

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION**

---

**ADMINISTRATIVE CIVIL LIABILITY COMPLAINT NO. R5-2017-0549**

**ORIGINAL SIXTEEN TO ONE MINE, INC.**

**SIXTEEN TO ONE MINE**

**SIERRA COUNTY**

**PROSECUTION TEAM'S LEGAL AND TECHNICAL ANALYSIS  
SUPPORTING ADMINISTRATIVE CIVIL LIABILITY COMPLAINT NO. R5-2017-0549**

## I. INTRODUCTION

The Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) Prosecution Team recommends the Central Valley Water Board assess an administrative civil liability in the amount of thirty-three thousand dollars (\$33,000) against Original Sixteen to One Mine, Inc. (hereinafter Discharger) for alleged violations of Waste Discharge Requirements Order R5-2015-0002 (2015 WDRs). Specifically, the Prosecution Team alleges in Administrative Civil Liability Complaint R5-2017-0549 (Complaint) that the Discharger violated the 2015 WDRs when it exceeded maximum daily, average monthly, and/or annual average effluent limitations for total suspended solids (TSS), arsenic, antimony, cadmium, iron, nickel, and copper from December 2015 to December 2016. These alleged effluent exceedances are subject to Mandatory Minimum Penalties (MMPs) under Water Code section 13385, subdivision (h).

## II. BACKGROUND

The Discharger owns and operates the Sixteen to One Mine (Facility), an underground hard rock gold mine. The Facility discharges mine drainage via the 21 Tunnel Portal to Kanaka Creek, tributary to Middle Fork Yuba River, Yuba River, Feather River, and the Sacramento River, a water of the United States in the Sacramento Hydrologic Basin.

Discharges from the Facility were regulated by the Central Valley Water Board under Waste Discharge Requirements Order R5-2002-0043 (2002 WDRs), which was adopted on 1 March 2002 and amended on 30 April 2003. (Exhibits 1, 4.)

On 5 February 2015, the Board adopted the 2015 WDRs which contained new requirements and superseded the 2002 WDRs except for enforcement purposes. (Exhibit 15.) The 2015 WDRs became effective on 16 April 2015. A minor modification letter was issued on 10 September 2015 to correct an error in the monitoring report due dates. (Exhibit 17.)

The 2015 WDRs provide the following effluent limitations:

Parameter	Units	Effluent Limitation		
		Average Monthly	Maximum Daily	Annual Average
Total Suspended Solids (TSS)	mg/L	20	30	
Antimony	µg/L	6.0	12	
Arsenic	µg/L	10	20	
Cadmium	µg/L	0.85	1.7	
Copper	µg/L	3.1	6.3	
Nickel	µg/L	21	43	
Iron, Total Recoverable	µg/L			300

On 17 April 2015, the Board issued Time Schedule Order (TSO) R5-2015-0035 pursuant to Water Code section 13300. (Exhibit 16.) The TSO provides interim effluent limitations for electrical conductivity, arsenic, antimony, cadmium, copper, iron, lead, manganese, and nickel. The interim effluent limitations are in effect until 16 April 2020.

The TSO provides the following interim effluent limitations:

Parameter	Units	Interim Effluent Limitation	
		Average Monthly	Maximum Daily
Arsenic	µg/L	700	1000
Antimony	µg/L	35	50
Cadmium	µg/L	30	50
Copper	µg/L	10	15
Iron	µg/L	2100	2500
Nickel	µg/L	150	200

### III. LEGAL AUTHORITY

Water Code section 13385, subdivision (h) requires assessment of MMPs. These penalties are mandatory in that the Board is required to issue a monetary penalty by statute. Under Water Code section 13385, subdivision (h), the minimum amount of the penalty is three thousand dollars (\$3,000) per violation. The Board does not have the discretion to order an administrative civil liability (ACL) below this amount. However, the Board does have the discretion to assess an ACL above the minimum, so long as the ACL is calculated pursuant to the State Water Resource Control Board's Water Quality Enforcement Policy and is at or below the statutory maximum allowed under Water Code section 13385, subdivision (c).

Water Code section 13385, subdivision (h)(1) states:

Notwithstanding any other provision of this division, and except as provided in subdivisions (j), (k), and (l), a mandatory minimum penalty of three thousand dollars (\$3,000) shall be assessed for each serious violation.

Water Code section 13385, subdivision (h)(2) defines a serious violation as:

[A]ny waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 20 percent or more or for a Group I pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 40 percent or more.

TSS and iron are identified as Group I pollutants in Appendix A to 40 Code of Federal Regulations part 123.45. Antimony, arsenic, cadmium, nickel, and copper are Group II pollutants under Appendix A to 40 Code of Federal Regulations part 123.45, since they are metals not specifically listed in Appendix A under Group I pollutants.

Water Code section 13385, subdivision (i) provides additional authority for assessing MMPs for chronic violations. This case does not involve chronic violations and the MMPs are not alleged under Water Code section 13385, subdivision (i).

Water Codes section 13385, subdivisions (j)(3) provides MMP protection for "[a] violation of an effluent limitation where the waste discharge is in compliance with either a cease and desist order issued pursuant to [Water Code] Section 13301 or a time schedule order issued pursuant to [Water Code] Section 13300 or 13308" if certain requirements are met. One of these

requirements is that the discharger must be in compliance with the cease and desist order or the time schedule order.

#### **IV. THE COMPLAINT CONSIDERS THE PROTECTION FROM MMPS PROVIDED BY THE TSO**

In the process of adopting the 2015 WDRs, the Discharger expressed concerns with the proposed effluent limitations for iron, manganese, electrical conductivity, and arsenic. (Exhibits 6, 8-14.) The Discharger's primary concern was the proposed effluent limitation for arsenic. (*Ibid.*) Central Valley Water Board staff encouraged the Discharger to seek a Cease and Desist Order with a time schedule or a Time Schedule Order. (Exhibits 6, 11, 14.) The Discharger submitted an Infeasibility Analysis to aid in this process. (Exhibit 13.)

Based on the Infeasibility Analysis, the Central Valley Water Board found that "[t]he Discharger cannot consistently comply with the arsenic, electrical conductivity, antimony, cadmium, copper, iron, lead, manganese, and nickel effluent limitations in [the 2015 WDRs] and must implement additional actions to reach compliance." (Exhibit 16, par. 6.) The TSO was designed to set forth a time schedule for compliance with the 2015 WDRs effluent limitations, set interim effluent limitations for certain constituents, and provide protection from MMPS for certain constituents. (*Ibid.*) The interim effluent limitations were set at a level that the Central Valley Water Board expected the Discharger to be able to comply with, and noted that if the Discharger exceeded the interim effluent limitations, it would be subject to MMPS. (*Id.* at par. 14, 15.) The Complaint considers the protection from MMPS provided by the TSO.

#### **V. MANDATORY MINIMUM PENALTIES MUST BE IMPOSED FOR THE ALLEGED VIOLATIONS**

Based on the Discharger's Self-Monitoring Reports from December 2015 to December 2016, the Prosecution Team alleges in the Complaint that the Discharger committed two (2) serious Group I violations and nine (9) serious Group II violations subject to MMPS. (Exhibits 35-37.)

##### **a. Group I Violations**

##### *i. Iron*

In December 2015, the Discharger violated the annual average effluent limitation for iron. The measured annual average effluent limitation was 486 µg/L. The TSO contains a maximum daily effluent limitation of 2500 µg/L, and an average monthly effluent limitation of 2100 µg/L for iron. The Discharger took one sample of iron in December 2015 which measured 3050 µg/L. (Exhibit 37.) Because this measurement exceeded both the maximum daily and average monthly interim effluent limitations in the TSO, the TSO does not provide protection from MMPS. The Discharger collected two additional samples of iron in 2015. The first on 28 April 2015 was 486 µg/L, the second on 22 September 2015 was non-detect (ND). (Exhibits 35, 36.) Since a ND value exists in the data set, the annual average is calculated by taking the median value of the three results, which in this case is 486 µg/L. Since 486 µg/L exceeds the 2015 annual average effluent limitation of 300 µg/L by 162%, the Discharger is subject to MMPS under Water Code section 13385, subdivision (h).

*ii. TSS*

In December 2015, the Discharger also violated the average monthly effluent limitation for TSS. The measured monthly average for TSS was 41 mg/L. (Exhibit 37.) The TSO does not contain interim effluent limitations for TSS. The measured concentration of TSS exceeded the average monthly effluent limitation of 20 mg/L contained in the 2015 WDRs by 205%, which is more than the 40% exceedance level required to impose MMPs under Water Code section 13385, subdivision (h).

On 16 February 2016, Central Valley Water Board staff sent the Discharger a Self-Monitoring Report review and Notice of Violation related to the Fourth Quarter 2015 monitoring period, which identified the TSS violation as potentially subject to mandatory minimum penalties. (Exhibit 19.)

On 1 March 2016, the Discharger submitted a response noting that the Fourth Quarter 2015 Self-Monitoring Report stated that '[p]umps off, difficult to get effluent sample without stirring up the bottom,' which it claims is the reason the TSS sample was high. (Exhibit 21.) As communicated by Central Valley Water Board staff in a 9 March 2016 email to the Discharger, this information is insufficient evidence to deem the sample invalid, and the Discharger remains liable for MMPs for this violation. (Exhibit 22.)

b. Group II Violations

*i. Arsenic*

In December 2015, the Discharger violated the average monthly effluent limitation for arsenic. The measured monthly average for arsenic was 883 µg/L. (Exhibit 37.) The TSO did not provide protection from MMPs because the measured monthly average exceeds the TSO interim effluent limitation of 700 µg/L. The measured monthly average for arsenic exceeded the 2015 WDRs effluent limitation of 10 µg/L by 8830%. This is well above the 20% exceedance level necessary to impose MMPs under Water Code section 13385, subdivision (h).

*ii. Cadmium*

The Discharger also violated the average monthly effluent limitation for cadmium in December 2015. The measured monthly average effluent limitation was 30.2 µg/L. (Exhibit 37.) The TSO contains an average monthly interim effluent limitation for cadmium of 30 µg/L. Since the measured monthly average exceeded the TSO average monthly interim effluent limitation, the TSO does not provide MMP protection for this exceedance. The measured monthly average exceeded the 2015 WDRs average monthly effluent limitation of 0.85 µg/L by approximately 3553%, which is well above the 20% exceedance level requiring assessment of MMPs.

*iii. Antimony*

In December 2015, July 2016, and September 2016, the Discharger violated the average monthly effluent limitation for antimony. The measured monthly average for antimony was 41.1 µg/L, 49.3 µg/L, and 60 µg/L, respectively, which exceeded the TSO interim effluent limitation of 35 µg/L and the 2015 WDRs effluent limitation of 6 µg/L. (Exhibits 37-39.) Since the measured monthly average for antimony exceeded the TSO interim effluent limitation, the TSO does not provide MMP protection of these exceedances. The measured concentration of antimony exceeded the average monthly effluent limitation contained in the 2015 WDRs by

approximately 685%, 821%, and 1000%, respectively. This is above the 20% exceedance level necessary to impose MMPs under Water Code section 13385, subdivision (h).

On 29 September 2016, the Discharger violated the 2015 WDRs maximum daily effluent limitation of 12 µg/L for antimony with a measured value of 60 µg/L. (Exhibit 39.) The TSO does not provide MMP protection for this exceedance because the measured value was above the maximum daily interim effluent limitation of 50 µg/L. The measure value was 500% above the 2015 WDR maximum daily effluent limitation, resulting in a MMP under Water Code section 13385, subdivision (h).

*iv. Nickel*

In September 2016, the Discharger violated the 2015 WDRs average monthly effluent limitation of 21 µg/L for nickel, with a monthly average of 153 µg/L. (Exhibit 39.) The TSO does not provide protection from MMPs because the monthly average of 153 µg/L exceeded the TSO average monthly interim effluent limitation for nickel of 150 µg/L. Since the monthly average of 153 µg/L exceeded the 2015 WDRs average monthly effluent limitation by 729%, the violation is subject to MMPs under Water Code section 13385, subdivision (h).

*v. Copper*

On 13 December 2016, the Discharger collected an effluent sample measuring 115.9 µg/L of copper. (Exhibit 39.) The Discharger did not collect any other effluent samples analyzing copper in December 2016. This sample exceeded the 2015 WDRs maximum daily and average monthly effluent limitations for copper of 6.3 µg/L and 3.1 µg/L, respectively. The TSO contains maximum daily and average monthly interim effluent limitations of 15 µg/L and 10 µg/L, respectively. Since the effluent exceeded the TSO maximum daily and average monthly interim effluent limitations for copper, the TSO does not provide MMP protection for these violations. Since the measured value exceeded the maximum daily and average monthly effluent limitations by approximately 1840% and 3739%, respectively, these violations are subject to MMPs under Water Code section 13385, subdivision (h).

**V. CONCLUSION**

For the reasons stated above in the Prosecution Team's Legal and Technical Analysis, the Complaint, and Attachment A to the Complaint, the Prosecution Team recommends assessment of MMPs in the amount of thirty-three thousand dollars (\$33,000), as proposed.

For the Prosecution Team:

**ORIGINAL SIGNED BY**

---

KAILYN ELLISON

Attorney

Office of Enforcement