Attachment A – ACL Complaint No. R5-2020-XXXX Specific Factors Considered for Administrative Civil Liability

California Department of Corrections and Rehabilitation, Mule Creek State Prison

The State Water Board's *Water Quality Enforcement Policy* (Enforcement Policy) establishes a methodology for determining administrative civil liability by addressing the factors that are required to be considered under California Water Code section 13327. Each factor of the ten-step approach is discussed below, as is the basis for assessing the corresponding score. The <u>Enforcement Policy</u> can be found at:

(http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf).

The application of the Enforcement Policy is an application of the statutory factors by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) in order to develop an appropriate penalty for the alleged conduct. The California Department of Corrections and Rehabilitation (Discharger) does not admit any of the allegations discussed below, and does not admit to the violation of any local, state or federal laws or regulations. The information contained below represents the position of the Central Valley Water regarding their understanding of the facts and circumstances surrounding the Stipulated Administrative Civil Liability Order. The Discharger did not participate in the application of the Enforcement Policy below.

Background

The stormwater collection system collects and conveys stormwater from the approximately 65-acre area inside the perimeter fence of the Old Prison Facility. Approximately 20-25 lateral drain pipes travel under the perimeter fence and discharge into unlined basins. These basins are connected by unlined ditches and buried culverts. This conveyance system loop completely encircles the Old Prison Facility just outside the lethal electric fence. Stormwater that enters the perimeter drainage system loop is conveyed to one of two common collection basins, located near guard towers 3 and 9. The basins discharge through culverts that run under the perimeter access road and discharge into wide, heavily vegetated conveyance ditches. These ditches convey water directly into Mule Creek. The outfalls of these ditches are approximately 50 and 1,300 feet upstream of the location where Highway 104 crosses over Mule Creek.

On 28 December 2017, Board staff received a complaint regarding the apparent illegal discharge of water of unknown origin directly into Mule Creek. The complainant stated that the discharge flows varied greatly, but had been occurring during every one of their numerous observations between August 2017 and January 2018. The complainant described the water being discharged as varying between clear and jet black, sometimes with solids, and sometimes steaming hot. The complaint alleged that these discharges occurred during observations both during the wet season and dry season, regardless of precipitation or irrigation. Therefore, the source is presumed to be something other than stormwater or irrigation runoff. These statements were supported

by video evidence of the described discharge that were later provided by the complainant.

On 4 January 2018, Compliance and Enforcement (CE) staff from the Central Valley Water Board inspected Mule Creek State Prison in response to the complaint. It was determined that the likely source of the discharge described in the complaint was originating from a stormwater collection system that originated from within the Old Prison Facility. At the time of the inspection, water was observed discharging out of the left drain pipe within the vault immediately south of guard tower 4 into the perimeter collection system. Board staff collected a sample from these discharges. Results from the sampling demonstrate that the water being discharged from the Old Prison Facility to the perimeter stormwater collection system, and then into Mule Creek, contained waste constituents including surfactants, oil and grease, metals, nutrients, and coliforms. Therefore, the Central Valley Water Board considered this an unpermitted illegal discharge.

On 14 February 2018, the Assistant Executive Officer issued a Water Code 13267 Order which required the Discharger, in part, to cease all discharges of waste to Mule Creek and to submit an *Interim Disposal Plan* to ensure the contaminated water in the stormwater system were captured, treated, and disposed of appropriately.

On 16 February 2018, Central Valley Water Board staff met with the Discharger. The Discharger agreed to meet the requirements in the 13267 Order, but requested an extension on the deadlines. However, due to the unknown source(s) of the wastewater, and the threat to humans as well as Mule Creek, Central Valley Water Board staff informed MCSP that the deadlines in the 13267 Order would not be changed. No extensions were granted.

On 13 March 2018, Central Valley Water Board staff performed an inspection of the stormwater system and the Discharger's actions performed to comply with the 13267 Order. During the inspection, the site was receiving heavy rain. The temporary system was in the process of being overrun. Temporary containment systems were nearly at capacity and the pumps were having difficulty keeping up. The wastewater treatment plant (WWTP) reported no problems with treatment or hydraulic capacity. Central Valley Water Board staff recommended that they increase the hydraulic capacity of their system, including larger pipelines, connecting to manholes, and additional pumps. Central Valley Water Board staff also suggested temporary holding tanks be installed to allow equalization of flow into the WWTP to prevent impacts on the plant, because more significant rain events had been forecasted. In response the Discharger had ten 21,000-gallon temporary holding tanks delivered to the site over the following week. On 15 March 2018, the Discharger submitted the required *Interim Disposal Plan*.

On 22 March 2018, the Discharger reported that heavy rainfall had fallen on the site, resulting in a complete inundation of the measures in place to divert stormwater from

discharging to Mule Creek. This resulted in a threat of flooding to buildings on the institution grounds, and caused the WWTP to operate at flood stage. Additionally, contained water had overtopped the perimeter road and surface flooding of the neighboring property owner's fields west of Collins Road and north of Highway 104. In response the Discharger pulled the slide gates in the collection sumps, which released an estimated 1,600,000 gallons of comingled turbid wastewater which was illegally discharged directly to Mule Creek. The Office of Emergency Services (OES) report was filed (ref # 18-1892), but inaccurately referred to the discharge as "stormwater." The WWTP was reported to be effectively treating the flows. Board staff advised the Discharger to improve the temporary system to ensure they would be able to contain all water during a similar storm event. In response an additional 4 temporary holding tanks were brought on site. The Discharger collected samples of the discharge, and reported the results on 1 May 2018. Results showed oil and grease, diesel range organics, fecal coliforms, E. coli, as well as elevated chemical oxygen demand, suspended solids, turbidity, aluminum, iron, manganese, and nickel. Upstream and downstream samples were collected, and confirm that Mule Creek had been impacted.

On 4 April 2018 Central Valley Water Board staff issued a formal review of the *Interim Disposal Plan* that found the submittal to be materially deficient, as it would cause a violation of the WDRs by exceeding the capacity of the WWTP and could potentially cause a plant upset. On 24 May 2018, CDCR submitted a *Revised Interim Disposal Plan*, which stated in part that the WWTP did not have the capacity to handle the increased flows during rain events over 0.1 inches per hour or 0.3 inches in any given 24-hour period in which case all comingled stormwater flows would be discharged to Mule Creek. Previously, on 6 April 2018, Central Valley Water Board staff informed CDCR via email that the *Heavy Rainfall Response Plan* described practices that would cause illegal discharges and violations of the Clean Water Act, and therefore would not be approved. CDCR did not revise their 24 May 2018 submittal.

On 6 April 2018, the temporary storage system was again completely overrun by a storm event. The heavy rains flooded the collection system, backing up into the WWTP. At this point the Discharger again pulled the slide gates on the collection system and knowingly released an estimated 1,600,000 gallons of comingled turbid wastewater directly to Mule Creek. CDCR reported the illegal discharge to OES (ref # 18-2255), but again inaccurately referred to the discharge as "stormwater." The WWTP operator communicated via email to Central Valley Water Board staff that the WWTP was "no longer effectively processing." The Discharger collected samples of the discharge during the event, and reported the results on 1 May 2018. Results showed oil and grease, diesel range organics, fecal coliforms, E. coli, as well as elevated chemical oxygen demand, suspended solids, turbidity, aluminum, chromium, lead, manganese, nickel, zinc, and iron. It does not appear that any effluent samples were collected from the WWTP to assess effectiveness of the treatment during the high flows or days following. Upstream and downstream samples were collected, and confirm that Mule Creek had been impacted.

Following the failure to contain and treat the comingled flows during the 6 April 2018 storm event, CDCR began using the practices described in the Revised Interim Disposal Plan despite Board staff repeatedly communicating that it would be a violation of the Clean Water Act. This practice led to additional unpermitted discharges of comingled flows directly to Mule Creek. This continued until 10 April 2019 when the facility was permitted under the Small MS4 permit. CDCR continues to discharge comingled flows during both dry and wet weather under the MS4 permit. Table 1 below lists the known days of unpermitted discharge to Mule Creek between Central Valley Water Board staff's discovery of the issue on 23 January 2018 and 19 April 2019. CDCR collected numerous samples from the stormwater collection system during this period as required by the 13267 Order to characterize the waste. That data was used to determine factors below. The Central Valley Water Board and the Discharger stipulated to the days and volumes of discharge for the purpose of resolving the administrative civil liability action. The Central Valley Water Board continues to assert that the entire volume of the discharge could be a basis for an administrative liability, while the Discharger asserts the alleged non-stormwater discharges are the only basis for liability. The legal and factual dispute was not resolved, and the stipulated volumes and days of discharge were used to estimate an appropriate administrative civil liability.

Days of Violation	OES Control #	Date
<u>N/A</u>	<u>18-0502</u>	<u>1/23/2018</u>
<u>1</u>	<u>18-1696</u>	<u>3/14/2018</u>
1	<u>18-1892</u>	<u>3/22/2018</u>
<u>1</u>	<u>18-2307</u>	<u>4/6/2018</u>
<u>1</u>	<u>18-3383</u>	<u>5/25/2018</u>
<u>2</u>	<u>18-7188</u>	<u>10/3-10/4/2018</u>
1	<u>18-8009</u>	<u>11/25/2018</u>
<u>7</u>	<u>18-8207</u>	<u>11/27-12/3/2018</u>
<u>2</u>	<u>18-8563</u>	<u>12/16-12/17/2018</u>
<u>4</u>	<u>19-0260</u>	<u>12/23-26/18</u>
<u>7</u>	<u>19-0305</u>	<u>1/5/19-1/11/19</u>
<u>4</u>	<u>19-0534</u>	<u>1/15/18-1/18/18</u>
<u>4</u>	<u>19-0535</u>	<u>1/19/19-1/22/19</u>
<u>6</u>	<u>19-0887</u>	2/1/19-2/6/19
<u>4</u>	<u>19-0976</u>	2/8/19-2/11/19
<u>7</u>	<u>19-1218</u>	2/12/19-2/18/19

Table 1: Days of Violation based on OES Reports between 18 January 2018 and 10 April 2019

Days of Violation	OES Control #	Date
<u>12</u>	<u>19-1622</u>	2/24/19-3/7/19
<u>10</u>	<u>19-2092</u>	<u>3/19/19-3/28/19</u>
<u>5</u>	<u>19-2312</u>	<u>4/1/19- 4/05/19</u>
total days: 79		

Step 1 – Actual or Potential for Harm for Discharge Violations

The "potential harm to beneficial uses" factor considers the harm that may result from exposure to the pollutants in the discharge, while evaluating the nature, circumstances, extent, and gravity of the violation(s). A three-factor scoring system is used for each violation or group of violations: (1) the degree of toxicity of the discharge; (2) the actual or potential for harm to beneficial uses; and (3) the discharge's susceptibility to cleanup or abatement

Factor 1: The Degree of Toxicity of the Discharge

This factor evaluates the degree of toxicity by considering the physical, chemical, biological, and/or thermal characteristics of the discharge, waste, fill or material involved in the violation or violations and the risk of damage the discharge could cause the receptors or beneficial uses. A score between 0 and 4 is assigned based on a determination of the risk or threat of the discharged material. "Potential receptors" are those identified considering human, environmental, and ecosystem exposure pathways.

Toxicity is the degree to which a substance can damage a living or non-living organism. Toxicity can refer to the effect on a whole organism, such as an animal, bacterium, or plant, as well as the effect on a substructure of the organism, such as a cell or an organ. In this case, the comingled discharges during rain events contained unknown but relatively small amounts of waste from unknown sources diluted by large volumes of stormwater. Based on data collected during both wet and dry weather, the discharge contained varying concentrations of numerous waste constituents normally found in domestic and industrial wastewater including coliform organisms, total suspended solids, biochemical oxygen demand, chemical oxygen demand, nutrients, surfactants, metals, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs). These constituents can impact aquatic life and human health. Because the discharged material possesses "less than moderate threat to beneficial uses," **a score of 2** was assigned for this factor.

Factor 2: Actual Harm or Potential Harm to Beneficial Uses

The evaluation of the actual harm or the potential harm to beneficial uses factor considers the harm to beneficial uses in the affected receiving water body that may result from exposure to the pollutants or contaminants in the discharge, consistent with

the statutory factors of the nature, circumstances, extent, and gravity of the violation(s). A score between 0 and 5 is assigned based on a determination of the extent of the actual harm or potential for harm. Actual harm as used in this section means harm that is documented and/or observed. Potential harm should be evaluated in the context of the specific characteristics of the waste discharged and the specific beneficial uses of the impacted waters.

The discharge entered Mule Creek, tributary to Dry Creek and the Sacramento-San Joaquin Delta. The beneficial uses of the Sacramento-San Joaquin Delta and its tributaries that could be impacted by the untreated sewage include municipal and domestic water supply, agricultural irrigation and stock watering, contact and non-contact water recreation, warm freshwater habitat, cold freshwater habitat, migration of aquatic organisms, warm spawning, wildlife habitat, navigation, and commercial sport fishing.

The Discharger collected paired samples from Mule Creek at upstream and downstream locations relative to the discharge point during almost all discharge events. Tables 2, 3, and 4 below summarize a subset of that data and demonstrate those impacts by comparing upstream and downstream paired data set. Values in bold highlight downstream concentrations that are higher than the upstream counterparts in the same paired data set.

Attachment A – ACL Complaint No. R5-2020-XXXX Specific Factors Considered for Administrative Civil Liability

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Table 2: Organic and Microbial Constituents Comparison in Discharge to Mule Creek

Date	Sample Location in Mule Creek	Oil and Grease (mg/l)	Volatile Organic Compounds (ug/L)	Fecal Coliforms (MPN/100mls)	Total Coliforms (MPN/100mls)	E. coli (MPN/100mls)
2/22/19	upstream	1.3		>1,600	>1,600	>1,600
3/23/10	downstream	1.3		>1,600	>1,600	>1,600
1/6/19	upstream	<5.0	ND	240	> 1,600	151.5
4/0/10	downstream	1.4 J	ND	> 1,600	> 1,600	>2419.6
1/7/18	upstream	2.3 J	ND	> 1,600	> 1,600	>2,419.6
4/7/10	downstream	1.7 J	ND	> 1,600	> 1,600	1,732.90
1/11/10	upstream	<5.0	ND	49	> 1,600	118.7
4/11/10	downstream	<5.0	ND	130	350	172.2
4/27/18	upstream	<5.0	ND	170	1,600	113.7
	downstream	2.9J	ND	540	> 1,600	178.9
5/25/18	upstream	<5.0	ND	1,600	>1,600	1,986.30
	downstream	<5.0	acetone = 5.5	>1,600	>1,600	>2,419.6
	upstream	1.5 J	ND	>1,600	>1,600	1,986.30
5/26/18	downstream	2.8 J	acetone = 2.7 J; chloroform = 1.1	>1,600	>1,600	>2,419.6
	upstream	<5.0	ND	3500	24000	1553
12/17/18	downstream	1.7 J	ND	11,000	>160,000	1,986.30
	upstream	<5.0	ND	540	9200	387
12/26/18	downstream	<5.0	ND	2200	24000	1046
	upstream	2.1 J	ND	79	2600	50
1/5/19	downstream	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled
1/15/19	upstream	<5.0	ND	240	16000	86

Date	Sample Location in Mule Creek	Oil and Grease (mg/l)	Volatile Organic Compounds (ug/L)	Fecal Coliforms (MPN/100mls)	Total Coliforms (MPN/100mls)	E. coli (MPN/100mls)
	downstream	1.4 J	ND	4600	16000	1986
	upstream	<1.4	ND	2200	11000	1203
1/20/19	downstream	<1.4	ND	>1,600	160000	2790
	upstream	1.4 J	ND	1700	16000	1203
2/2/19	downstream	<1.4	ND	3500	28000	2320
	upstream	1.7 J	ND	1700	16000	1203
2/10/19	downstream	<1.4	ND	920	35000	3550
	upstream	<1.4	ND	3500	35000	3130
2/13/19	downstream	<1.4	ND	2300	13000	770
	upstream	<1.4	ND	1100	2200	1300
2/26/19	downstream	<1.4	ND	540	17000	365
	upstream	1.6 J	ND	33	920	98.5
3/20/19	downstream	<1.4	ND	220	1400	101
	upstream	1.5 J	ND	310	5400	193
3/27/19	downstream	<1.4	ND	130	2400	57.6
	upstream	2.8 J	ND	140	9200	114
4/5/19	downstream	3.2 J	ND	220	2600	96

Date	Sample Location in Mule Creek	Total Dissolved Solids (mg/L)	Turbidity (NTUs)	Sulfate as SO4 (mg/L)	Total Nitrogen (mg/L)	Biological Oxygen Demand (mg/L)
	Regulatory Limit	5003	11	2503		
2/22/40	upstream	130	24	7.7	0.63	<10
3/23/10	downstream	150	26	8.2	0.69	<10
1/6/19	upstream	190	3.9	17	1.1	2.0J
4/0/10	downstream	220	23	26	1	2.8J
1/7/10	upstream	120	30	7.2	1.1	3.4J
4/7/10	downstream	140	40	9.3	1.2	3.4J
1/11/10	upstream	210	1.9	13	<1.0	<5.0
4/11/10	downstream	220	5.6	15	<1.0	<5.0
1/27/18	upstream	250	1.1	16	<1.0	<5.0
4/27/10	downstream	260	1.8	18	<1.0	<5.0
E/0E/10	upstream	260	0.79	12	<1.0	<5.0
3/23/10	downstream	120	68	39	3.4	7.1
5/26/18	upstream	250	0.54	11	<1.0	<5.0
5/20/10	downstream	120	56	26	1.8	2.9J
	upstream	470	Not Analyzed	100	<1.0	<5.0
12/17/18	downstream	170	Not Analyzed	36	3	3.7 J
	upstream	220	Not Analyzed	75	1	<5.0
12/26/18	downstream	380	Not Analyzed	18	1.3	2.0 J
	upstream	340	Not Analyzed	50	<1.0	<5.0
1/5/19	downstream	Not Sampled	Not sampled	Not sampled	Not sampled	Not sampled
	upstream	270	Not Analyzed	39	<1.0	<5.0
1/15/19	downstream	130	Not Analyzed	30	1.8	3.7 J

 Table 3: Inorganic Constituents Comparison in Discharge to Mule Creek

Date	Sample Location in Mule Creek	Total Dissolved Solids (mg/L)	Turbidity (NTUs)	Sulfate as SO4 (mg/L)	Total Nitrogen (mg/L)	Biological Oxygen Demand (mg/L)
	upstream	170	Not Analyzed	16	3	<2.0
1/20/19	downstream	180	Not Analyzed	21	2.2	2.1 J
	upstream	220	Not Analyzed	23	1.9	3.6 J
2/2/19	downstream	160	Not Analyzed	26	1.4	2.8 J
	upstream	120	Not Analyzed	10	1.8	2.5 J
2/10/19	downstream	130	Not Analyzed	12	1.8	2.2 J
	upstream	150	Not Analyzed	13	1.8	<2.0
2/13/19	downstream	130	Not Analyzed	12	1.2	<2.0
	upstream	160	Not Analyzed	16	1.4	<2.0
2/26/19	downstream	170	Not Analyzed	22	1.2	<2.0
	upstream	190	Not Analyzed	16	<0.20	<2.0
3/20/19	downstream	200	Not Analyzed	21	<0.20	<2.0
	upstream	160	Not Analyzed	15	<0.20	<2.0
3/27/19	downstream	190	Not Analyzed	17	<0.20	<2.0
	upstream	180	Not Analyzed	14	3.7	<2.0
4/5/19	downstream	200	Not Analyzed	17	1.3	<2.0

Date	Sample Location in Mule Creek	Aluminum (ug/L)	Chromium (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Manganese (ug/L)	Zinc (ug/L)
2/22/4.0	upstream	940	3.7		1200	<1.0	36	6.3
3/23/10	downstream	1200	3.5		1300	1.4	28	5.7
4/0/40	upstream	110	<2.0	2.4	320	<1.0	31	<20
4/0/18	downstream	620	<2.0	3.5	700	0.81J	36	9.2J
1/7/10	upstream	1000	5.3	6.4	2300	0.66J	83	<20
4///10	downstream	1800	6	8	3200	4	87	9.0J
1/11/10	upstream	45	<2.0	2.2	190	<1.0	<20	<20
4/11/10	downstream	140	<2.0	2.5	410	<1.0	27	<20
1/27/10	upstream	<40	<2.0	<2.0	<100	<1.0	30	<20
4/27/10	downstream	29J	<2.0		180	0.24J	<20	<20
E/0E/4.0	upstream	<40	<2.0	<2.0	<100	<1.0	43	<20
5/25/16	downstream	1600	4.1	15	2100	<1.0	76	180
5/26/19	upstream	<40	<2.0	<2.0	<100	<1.0	13J	<20
5/20/10	downstream	1200	3.8	14	1800	0.67J	34	70
	upstream	<40	<2.0	Not Analyzed	<100	<1.0	Not Analyzed	<20
12/17/18	downstream	380	<2.0	Not Analyzed	4800	1.6	Not Analyzed	49
	upstream	39J	<2.0	Not Analyzed	70 J	2.2	Not Analyzed	<20
12/26/18	downstream	740	<2.0	Not Analyzed	2100	24	Not Analyzed	11 J
	upstream	100	<2.0	Not Analyzed	180	<1.0	Not Analyzed	<20
	downstream	Not	Not		Not			Not
1/5/19	uownstream	Sampled	sampled	Not sampled	sampled	Not sampled	Not sampled	sampled
	upstream	20	<2.0	Not Analyzed	<100	<1.0	Not Analyzed	<20
1/15/19	downstream	2100	5.3	Not Analyzed	4300	2.1	Not Analyzed	130
	upstream	390	<2.0	Not Analyzed	650	0.47 J	Not Analyzed	<8.0
1/20/19	downstream	3000	4.7	Not Analyzed	1900	1.1	Not Analyzed	37

Table 4: Metal Constituents Comparison in Discharge to Mule Creek

Date	Sample Location in Mule Creek	Aluminum (ug/L)	Chromium (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Manganese (ug/L)	Zinc (ug/L)
	upstream	140	<2.0	Not Analyzed	320	<0.24	Not Analyzed	<8.0
2/2/19	downstream	2200	4.1	Not Analyzed	4300	65	Not Analyzed	17 J
	upstream	580	2.3	Not Analyzed	950	.43 J	Not Analyzed	<8.0
2/10/19	downstream	670	2	Not Analyzed	1500	2.3	Not Analyzed	<8.0
	upstream	440	<5.0	Not Analyzed	830	<0.6	Not Analyzed	<20
2/13/19	downstream	2600	7.5	Not Analyzed	5000	30	Not Analyzed	<20
	upstream	61	<2.0	Not Analyzed	150	<0.24	Not Analyzed	<8.0
2/26/19	downstream	120	<2.0	Not Analyzed	250	0.91 J	Not Analyzed	<8.0
	upstream	24 J	<2.0	Not Analyzed	150	<0.24	Not Analyzed	<8.0
3/20/19	downstream	49	<2.0	Not Analyzed	170	0.31 J	Not Analyzed	<8.0
	upstream	28 J	<2.0	Not Analyzed	170	<0.24	Not Analyzed	<8.0
3/27/19	downstream	350	<2.0	Not Analyzed	840	1	Not Analyzed	<8.0
	upstream	160	<2.0	Not Analyzed	430	<0.24	Not Analyzed	<16
4/5/19	downstream	86	<2.0	Not Analyzed	340	0.54 J	Not Analyzed	<16

Attachment A – ACL Complaint No. R5-2020-XXXX Specific Factors Considered for Administrative Civil Liability

California Department of Corrections and Rehabilitation, Mule Creek State Prison

Discharges of any domestic or industrial wastewater to surface water must typically be treated to a high standard to prevent adverse impacts to human and aquatic life. In this case, the discharge contained constituents typically found in domestic and industrial wastewater, including pathogens, nitrogen, salts, metals, VOCs, oil and grease, suspended solids, sulfate, and biological oxygen demand. It should be noted that the data presented in Tables 2, 3, and 4 above is from samples collected from Mule Creek itself, and downstream data represents the conditions in the creek after the diluted comingled flows mixed with stormwater runoff that was naturally draining into the creek bed. This data demonstrates an impact to the creek and water quality objectives protective of beneficial uses.

The spill resulted in a below moderate potential harm to beneficial uses. "Moderate" is defined as "observed or reasonably expected potential impacts, but harm or potential harm to beneficial uses are moderate and likely to attenuate without appreciable medium or long term acute or chronic effects." Therefore, **a score of 2**, below moderate, is assigned for this factor.

Factor 3: Susceptibility to Cleanup or Abatement.

A score of 0 is assigned for this factor if the discharger cleans up 50% or more of the discharge within a reasonable amount of time. A score of 1 is assigned if less than 50% of the discharge is susceptible to cleanup or abatement, or if 50% or more of the discharge is susceptible to cleanup and abatement but the discharger failed to clean up 50% or more of the discharge within a reasonable amount of time. In this case, less than 50% of the discharge was susceptible to cleanup or abatement as the wastewater entered Mule Creek and was not recoverable. Therefore, a factor of 1 is assigned.

Final Score - "Potential for Harm"

The scores of the three factors are added to provide a Potential for Harm score for the effluent limit violations. In this case, a final score of 5 was calculated. The total score is then used in Step 2, below.

Step 2– Assessment for Discharge Violations

This step addresses administrative civil liabilities for the unauthorized discharge based on both a per-gallon and a per-day basis.

1. Per Gallon Assessments for Discharge Violations

When there is a discharge, the Central Valley Water Board is to determine an initial liability amount on a per gallon basis using the Potential for Harm score and the Extent of Deviation from Requirement of the violation. The Potential for Harm Score was determined in Step 1 and is 5. The California Clean Water Act and Federal Clean Water Act prohibit the discharge of untreated wastewater to waters of the United States. In this case, the discharge of comingled wastewater and stormwater to Mule Creek is a major deviation from the required standards.

Table 1 of the Enforcement Policy (p. 14) is used to determine a "per gallon factor" based on the total score from Step 1 and the level of Deviation from Requirement. For this particular case, the factor is 0.15. This value of 0.15 is multiplied by the volume of discharge and the days of discharge, as described below.

The statutory maximum penalty amount of \$10 per gallon was used for this calculation. CWC section 13385(c)(2) states that the civil liability amount is to be based on the number of gallons discharged but not cleaned up, over 1,000 gallons for each spill event. Of the 1,119,746 gallons spilled that reached surface water, a total of 1,118,746 gallons were discharged in excess of 1,000 gallons into waters of the United States.

Therefore, the per gallon assessment is calculated as:

Discharge Liability

0.15 x 1,118,746 gallons x \$10 per gallon = \$1,678,119

2. Per Day Assessments for Discharge Volumes

When there is a discharge, the Central Valley Water Board is to determine an initial liability amount on a per day basis using the same Potential for Harm and the Extent of Deviation from Requirement that were used in the per-gallon analysis. The "per day" factor (determined from Table 2 of the Enforcement Policy) is 0.1. The spill event took place over 79 days (see Table 1).

Water Code section 13385(c)(1) states that the maximum civil liability is \$10,000 per day of violation.

Per Day Liability

0.15 x 79 days x \$10,000 per day= \$118,500

Initial Liability Amount: The value is determined by adding together the per gallon assessment and the per day assessment.

Initial Liability

\$1,678,119 per gallon assessment + \$118,500 per day assessment = \$1,796,619

Step 3 – Per Day Assessment for Non-Discharge Violation

This step is not applicable.

Step 4 – Adjustment Factors

There are three additional factors to be considered for potential modification of the amount of initial liability: the violator's culpability, the violator's prior history of violations, and efforts to clean-up or cooperate with regulatory authorities after the violation. After each of these factors is considered for the violations involved, the applicable factor should be multiplied by the proposed amount for each violation to determine the revised amount for that violation.

Degree of Culpability

This factor considers a discharger's degree of culpability. Higher liabilities should result from intentional or negligent violations as opposed to accidental violations. A multiplier between 0.75 and 1.5 is to be used, with a higher multiplier for negligent behavior. In this case there was only one party involved, and Central Valley Water Board staff evaluated the party's degree of culpability individually and assigned an overall multiplier to this incident.

The source of the waste constituents appears to be entirely within CDCR's facility. Although CDCR made some efforts to contain and treat the comingled flows as required by the 14 February 2018 13267 Order, they did not adequately prepare themselves for rain events which led to failures of the temporary containment system. On several occasions Central Valley Water Board staff conveyed to CDCR staff that the system was severely undersized, but CDCR did not take further steps to increase capacity. Additionally, they later changed their policy to allow discharge of comingled wastewater and stormwater to Mule Creek during all significant rain events in a clear contradiction with Central Valley Water Board staff's instruction.

If CDCR had adequately sized their temporary storage and treatment system these spills could have been avoided or mitigated; however, they failed to respond to Central Valley Water Board staff's directives and the 13267 Order appropriately. Therefore, Board staff assigns a **multiplier of 1.2** for culpability.

History of Violations

The Enforcement Policy states that if the discharger has a prior history of violations within the last five years, the Water Boards should use a multiplier of 1.1. Where the discharger has a history of similar or numerous dissimilar violations, the Water Boards should consider adopting a multiplier above 1.1.

The Central Valley Water Board issued Administrative Civil Liability Order (ACLO) R5-2007-0518 against the California Department of Corrections and Rehabilitation for the Mule Creek State Prison Facility. The ACLO was issued because of several releases of raw sewage to Mule Creek from the collection system to Mule Creek. Since the issuance of the ACLO, CDCR took several actions to address the issues causing the repeated releases including the construction of a new treatment plant.

Because CDCR does not have a recent history of violations and the violations cited in this Order are not caused by the same issues as the historical violations, Central Valley Water Board staff has taken a conservative approach and assessed an **multiplier of 1.0** for history of violations.

Cleanup and Cooperation

This factor reflects the extent to which a discharger voluntarily cooperates with regulatory authorities in returning to compliance and correcting environmental damage after the violation. A multiplier between 0.75 and 1.5 is to be used, with a higher multiplier when there is a lack of cooperation. Since this case involves multiple parties, Board staff evaluated each party's cleanup and cooperation and then assigned an overall multiplier.

After CDCR received notification that waste constituents had been detected in the stormwater discharging to Mule Creek, it took reasonable and prudent steps to respond to the discharge. CDCR immediately began a preliminary investigation and sampling program, and implemented a temporary storage and disposal system to contain and treat the comingled flows. However, when it became evident that the flows during certain rain events were much greater than CDCR originally had estimated they proposed direct discharge to Mule Creek during rain events that met a specific threshold with no treatment. Despite Central Valley Water Board staff informing them that it would be an illegal discharge, they implemented this practice anyway. CDCR eventually completed their investigation and produced a final report. However, the report was 124 days late.

Overall, all parties involved in this incident cooperated with Central Valley Water Board staff by providing appropriate information when requested, but also ignored directives related to discharges to surface water. The parties did not act as would be expected of a reasonable and prudent person during some parts of the process. Therefore, Board staff assigns the parties a **multiplier of 1.1** for cleanup and cooperation.

Total Base Liability Initial Liability x Culpability Multiplier x History of Violations Multiplier x Cleanup and Cooperation Multiplier = Total Base Liability

\$1,796,619x 1.2 x 1.0 x 1.1 = \$2,371,537

Step 6 - Ability to Pay and Ability to Continue in Business

CDCR has stipulated to the ability to pay the administrative penalty. CDCR is a state agency with a budget of \$13.4 billion for the 2020-2021 fiscal year.

Step 7 – Other Factors as Justice May Require

The Central Valley Water Board and the Discharger have agreed to settle this action in an administrative setting, in lieu of engaging in a civil action, where the maximum penalty amounts are significantly larger, and the penalty may amount to a much larger penalty. Thus, the estimated amount generated by the Enforcement Policy in this matter does adequately address the penalty exposure for the Discharger. Thus, the stipulated administrative civil liability in this case is \$2,500,000 to more reasonably address the alleged violations, and threats to water quality and public health from the alleged violations. In addition, the stipulated penalty in this action addresses the estimated economic benefit below.

Step 8 – Economic Benefit

The Enforcement Policy provides that the economic benefit of noncompliance should be calculated using the United States Environmental Protection Agency's (US EPA) <u>Economic Benefit Model (BEN)</u> (https://www.epa.gov/enforcement/penalty-and-financial-models) penalty and financial modeling program unless it is demonstrated that an alternative method of calculating the economic benefit is more appropriate. Economic benefit was calculated using BEN Version 2019.0.0. For this case, BEN was determined to be the appropriate method. Using standard economic principals such as time-value of money and tax deductibility of compliance costs, BEN calculates a discharger's economic benefit derived from delaying or avoiding compliance with environmental statutes.

The estimated economic benefit for the violations alleged above is \$1,459,828. Therefore, the Enforcement Policy requires a minimum administrative civil liability of \$1,605,811.

A copy of the BEN output is included as an Attachment D.

Final Adjusted Liability

The stipulated administrative civil liability in this matter is \$2,500,000.00.

Step 9 – Maximum and Minimum Liability Amounts

The maximum and minimum amounts must be determined for comparison to the proposed liability.

Maximum Liability Amount:

The maximum penalty is the sum of the statutory per day and per gallon penalties. Pursuant to Water Code section 13385(c)(1), the per day maximum penalty for 79 days of violation is \$790,000. Pursuant to Water Code section 13385(c)(2), the per gallon maximum penalty is \$11,977,460. Therefore, the maximum penalty when combining the per day and per gallon statutory penalties is \$12,767,460.

Minimum Liability Amount: The minimum liability for a discretionary penalty is equal to the economic benefit of noncompliance plus 10%. The minimum liability in this case is \$1,605,811.

Step 10 - Final liability Amount

The final liability amount consists of the added amounts for the violation, with any allowed adjustments, provided amounts are within the statutory minimum and maximum amounts. The proposed administrative civil liability is \$2,500,000.