknowledge this was an oversight in applying the 2017 Enforcement Policy to this settlement agreement. The settlement agreement has been updated in order to adhere to the Economic Benefit requirements of the 2017 Enforcement Policy. After this issue was identified, the Parties reengaged the discussion of the economic benefit analysis, as this was not previously identified to be a penalty driver. The Parties further examined the economic benefit analysis and have developed a revised stipulated economic benefit analysis. The revised analysis requires changes to the penalty allocations between the Enhanced Compliance Actions and penalties paid to the Cleanup and Abatement Account in order to comply with Section IX of the Enforcement Policy. The amended allocations are \$1,605,811 of penalties paid to the Cleanup and Abatement Account, and \$894,189 suspended in lieu of expenditures on the Enhanced Compliance Actions identified in the Proposed Order. The revised economic benefit stipulation is posted with these comments and should replace the original Attachment D to the Proposed Order.

Amador County Council comments that the Order does not impose penalties for violations of the Clean Water Act's National Pollutant Discharge Elimination System (NPDES) issued to CDCR, citing that the Discharger had acquired coverage under the Industrial Stormwater General Permit beginning in May of 2018 and the MS4 General Order beginning in April 2019, both of which cover stormwater discharges.

Response: The time frame for which Board staff is alleging violations in this Order is between the original Notice of Violation issued on 14 February 2018 and when CDCR acquired coverage for its Facility under the MS4 General Order on 10 April 2019. It does not include violations occurring after 10 April 2019, and therefore violations of the MS4 General Order and/or Industrial Stormwater General Permit beyond that date are not included here. While the violations cited in the Order are violations of the Industrial Stormwater General Permit and occurred within the time frame described above, the Enforcement Team has chosen to pursue these violation in terms of the Clean Water Act itself instead of under Industrial Stormwater General Permit coverage.