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## Central Valley Regional Water Quality Control Board

16 December 2020

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### ***WATER CODE SECTION 13383 ORDER TO MONITOR DISCHARGES TO SURFACE WATER; CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION – MULE CREEK STATE PRISON, WDID#:5S03M2000307, AMADOR COUNTY***

On 6 August 2020, the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) issued the California Department of Corrections and Rehabilitation (CDCR or Permittee) a Water Code Section 13383 Order to monitor discharges from Mule Creek State Prison (Facility) to surface water. This revised Water Code Section 13383 Order is being issued to clarify that monitoring is to be conducted when there is any discharge from the Facility's municipal separate storm sewer system (MS4) and require submittal of a Non-Storm Water Discharge Report. This Water Code 13383 Section Order supersedes the 6 August 2020 Water Code Section 13383 Order.

The Central Valley Water Board finds the following:

1. **Responsible Party.** CDCR owns and operates an MS4 at the Facility, located in Ione within Amador County.
2. **Mule Creek.** The Facility's MS4 discharges to Mule Creek, a water of the United States. Mule Creek is tributary to Dry Creek which runs into the Mokelumne River. The Central Valley Water Board's Water Quality Control Plan for the Sacramento River and San Joaquin River Basins designates the following beneficial uses for Mokelumne River, Camanche Reservoir and Delta and its tributaries, including Mule Creek: AGR, REC-1, REC-2, WARM, COLD, MIGR, SPWN, and WILD.
3. **Small MS4 General Permit.** The Facility is regulated under the State Water Resources Control Board (State Water Board) National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Storm Water Discharges

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KARL E. LONGLEY SCD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

from Small Municipal Separate Storm Sewer Systems, Water Quality Order 2013-0001-DWQ, as amended (Small MS4 General Permit) as a Non-Traditional MS4.

4. **Storm Water Control Program.** The Small MS4 General Permit requires CDCR to develop and implement a storm water control program for the Facility to reduce the discharge of pollutants from its MS4 to waters of the United States and ensure compliance with applicable water quality requirements.

5. **Water Code Section 13383.** Under Water Code section 13383, subdivision (a), the regional board “may establish monitoring, inspection, entry, reporting, and recordkeeping requirements . . . for any person who discharges, or proposes to discharge, to navigable waters . . .” The regional board “may require any person subject to this section to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required.” (Water Code, § 13383, subd. (b); see also 33 U.S.C. § 1318(a); 40 C.F.R. § 122.41(h).)

6. **Potential Liability for Noncompliance.** Pursuant to Water Code section 13385, any person who violates a requirement established pursuant to section 13383 may be subject to an administrative civil liability up to \$10,000 for each day in which the violation occurs. The Central Valley Water Board may also seek judicially imposed civil liabilities up to \$25,000 for each day in which the violation occurs.

7. **Need for Monitoring and Reporting Requirements.** Due to potential water quality impacts to Mule Creek while the Facility’s storm water control program is being fully developed and implemented and to ensure compliance with Small MS4 General Permit requirements, the Central Valley Water Board has determined that an interim monitoring and reporting program is necessary to monitor MS4 discharges from the Facility to Mule Creek.

The Discharger has been submitting weekly monitoring reports since 2018. This weekly monitoring report is required by a Water Code Section 13267 Order issued by the Central Valley Water Board on 14 February 2019. Recent weekly monitoring reports document large volumes of irrigation water being discharged through the Facility’s MS4 into Mule Creek. The Discharge Prohibitions, Section B, in the Small MS4 General Permit state the following, in relevant part:

3. Discharges through the MS4 of material other than storm water to waters of the U.S. shall be effectively prohibited, except as allowed under this Provision or as otherwise authorized by a separate NPDES permit. The following non-storm water discharges are not prohibited provided any pollutant discharges are identified and appropriate control measures to minimize the impacts of such discharges, are developed and implemented under the Permittee’s storm water program. This provision does not obviate the need to obtain any other appropriate permits for such discharges.

[...]

- o. incidental runoff from landscaped areas (as defined in accordance with Section B.4 of this Order.

[...]

If a Permittee or Regional Water Board Executive Officer determines that any individual or class of non-storm water discharge(s) listed above may be a significant source of pollutants to waters of the U.S. or physically interconnected MS4, or poses a threat to water quality standards (beneficial uses), the Regional Water Board Executive Officer may require the appropriate Permittee to monitor and submit a report and to implement BMPs on the discharge.

4. Discharges in excess of an amount deemed to be incidental runoff shall be controlled. Regulated Small MS4s shall require parties responsible for such to implement Section B.4.a-d below. Incidental runoff is defined as unintended amounts (volume) of runoff, such as unintended, minimal over-spray from sprinklers that escapes the area of intended use. Water leaving an intended use area is not considered incidental if it is part of the facility design, if it is due to excessive application, if it is due to intentional overflow or application, or if it is due to negligence.

[...]

Non-storm water runoff discharge that is not incidental is prohibited, unless otherwise specified in Section B.3 above.

Due to the Facility discharging large volumes of irrigation water (i.e., non-storm water) through its MS4, a report is necessary for the Discharger to demonstrate that the non-storm water discharges through the MS4 are in compliance with the Discharge Prohibitions in the Small MS4 General Permit. The requirements in this Order supplement and do not supersede existing monitoring and reporting requirements under the Small MS4 General Permit or other monitoring and reporting orders issued by the Central Valley Water Board or its delegates.

8. **Delegated Authority.** This Order is issued under authority delegated to the Central Valley Water Board's Executive Officer pursuant to Resolution R5-2018-0057 and Water Code section 13223.

**IT IS HEREBY ORDERED** that, pursuant to Water Code section 13383, CDCR shall comply with the following monitoring and reporting requirements set forth below:

## **I. REPORTING REQUIREMENTS**

- A. **Analytical Methods Report.** The Permittee shall complete and submit an Analytical Methods Report, electronically via the Stormwater Multiple Application Tracking System (SMARTS) database submittal. The Analytical Methods Report shall include the following for each constituent to be

monitored in accordance with this Order: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RLs consistent with the Sufficient Sensitive Methods Rule (SSM Rule) per 40 C.F.R. sections 122.21(e)(3) and 122.44(i)(1)(iv), and with this Order. If an RL is not less than or equal to the applicable water quality objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule. Central Valley Water Board staff will provide a tool with the transmittal of this Order to assist the Permittee in completing this requirement. The tool will include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report. In accordance with the 6 August 2020 Water Code 13383 Order, the Discharger submitted an Analytical Methods Report on 15 September 2020.

**B. Quarterly Monitoring Report.** Permittee shall submit a Quarterly Monitoring Report by **1 May, 1 August, 1 November, and 1 February annually**. The Quarterly Monitoring Reports shall cover the following periods: 1) 1 January through 31 March, 2) 1 April through 30 June, 3) 1 July through 30 September, and 4) 1 October through December. The Quarterly Monitoring Report shall:

1. Provide monitoring data and toxicity test results for the quarter and a copy of all sample documents, including chain of custody forms, toxicity test results, and all associated laboratory documents

**C. Annual Report.** The Small MS4 General Permit requires an Annual Report to be submitted by 15 October. The following additional information shall be included in the Annual Report:

1. Toxicity Testing

- a) The dates of sample collection and initiation of each toxicity test;
- b) A summary of the reported toxicity test results according to the test methods manual chapter on report preparation and test review; and
- c) All results for MS4 outfall parameters monitored concurrently with the toxicity test(s).

2. Monitoring data for the fiscal year covering 1 July through 30 June.

**D. Non-Storm Water Discharge Report.** The Permittee shall submit a Non-Storm Water Discharge Report **by 1 February 2021**. The Non-Storm Water Discharge Report shall either:

1. Demonstrate how the non-storm water discharge is in compliance with the Discharge Prohibitions in the Small MS4 General Permit; or

2. If the non-storm water discharge does not comply with the Discharge Prohibitions, provide a proposed plan, subject to Central Valley Water Board staff approval, to eliminate the non-storm water discharge. The proposed plan shall include the following:

- a) Details of proposed best management practices (BMPs) to be implemented to eliminate the non-storm water discharge,
- b) Details of interim actions to mitigate impact of non-storm water discharges to Mule Creek,
- c) Implementation schedule of the BMPs, and
- d) Date for expected compliance with the Discharge Prohibitions.

E. **Discharge Notification.** The Permittee shall notify the Central Valley Water Board within 24 hours of the Facility discharging through the MS4 to the receiving water.

F. **Certification.** Any person signing a document submitted under this Order shall make the following Certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

G. **Submission.** All reports and monitoring data shall be submitted into the SMARTS database. The monitoring data must be in an electronic format where the data can be manipulated.

## II. MONITORING REQUIREMENTS

A. **Monitoring Samples.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance.

B. **Quality Assurance and Control.** Chemical, bacteriological, and bioassay analyses of any material required by this Order shall be conducted by a laboratory accredited for such analyses by the State Water Board, Division of Drinking Water (DDW), in accordance with the provision of Water Code section 13176. Laboratories that perform sample analyses must be identified in all monitoring reports submitted to the Central Valley Water Board. Data generated from field measurements such as pH, dissolved oxygen (DO),

electrical conductivity (EC), turbidity, and temperature are exempt pursuant to Water Code Section 13176. A manual containing the steps followed in this program for any field measurements such as pH, DO, EC, turbidity, and temperature must be kept onsite and shall be available for inspection by Central Valley Water Board staff. The Permittee must demonstrate sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform these field measurements. The Quality Assurance-Quality Control Program must conform to U.S. EPA guidelines or to procedures approved by the Central Valley Water Board.

- C. **Monitoring Instruments and Devices.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring instruments and devices used by the Permittee to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary, at least yearly, to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- D. **Analytical Methods.** Laboratory analytical methods shall be sufficiently sensitive in accordance with the Sufficiently Sensitive Methods Rule (SSM Rule) specified under 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv). A U.S. EPA-approved analytical method is sufficiently sensitive for a pollutant/parameter where:
1. The method minimum level (ML) is at or below the applicable water quality objective for the receiving water, or;
  2. The method ML is above the applicable water quality objective for the receiving water but the amount of the pollutant/parameter in the discharge is high enough that the method detects and quantifies the level of the pollutant/parameter, or;
  3. The method ML is above the applicable water quality objective for the receiving water, but the ML is the lowest of the 40 CFR 136 U.S. EPA-approved analytical methods for the pollutant/parameter.

### III. MONITORING LOCATIONS

- A. **Monitoring Locations.** The Permittee shall establish the monitoring locations identified in Table A.
- B. **Executive Officer Approval.** Monitoring locations shall not be changed without notification to and the approval of the Executive Officer.

**Table A. Monitoring Station Locations**

<b>Discharge Point Name</b>	<b>Monitoring Location Name</b>	<b>Monitoring Location Description<sup>1</sup></b>
--	RAIN-1	Rain gage located at the Mule Creek Wastewater Treatment Plant
--	MCSP1 (RSW-001)	Upstream receiving water location
001	MCSP5 (OUTFALL-1)	MS4 slide gate
002	MCSP6 (OUTFALL-2)	MS4 slide gate
--	MCSP4 (RSW-002)	Downstream receiving water location approximately 200 feet downstream (south) of MCSP3 .

Table Notes:

1. Monitoring locations are shown in Figure 1 of this Order.

**IV. MS4 OUTFALL MONITORING REQUIREMENTS**

**When discharging through the MS4 to Mule Creek**, the Permittee shall monitor MS4 outfall discharges from the Facility at Monitoring Locations MCSP5 and MCSP6 as shown in Table B. MS4 outfall monitoring shall be collected concurrently with receiving water sampling (i.e., within four (4) hours).

**Table B. MS4 Outfall Monitoring**

<b>Parameter</b>	<b>Units</b>	<b>Sample Type</b>	<b>Minimum Sampling Frequency</b>
Total Discharge	MGD	Calculated	1/event
Duration of Discharge	Hours	Calculated	1/event
Rainfall in previous 24-hours	Inches	Gage	1/event
Biochemical Oxygen Demand 5-day @ 20°C (BOD)	mg/L	Grab	1/event
Chemical Oxygen Demand (COD)	mg/L	Grab	1/event
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/event
Dissolved Oxygen	mg/L	Grab	1/event
Electrical Conductivity (EC) @ 25°C	µmhos/cm	Grab	1/event
Oil & Grease	mg/L	Grab	1/event
Ammonia (Total as N)	mg/L	Grab	1/event
pH	Standard Units	Grab	1/event

Parameter	Units	Sample Type	Minimum Sampling Frequency
Settleable Solids	ml/L	Grab	1/event
Temperature	°C	Grab	1/event
Total Dissolved Solids (TDS)	mg/L	Grab	1/event
Total Hardness, (as CaCO <sub>3</sub> )	mg/L	Grab	1/event
Total Suspended Solids (TSS)	mg/L	Grab	1/event
Turbidity	NTU	Grab	1/event
E. coli	CFU/100 mL	Grab	1/event
Aluminum, Total recoverable <sup>2</sup>	µg/L	Grab	1/event
Arsenic, Total recoverable	µg/L	Grab	1/event
Copper, Dissolved	µg/L	Grab	1/event
Iron, Total Recoverable <sup>2</sup>	µg/L	Grab	1/event
Lead, Dissolved	µg/L	Grab	1/event
Manganese, Total Recoverable <sup>2</sup>	µg/L	Grab	1/event
Zinc, Dissolved	µg/L	Grab	1/event

Table Notes:

1. Analytical Methods. All parameters shall be analyzed using the analytical methods described in 40 CFR part 136, unless approved by the Executive Officer.
2. Aluminum, Manganese, and Iron. Samples may be passed through a 1.5-micron filter to reduce filterable residue prior to analysis. Filter size recommended in EPA Approved Methods 30 CFR Part 136 for Total Dissolved Solids and Total Suspended Solids and is used for removing suspended solids from a solid prior to analysis. Filtering the sample will remove suspended solids that may contribute to turbidity and color in samples that may negatively impact analytical results for metal concentrations while better representing the dissolved solids that may pass through a water treatment plant's filtration system.

## V. RECEIVING WATER MONITORING REQUIREMENTS

**When discharging through the MS4 to Mule Creek**, the Permittee shall monitor receiving water at Monitoring Locations MCSP1 and MCSP4 as shown in Table C. Receiving water monitoring shall be collected concurrently with MS4 outfall sampling (i.e., within four (4) hours).



**Table C. Receiving Water Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/event
Dissolved Oxygen (DO)	mg/L	Grab	1/event
Electrical Conductivity (EC) @ 25°C	µmhos/cm	Grab	1/event
pH	Standard Units	Grab	1/event
Temperature	°C	Grab	1/event
Total Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/event
Total Suspended Solids (TSS)	mg/L	Grab	1/event
Turbidity	NTU	Grab	1/event
E. coli	CFU/100 mL	Grab	1/event
Aluminum, Total Recoverable <sup>2</sup>	µg/L	Grab	1/event
Arsenic, Total recoverable	µg/L	Grab	1/event
Copper, Dissolved	µg/L	Grab	1/event
Iron, Total Recoverable <sup>2</sup>	µg/L	Grab	1/event
Lead, Dissolved	µg/L	Grab	1/event
Manganese, Total Recoverable <sup>2</sup>	µg/L	Grab	1/event
Zinc, Dissolved	µg/L	Grab	1/event

Table Notes:

1. Analytical Methods. All parameters shall be analyzed using the analytical methods described in 40 CFR part 136, unless approved by the Executive Officer.
2. Aluminum, Manganese, and Iron. Samples may be passed through a 1.5-micron filter to reduce filterable residue prior to analysis. Filter size recommended in EPA Approved Methods 30 CFR Part 136 for Total Dissolved Solids and Total Suspended Solids and is used for removing suspended solids from a solid prior to analysis. Filtering the sample will remove suspended solids that may contribute to turbidity and color in samples that may negatively impact analytical results for metal concentrations while better representing the dissolved solids that may pass through a water treatment plant's filtration system.

## **VI. WATER COLUMN TOXICITY TESTING REQUIREMENTS**

**A. Acute Toxicity Testing.** The Permittee shall conduct acute toxicity testing to determine whether the MS4 discharge is contributing to acute toxicity to the receiving water. The Permittee shall meet the following acute toxicity testing requirements:

1. *Monitoring Frequency* – The Permittee shall perform acute toxicity testing twice per year (i.e., one sample January – June and another sample July – December), while discharging through the MS4 and concurrent with MS4 outfall constituent sampling required in III.A, above.
2. *Sample Types* – The Permittee shall use static renewal testing. The receiving water samples shall be grab samples and shall be taken at MCSP1 and MCSP4
3. *Test Species* – The test species shall consist of fathead minnows (*Pimephales promelas*).
4. *Methods* – The acute toxicity testing samples shall be analyzed using EPA-821-R-02-012 (Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, USEPA, October 2002, or most recent edition).
5. *Test Failure* – If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Permittee must re-sample and re-test to satisfy the monitoring frequency requirement (i.e., twice per year sampling).

## **VII. EFFECTIVE DATE**

This Order is effective as of the date set forth below and remains in effect until rescinded by the Executive Officer.

## **VIII. RIGHT TO PETITION**

Persons aggrieved by this Central Valley Water Board action may petition the State Water Board for review in accordance with Water Code section 13320, and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5pm on the 30th day after the date of this Order, except that if the 30th day falls on a Saturday, Sunday or State holiday, in which case the petition must be received by the State Water Board by 5pm on the next business day. Laws and regulations applicable to filing petitions are available on the internet (at the address below), and copies will also be provided upon request.

[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

If you have any questions, please contact Elizabeth Lee at (916) 464-4787 or at [Elizabeth.Lee@waterboards.ca.gov](mailto:Elizabeth.Lee@waterboards.ca.gov).

Original signed by

22 December 2020

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Patrick Pulupa  
Executive Officer

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Date Signed

Attachment: Figure 1 – Mule Creek State Prison Water Sampling Locations, dated June 2018

cc: [via E-mail]  
Bryan Smith, Central Valley Regional Water Quality Control Board, Redding  
Kari Holmes, Central Valley Regional Water Quality Control Board, Rancho Cordova  
Howard Hold, Central Valley Regional Water Quality Control Board, Rancho Cordova  
Gregor Larabee, California Department of Corrections and Rehabilitation  
Christofer Hudgens, California Department of Corrections and Rehabilitation

