



COLORADO
Department of Public
Health & Environment

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August 13, 2020

Nancy Bentson Essex, Registered Agent
LKA International, Inc.
PO Box 4049
Crested Butte, Colorado 81224

Certified Mail Number: 7018 0360 0000 1227 5974

RE: **Service of Notice of Violation / Cease and Desist Order / Order for Civil Penalty,
Number: IO-200813-1**

Dear Ms. Essex :

LKA International, Inc. is hereby served with the enclosed Notice of Violation / Cease and Desist Order / Order for Civil Penalty ("NOV/CDO/OCP"). The NOV/CDO/OCP is issued by the Colorado Department of Public Health and Environment's Water Quality Control Division ("Division") pursuant to authority given to the Division by §§ 25-8-602, 25-8-605, and 25-8-608, C.R.S., of the *Colorado Water Quality Control Act* ("Act"). The Division bases the NOV/CDO/OCP upon findings that LKA International, Inc. violated the Act, regulations promulgated pursuant to the Act, and/or a discharge permit, as described in the enclosed NOV/CDO/OCP.

Pursuant to § 25-8-603, C.R.S., LKA International, Inc. is required, within 30 calendar days of receipt of this NOV/CDO/OCP, to submit to the Division an answer admitting or denying each paragraph of the Findings of Fact and responding to the Notice of Violation. Additionally, pursuant to authority given to the Division by § 25-8-608, C.R.S., the Division imposes a civil penalty as outlined in the attached NOV/CDO/OCP. Payment of the civil penalty should be made in accordance with the methods referenced in the Order for Civil Penalty.

Please be advised that the Division is continuing its investigation into this matter and the Division may identify supplementary violations that warrant amendments to this NOV/CDO/OCP or the issuance of additional enforcement actions.

Should you or representatives of LKA International, Inc. desire to discuss this matter informally with the Division, or if you have questions regarding the NOV/CDO/OCP, please do not hesitate to contact me at (303) 692-6498 or andrea.beebout@state.co.us.

Sincerely,

Andrea Beebout, Enforcement Specialist
Clean Water Enforcement Unit
WATER QUALITY CONTROL DIVISION

Enclosure(s)

cc: Enforcement File

ec: Michael Boeglin, EPA Region 8
Silver Thread Public Health District
Aimee Konowal, Watershed Section, CDPHE
Nathan Moore, Compliance & Enforcement Section, CDPHE



Mark Henderson, Grants and Loans Unit, CDPHE
Amy Zimmerman, Engineering Section, CDPHE
Heather Young, Field Services Section, CDPHE
Erin Scott, Permits Section, CDPHE
Kelly Morgan, Clean Water Enforcement Unit, CDPHE
Tania Watson, Data Management Workgroup, CDPHE
Travis Marshall, Division of Reclamation Mining & Safety, DNR
Stephanie Mitchell, Division of Reclamation Mining & Safety, DNR
Stefanie Neale, Assistant Attorney General, Colorado Department of Law





COLORADO

Department of Public Health & Environment

WATER QUALITY CONTROL DIVISION

NOTICE OF VIOLATION / CEASE AND DESIST ORDER / ORDER FOR CIVIL

PENALTY NUMBER: IO-200813-1

IN THE MATTER OF: LKA INTERNATIONAL, INC.
CDPS PERMIT NO. CO0048119
HINSDALE COUNTY, COLORADO

Pursuant to the authority vested in the Colorado Department of Public Health and Environment's ("Department") Division of Administration by §§25-1-109 and 25-8-302, C.R.S., which authority is implemented through the Department's Water Quality Control Division ("Division"), and pursuant to §§25-8-602, 25-8-605 and 25-8-608, C.R.S., the Division hereby makes the following Findings of Fact and issues the following Notice of Violation / Cease and Desist Order / Order for Civil Penalty ("Order"):

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. At all times relevant to the alleged violations identified herein, LKA International, Inc. ("LKA") was a Nevada corporation in good standing and registered to conduct business in the State of Colorado.
2. LKA is a "person" as defined under the Water Quality Control Act, §25-8-103(13), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, §61.2(73).
3. LKA owns and/or operates the Golden Wonder Mine. The Golden Wonder Mine is an active underground hard rock mine and is located in the vicinity of 38.0047 N, -107.280 W, approximately five miles southeast of the Town of Lake City, Hinsdale County, Colorado ("Facility").
4. Level 6 of the Golden Wonder Mine currently and historically supported mining activities at the site. Level 6 includes the Level 6 pad, which was constructed on top of a waste rock pile that was generated by historic mining activities. The Facility's effluent consists of drainage from the level 6 portal and seep discharges that emanate from the toe of the waste rock pile. In August of 2017, LKA installed a system to convey wastewater from the level 6 portal to an iron slag filtration system, prior to commingling with the seep discharges and stormwater, which are treated via a passive (limestone) treatment system prior to discharging to Deadman Gulch.
5. The Facility is the subject of Colorado Discharge Permit System ("CDPS") Permit No. CO0048119 ("Permit"). The Permit was originally issued on December 29, 2009, became effective on February 1, 2010, and was set to expire January 31, 2015 but was administratively continued pending a renewal of the Permit ("2010 Permit"). A renewed version of the Permit was issued on January 29,



2019 and became effective on March 1, 2019. The renewed version of the Permit was modified via Modification 1, issued on May 31, 2019. The current version of the permit became effective May 31, 2019 and is set to expire on February 29, 2024 ("2019 Permit").

6. The 2010 Permit authorized LKA to discharge treated wastewater from the Facility via Outfall 001A after the passive (limestone) treatment system into Deadman Gulch.
7. The 2019 Permit authorizes LKA to discharge stormwater and treated wastewater to Deadman Gulch via the following outfalls:

OUTFALL NUMBER	DESCRIPTION	LATITUDE	LONGITUDE
002	Discharge from the limestone-lined channel consisting of treated mine water and Level 6 stormwater, prior to mixing with Deadman Gulch	38.003263 N	-107.283609 W
003	Discharge from seep #1 at the toe of the waste rock pile, prior to mixing with Deadman Gulch	38.003272 N	-107.283583 W
004	Discharge from seep #2 at the toe of the waste rock pile, prior to mixing with Deadman Gulch	38.003250 N	-107.283644 W
005	Stormwater runoff from Level 3 pad/wasterock pile, prior to mixing with Deadman Gulch	38.004667 N	-107.280861 W
006	Stormwater runoff from Level 3 access road, prior to mixing with Deadman Gulch	38.006278 N	-107.282778 W
007	Stormwater runoff from main access road, prior to mixing with Deadman Gulch	38.006472 N	-107.285833 W
008	Stormwater runoff from main access road, prior to mixing with Deadman Gulch	38.005444 N	-107.284583 W
009	Stormwater runoff from main access road, prior to mixing with Deadman Gulch	38.004528 N	-107.283722 W
010	Stormwater runoff from the eastern waste rock slope, discharging to Deadman Gulch above the headwall diversion, prior to mixing with Deadman Gulch	38.003144 N	-107.282564 W

8. On March 17, 2017 the Division issued LKA a Notice of Violation/Cease and Desist Order ("NOV/CDO IO-170317-1"), which alleged findings that LKA violated the Act and the 2010 Permit.
9. Pursuant to 5 CCR 1002-61, §61.8, LKA must comply with all terms and conditions of the Permit, and violations of such terms and conditions as specified in the Permit may be subject to civil and criminal liability pursuant to §25-8-601 through 25-8-612, C.R.S.

Failure to Comply with Permit Effluent Limitations

10. Pursuant to Part I.A.2. of the 2010 Permit, LKA is required to monitor defined effluent parameters at specified frequencies to provide an indication of compliance or non-compliance with the effluent limitations of the 2010 Permit. Pursuant to Part I.A.1. of the 2010 Permit, LKA's permitted discharge at Outfall 001A shall not exceed, among others not subject of this action, the following effluent discharge limitations specified below:

LKA EFFLUENT DISCHARGE LIMITATIONS				
PARAMETER	UNITS	DISCHARGE LIMITATIONS		
		30-DAY AVERAGE	DAILY MAX.	2-YEAR ROLLING AVG.
Total Suspended Solids	mg/L	20	30	--
Total Recoverable Iron	µg/L	1,000	--	100
Total Copper	µg/L	150	300	--
Potentially Dissolved Zinc	µg/L	47	106	7.1
Potentially Dissolved Copper	µg/L	6.6	9.6	1
Potentially Dissolved Lead	µg/L	1.7	44	0.3
Potentially Dissolved Selenium	µg/L	4.6	18	0.7
Effluent Flow	MGD	0.16	--	--

11. Pursuant to Part I.C.1. of the 2019 Permit, LKA is required to monitor defined effluent parameters at specified frequencies to provide an indication of compliance or non-compliance with the effluent limitations of the 2019 Permit. LKA's permitted discharge at Outfall 002A shall not exceed, among others not subject of this action, the following effluent discharge limitations specified below:

LKA EFFLUENT DISCHARGE LIMITATIONS					
PARAMETER	UNITS	DISCHARGE LIMITATIONS			
		30-DAY AVERAGE	7-DAY AVG.	DAILY MAX.	2-YEAR ROLLING AVG.
pH	s.u.	--		6.5-9.0	--
Total Suspended Solids	mg/L	20	30		--
Total Recoverable Arsenic	µg/L	3.4	--	--	Report
Total Recoverable Iron	µg/L	1,000	--	--	--
Total Recoverable Nickel	µg/L	100	--	--	15
Total Recoverable Copper	µg/L	150	--	300	--
Potentially Dissolved Zinc	µg/L	81	--	107	12
Potentially Dissolved Silver	µg/L	0.035	--	0.94	0.0053
Potentially Dissolved Copper	µg/L	6.1	--	8.8	0.92
Potentially Dissolved Cadmium	µg/L	0.51	--	1.2	0.077
Potentially Dissolved Lead	µg/L	1.5	--	40	0.23
Potentially Dissolved Manganese	µg/L	1,422	--	2,573	213
Potentially Dissolved Nickel	µg/L	36	--	321	5.4
Potentially Dissolved Selenium	µg/L	4.6	--	Report	0.69
Total Mercury	µg/L	0.01	--	2.0	0.0015
Sulfide as H ₂ S	mg/L	0.002	--	--	0.0003

12.

13. Pursuant to Part I.D.1. of the 2010 Permit, LKA is required to summarize and report the analytical results of its effluent monitoring to the Division via monthly discharge monitoring reports ("DMRs"). Each DMR shall include a certification by LKA that the information provided therein is true, accurate, and complete to the knowledge and belief of LKA.
14. Pursuant to Part I.J.1. of the 2019 Permit, LKA is required to report the data gathered in compliance with the 2019 Permit on a monthly basis via the Division's NetDMR service. The DMRs shall be filled out accurately and completely in accordance with the requirements of the 2019 Permit, and shall be signed by an authorized person.
15. LKA's DMRs include, among other information and data, the following effluent concentration data, which exceeded Part I.A.1. of the 2010 Permit:

LKA EFFLUENT SELF-MONITORING DATA			
REPORTING PERIOD	SAMPLE MEASUREMENTS FOR OUTFALL 001A		
Total Suspended Solids, mg/L	30-DAY AVERAGE LIMIT = 20mg/L	MAX 7-DAY AVERAGE LIMIT = 30mg/L	
April 1, 2017–April 30, 2017	66	62	
May 1, 2017–May 31, 2017	106.5	154	
June 1, 2017–June 30, 2017	39.6	50	
July 1, 2017–July 31, 2017	36.36	47.5	
September 1, 2017–September 30, 2017	22.52	35	
Total Recoverable Iron, µg/L			2-YR ROLLING AVG. LIMIT = 100 µg/L
April 1, 2017–April 30, 2017			1,318.23
May 1, 2017–May 30, 2017			1,347.28
June 1, 2017–June 30, 2017			1,143.67
July 1, 2017–July 31, 2017			1,163.46
August 1, 2017–August 31, 2017			1,213
September 1, 2017–September 30, 2017			1,267
Total Copper, µg/L	30-DAY AVERAGE LIMIT = 150 µg/L		
April 1, 2017–April 30, 2017	254		
May 1, 2017–May 30, 2017	233.75		
June 1, 2017–June 30, 2017	215.7		
July 1, 2017–July 31, 2017	197.97		
Potentially Dissolved Zinc, µg/L			2-YR ROLLING AVG. LIMIT = 7.1 µg/L
April 1, 2017–April 30, 2017			79.09
May 1, 2017–May 30, 2017			77.49
June 1, 2017–June 30, 2017			63.19
July 1, 2017–July 31, 2017			61.95
August 1, 2017–August 31, 2017			63.04
September 1, 2017–September 30, 2017			64.6
Potentially Dissolved Copper, µg/L	30-DAY AVERAGE LIMIT = 6.6 µg/L	DAILY MAX LIMIT = 9.6 µg/L	2-YR ROLLING AVG. LIMIT = 1 µg/L
April 1, 2017–April 30, 2017	23	24	45.25
May 1, 2017–May 30, 2017	22.375	28	44.29



LKA EFFLUENT SELF-MONITORING DATA			
REPORTING PERIOD	SAMPLE MEASUREMENTS FOR OUTFALL 001A		
June 1, 2017–June 30, 2017	20.1	23	36.04
July 1, 2017–July 31, 2017	21.61	31	35.01
August 1, 2017–August 31, 2017	12.2	17	36.03
September 1, 2017–September 30, 2017	16.02	26	37.365
Potentially Dissolved Lead, µg/L			2-YR ROLLING AVG. LIMIT = 0.3 µg/L
April 1, 2017–April 30, 2017			0.369
May 1, 2017–May 30, 2017			0.369
June 1, 2017–June 30, 2017			0.307
July 1, 2017–July 31, 2017			0.308
August 1, 2017–August 31, 2017			0.308
September 1, 2017–September 30, 2017			0.307
Potentially Dissolved Selenium, µg/L			2-YR ROLLING AVG. LIMIT = 0.7 µg/L
April 1, 2017–April 30, 2017			2.66
May 1, 2017–May 30, 2017			2.51
June 1, 2017–June 30, 2017			1.94
July 1, 2017–July 31, 2017			1.76
August 1, 2017–August 31, 2017			1.85
September 1, 2017–September 30, 2017			1.95
Flow, MGD	30-DAY AVERAGE LIMIT = 0.16 MGD		
August 1, 2017–August 31, 2017	0.214		

16. LKA's DMRs include, among other information and data, the following effluent concentration data, which exceeded Part I.C.1. of the 2019 Permit:

LKA EFFLUENT SELF-MONITORING DATA			
REPORTING PERIOD	SAMPLE MEASUREMENTS FOR OUTFALL 002A		
pH, SU		DAILY MAX LIMIT = 6.5-9.0	
June 1, 2019–June 30, 2019		2.47	
July 1, 2019–July 31, 2019		2.24	
August 1, 2019–August 31, 2019		2.38	
Total Suspended Solids, mg/L	30-DAY AVERAGE LIMIT = 20mg/L	MAX 7-DAY AVERAGE LIMIT = 30mg/L	
June 1, 2019–June 30, 2019	76	76	
July 1, 2019–July 31, 2019	56	56	
August 1, 2019–August 31, 2019	73	73	
Total Recoverable Arsenic, µg/L	30-DAY AVERAGE LIMIT = 3.4 µg/L		
August 1, 2019–August 31, 2019	3.55		
Total Recoverable Iron, µg/L	30-DAY AVERAGE LIMIT = 1000 µg/L		2-YR ROLLING AVERAGE LIMIT = 150 µg/L
June 1, 2019–June 30, 2019	4322		1,585
July 1, 2019–July 31, 2019	4671		2,560.7



LKA EFFLUENT SELF-MONITORING DATA			
REPORTING PERIOD		SAMPLE MEASUREMENTS FOR OUTFALL 002A	
August 1, 2019–August 31, 2019	4755		3,598
Total Recoverable Nickel, µg/L			2-YR ROLLING AVERAGE LIMIT = 15 µg/L
June 1, 2019–June 30, 2019			26.3
July 1, 2019–July 31, 2019			20.85
August 1, 2019–August 31, 2019			35.7
Total Recoverable Copper, µg/L	30-DAY AVERAGE LIMIT = 150 µg/L		
June 1, 2019–June 30, 2019	178		
July 1, 2019–July 31, 2019	189		
August 1, 2019–August 31, 2019	216		
Potentially Dissolved Zinc, µg/L	30-DAY AVERAGE LIMIT = 81 µg/L	DAILY MAX LIMIT = 107 µg/L	2-YR ROLLING AVERAGE LIMIT = 12 µg/L
June 1, 2019–June 30, 2019	436	436	123.2
July 1, 2019–July 31, 2019	454	454	230.45
August 1, 2019–August 31, 2019	467	467	343.92
Potentially Dissolved Silver, µg/L	30-DAY AVERAGE LIMIT = 0.035 µg/L		2-YR ROLLING AVERAGE LIMIT = 0.0053 µg/L
June 1, 2019–June 30, 2019	0.066		0.0165
July 1, 2019–July 31, 2019	0.069		0.03375
August 1, 2019–August 31, 2019	0.073		0.052
Potentially Dissolved Copper, µg/L	30-DAY AVERAGE LIMIT = 6.1 µg/L	DAILY MAX LIMIT = 8.8 µg/L	2-YR ROLLING AVERAGE LIMIT = 0.92 µg/L
June 1, 2019–June 30, 2019	112	112	40.46
July 1, 2019–July 31, 2019	129	129	67.305
August 1, 2019–August 31, 2019	135	135	98.01
Potentially Dissolved Cadmium, µg/L			2-YR ROLLING AVERAGE LIMIT = 0.077 µg/L
June 1, 2019–June 30, 2019			0.1025
July 1, 2019–July 31, 2019			0.2125
August 1, 2019–August 31, 2019			0.3275
Potentially Dissolved Lead, µg/L			2-YR ROLLING AVERAGE LIMIT = 0.23 µg/L
June 1, 2019–June 30, 2019			0.322
July 1, 2019–July 31, 2019			0.655
August 1, 2019–August 31, 2019			1.025
Potentially Dissolved Manganese, µg/L			2-YR ROLLING AVERAGE LIMIT = 213 µg/L
July 1, 2019–July 31, 2019			221.44
August 1, 2019–August 31, 2019			335.27
Potentially Dissolved Nickel, µg/L			2-YR ROLLING AVERAGE LIMIT = 5.4 µg/L
July 1, 2019–July 31, 2019			5.52
August 1, 2019–August 31, 2019			20.85



LKA EFFLUENT SELF-MONITORING DATA			
REPORTING PERIOD		SAMPLE MEASUREMENTS FOR OUTFALL 002A	
July 1, 2019–July 31, 2019			18.78
Potentially Dissolved Selenium, µg/L			2-YR ROLLING AVERAGE LIMIT = 0.69 µg/L
June 1, 2019–June 30, 2019			1.76
July 1, 2019–July 31, 2019			2.43
August 1, 2019–August 31, 2019			3.18
Total Mercury, µg/L			2-YR ROLLING AVERAGE LIMIT = 0.0015 µg/L
June 1, 2019–June 30, 2019			0.005958
July 1, 2019–July 31, 2019			0.00612
August 1, 2019–August 31, 2019			0.0073
Sulfide as H ₂ S, mg/L		30-DAY AVERAGE LIMIT = 0.002mg/L	2-YR ROLLING AVERAGE LIMIT = 0.0003 mg/L
June 1, 2019–June 30, 2019		0.28	0.07
July 1, 2019–July 31, 2019		0.31	0.1475
August 1, 2019–August 31, 2019		0.31	0.225

17. The 2010 Permit did not authorize the pollutant levels identified above in paragraph 15. Division records establish that LKA did not have any other permit authorizing such discharges into State Waters.
18. The 2019 Permit does not authorize the pollutant levels identified above in paragraph 16. Division records establish that LKA does not have any other permit authorizing such discharges into State Waters.
19. LKA's failure to comply with the effluent limitations constitutes violations of Part I.A.1. of the 2010 Permit and Part I.C.1. of the 2019 Permit.

Failure to Properly Monitor and Report

20. Pursuant to Part I.A.2. of the 2010 Permit, LKA was required to monitor defined effluent parameters at specified frequencies, as outlined below:

LKA 2010 PERMIT MONITORING REQUIREMENTS		
PARAMETER	FREQUENCY	SAMPLE TYPE
Flow	Continuous	Recorder
pH	Daily	Grab
Oil and Grease	Daily	Visual
TSS	Five days/week	Composite
TDS	Quarterly	Composite
Total Recoverable Aluminum	Two days/week	Composite
Total Recoverable Arsenic	Two days/week	Composite
Total Cadmium	Two days/week	Composite
Potentially Dissolved Cadmium	Two days/week	Composite
Total Recoverable Chromium	Two days/week	Composite
Total Recoverable Chromium (III)	Two days/week	Composite

Total Copper	Two days/week	Composite
Total Recoverable Iron	Two days/week	Composite
Total Lead	Two days/week	Composite
Potentially Dissolved Lead	Two days/week	Composite
Potentially Dissolved Manganese	Two days/week	Composite
Total Mercury	Two days/week	Composite
Potentially Dissolved Nickel	Two days/week	Composite
Potentially Dissolved Selenium	Two days/week	Composite
Potentially Dissolved Silver	Two days/week	Composite
Total Zinc	Two days/week	Composite
Potentially Dissolved Zinc	Two days/week	Composite
Sulfide	Two days/week	Composite
Whole Effluent Toxicity ("WET"), chronic	Quarterly	Three composites/test

**Note: Aluminum, arsenic, cadmium, chromium, chromium (III), copper, iron, lead, manganese, mercury, nickel, selenium, silver, and zinc will be collectively referred to as ("All 2010 Permit Metals") for the remainder of this Order*

21. Pursuant to Part I.D.1. of the 2010 Permit, LKA was required to report the analytical results of its effluent monitoring to the Division via monthly DMRs. Each DMR shall include a certification by LKA that the information provided therein is true, accurate, and complete to the knowledge and belief of LKA.
22. Pursuant to Part I.C.1. of the 2019 Permit, LKA is required to monitor defined effluent parameters at specified frequencies, as outlined below:

LKA 2010 PERMIT MONITORING REQUIREMENTS		
PARAMETER	FREQUENCY	SAMPLE TYPE
Flow	Continuous	Recorder
pH	Daily	Grab
Oil and Grease	Daily	Visual/Contingent
TDS	Quarterly	Composite
Total Recoverable Arsenic	Two days/week	Composite
Total Recoverable Cadmium	Two days/week	Composite
Potentially Dissolved Cadmium	Two days/week	Composite
Total Recoverable Chromium	Two days/week	Composite
Total Recoverable Chromium (III)	Two days/week	Grab
Potentially Dissolved Chromium (III)	Two days/week	Composite
Total Recoverable Copper	Two days/week	Composite
Potentially Dissolved Copper	Two days/week	Composite
Total Recoverable Iron	Two days/week	Composite
Dissolved Iron	Two days/week	Composite
Total Lead	Two days/week	Composite
Potentially Dissolved Lead	Two days/week	Composite
Potentially Dissolved Manganese	Two days/week	Composite
Total Mercury	Two days/week	Composite
Potentially Dissolved Nickel	Two days/week	Composite
Total Recoverable Nickel	Two days/week	Composite
Potentially Dissolved Selenium	Two days/week	Composite
Potentially Dissolved Silver	Two days/week	Composite
Total Recoverable Zinc	Two days/week	Composite
Potentially Dissolved Zinc	Two days/week	Composite



LKA 2010 PERMIT MONITORING REQUIREMENTS		
PARAMETER	FREQUENCY	SAMPLE TYPE
Sulfate	Two days/week	Composite
Sulfide as H ₂ S	Two days/week	Composite
Calcium	Weekly	Composite
Magnesium	Weekly	Composite
Sodium	Weekly	Composite
Bicarbonate as HCO ₃	Weekly	Composite
SAR Caclulated Limit	Weekly	Calculated
Adjusted SAR effluent	Weekly	Calculated
EC	Weekly	Composite
WET, chronic	Quarterly	Three composites/test

**Note: Arsenic, cadmium, chromium, chromium (III), copper, iron, lead, manganese, mercury, nickle, selenium, silver, and zinc will be collectively referred to as ("All 2019 Permit Metals") for the remainder of this Order.*

23. Pursuant to Pursuant to Part I.J.1. of the 2019 Permit, LKA is required to report the data gathered in compliance with the 2019 Permit on a monthly basis via the Division's NetDMR service. The DMRs shall be filled out accurately and completely in accordance with the requirements of the 2019 Permit, and shall be signed by an authorized person.
24. Division records, as supplemented by records submitted by LKA, establish that LKA failed to properly sample its effluent in accordance with the 2010 Permit, as outlined below:

LKA FAILURE TO PROPERLY SAMPLE				
REPORTING PERIOD	OUTFALL	PARAMETER	ACTUAL SAMPLE TYPE	REQUIRED SAMPLE TYPE
June 1, 2017–June 30, 2017	001A	All 2010 Permit Metals, TSS, Sulfide	Grab	Composite
July 1, 2017–July 31, 2017	001A	All 2010 Permit Metals, TSS, Sulfide	Grab	Composite
August 1, 2017–August 31, 2017	001A	All 2010 Permit Metals, TSS, Sulfide	Grab	Composite
September 1, 2017–September 30, 2017	001A	All 2010 Permit Metals, TSS, Sulfide	Grab	Composite

25. Division records, supplemented by DMRs submitted by LKA, establish that LKA failed to properly sample its effluent in accordance with the 2019 Permit, as outlined below:

LKA FAILURE TO PROPERLY SAMPLE				
REPORTING PERIOD	OUTFALL	PARAMETER	ACTUAL SAMPLE TYPE	REQUIRED SAMPLE TYPE
June 1, 2019–June 30, 2019	002A	All 2019 Permit Metals, Sulfate, Sulfide as H ₂ S, Calcium,	Grab	Composite



LKA FAILURE TO PROPERLY SAMPLE				
		Magnesium, Sodium, Bicarbonate as HCO ₃ , EC		
July 1, 2019–July 30, 2019	002A	All 2019 Permit Metals, Sulfate, Sulfide as H ₂ S, Calcium, Magnesium, Sodium, Bicarbonate as HCO ₃ , EC	Grab	Composite
August 1, 2019–August 31, 2019	002A	All 2019 Permit Metals, Sulfate, Sulfide as H ₂ S, Calcium, Magnesium, Sodium, Bicarbonate as HCO ₃ , EC	Grab	Composite

26. Division records, supplemented by DMRs submitted by LKA, establish that LKA failed to properly monitor its effluent discharges at the frequencies required by the 2010 Permit, as outlined below:

LKA FAILURE TO PROPERLY MONITOR				
REPORTING PERIOD	OUTFALL	PARAMETER	REPORTED MONITORING FREQUENCY	REQUIRED MONITORING FREQUENCY
June 1, 2017–June 30, 2017	001A	TSS	Two days/week	Five days/week
July 1, 2017–July 31, 2017	001A	TSS	Two days/week	Five days/week
August 1, 2017–August 31, 2017	001A	TSS	Two days/week	Five days/week
September 1, 2017– September 30, 2017	001A	TSS	Two days/week	Five days/week

27. Division records, supplemented by DMRs submitted by LKA, establish that LKA failed to properly monitor its effluent discharges at the frequencies required by the 2019 Permit, as outlined below:

LKA FAILURE TO PROPERLY MONITOR				
REPORTING PERIOD	OUTFALL	PARAMETER	REPORTED MONITORING FREQUENCY	REQUIRED MONITORING FREQUENCY
June 1, 2019–June 30, 2019	002A	All 2019 Permit Metals, Sulfate, Sulfide as H ₂ S	One day/month	Two days/week
June 1, 2019–June 30, 2019	002A	Calcium, Magnesium, Sodium, Bicarbonate as	One day/month	Weekly

LKA FAILURE TO PROPERLY MONITOR				
		HCO ₃ , EC		
July 1, 2019--July 31, 2019	002A	All 2019 Permit Metals, Sulfate, Sulfide as H ₂ S	One day/month	Two days/week
July 1, 2019--July 31, 2019	002A	Calcium, Magnesium, Sodium, Bicarbonate as HCO ₃ , EC	One day/month	Weekly
August 1, 2019--August 31, 2019	002A	All 2019 Permit Metals, Sulfate, Sulfide as H ₂ S	One day/month	Two days/week
August 1, 2019--August 31, 2019	002A	Calcium, Magnesium, Sodium, Bicarbonate as HCO ₃ , EC	One day/month	Weekly
May 1, 2020--May 31, 2020	002A	All 2019 Permit parameters	No samples collected	--

28. Pursuant to Part I.D.1. of the 2010 Permit and Part I.J.1. of the 2019 Permit, LKA is required to report all monitoring results on a monthly basis (quarterly for quarterly requirements and WET monitoring) using Division approved DMRs. LKA is required to ensure the DMRs are submitted so that they are received by the Division by not later than the 28th day of the month following the reporting period. The Permit specifies that if no discharge occurs during the reporting period, "No Discharge" shall be reported on the DMR.
29. Division records establish that LKA failed to submit DMRs to the Division by the 28th day of the month following the end of the reporting periods identified below:

LKA LATE DISCHARGE MONITORING REPORTS			
DISCHARGE MONITORING REPORTING PERIOD	OUTFALL NUMBER(S)	DMR DUE DATE	DMR RECEIPT DATE
Reporting Periods for 2018			
March 1, 2018--March 31, 2018	001A	4/28/2018	5/14/2018
1 st Quarter 2018 (January 1, 2018--March 31, 2018)	001Q, 001X	4/28/2018	5/14/2018
April 1, 2018--April 2018	001A	5/28/2018	6/5/2018
June 1, 2018--June 30, 2018	001A	7/28/2018	7/30/2018
2 nd Quarter 2018 (April 1, 2018--June 30, 2018)	001Q, 001X	7/28/2018	7/30/2018
October 1, 2018--October 31, 2018	001A	11/28/2018	12/7/2018
Reporting Periods for 2019			
December 1, 2019--December 31, 2019	002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A	1/28/2020	2/19/2020

LKA LATE DISCHARGE MONITORING REPORTS			
DISCHARGE MONITORING REPORTING PERIOD	OUTFALL NUMBER(S)	DMR DUE DATE	DMR RECEIPT DATE
4 th Quarter 2019 (October 1, 2019–December 31, 2019)	002Q, 002X, 003Q, 003X, 004Q, 004X	1/28/2020	2/5/2020
Reporting Periods for 2020			
March 1, 2020–March 31, 2020	002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A	4/28/2020	4/30/2020
1 st Quarter 2020 (January 1, 2020–March 31, 2020)	002Q, 002X, 003Q, 003X, 004Q, 004X	1/28/2020	2/5/2020

30. Pursuant to Part I.I.1. of the 2019 Permit, LKA's samples and measurements taken for the respective identified monitoring points shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification and approval by the Division.
31. Pursuant to Part I.A. of the 2019 Permit, LKA's process water effluent outfalls are described as follows:

OUTFALL NUMBER	DESCRIPTION	LATITUDE	LONGITUDE
002	Discharge from the limestone-lined channel consisting of treated mine water and Level 6 stormwater, prior to mixing with Deadman Gulch	38.003263 N	-107.283609 W
003	Discharge from seep #1 at the toe of the waste rock pile, prior to mixing with Deadman Gulch	38.003272 N	-107.283583 W
004	Discharge from seep #2 at the toe of the waste rock pile, prior to mixing with Deadman Gulch	38.003250 N	-107.283644 W

32. Division records, as supplemented by correspondence from LKA, establish that LKA failed to take representative samples of its effluent between June 2019 and August 2019. Specifically, LKA collected and analyzed samples of its effluent at a point below outfalls 002, 003, and 004, where the effluent from each of the outfalls has commingled and blends with Deadman Gulch.
33. LKA's failure to properly monitor its effluent, as identified in paragraphs 24-27 above, constitutes violations of Part I.A.2. of the 2010 Permit and Part I.C.1. of the 2019 Permit.
34. LKA's failure to submit DMRs to the Division by the 28th day of the month following the end of each reporting period, as identified in paragraph 29 above, constitutes violations of Part I.D.1. of the 2010 Permit and Part I.J.1. of the 2019 Permit.



35. LKA's failure to take representative samples of its effluent as identified in paragraph 32 above, constitutes violations of Part I.I.1. and Part I.A. of the 2019 Permit.

Failure to Cease and Desist from Violations of the Colorado Water Quality Control Act

36. Pursuant to paragraph 27 of NOV/CDO IO-170317-1, LKA was ordered to cease and desist from all violations of the Colorado Water Quality Control Act, §§25-8-101 through 25-8-803, C.R.S., its implementing regulations promulgated thereto, and the 2010 Permit.
37. LKA failed to cease and desist from all violations of the Colorado Water Quality Control Act, the 2010 Permit and the 2019 Permit, as outlined in paragraphs 10 through 35 above.
38. LKA's failure to cease and desist from all violations of the Colorado Water Quality Control Act, the 2010 Permit and the 2019 Permit constitutes violations of NOV/CDO IO-170317-1.

NOTICE OF VIOLATION

39. Based on the foregoing Findings of Fact and Conclusions of Law, LKA is hereby notified that the Division has determined that LKA has violated the following sections of the 2010 Permit, the 2019 Permit, and NOV/CDO IO-170317-1:

Part I.A.1. of the 2010 Permit, which states in part, "In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Section 61.8(2), 5 CCR 1002-61, the permitted discharge shall not contain effluent parameter concentrations which exceed the following limitations specified below or exceed the specified flow limitation."

Part I.A.2. of the 2010 Permit, which states in part, "In order to obtain an indication of the probable compliance or noncompliance with the effluent limitations specified in Part I.A., the permittee shall monitor all effluent parameters at the following frequencies. Such monitoring will begin immediately and last for the life of the permit unless otherwise noted. The results of such monitoring shall be reported of the Discharge Monitoring Report form."

Part I.D.1. of the 2010 Permit, which states in part, "Reporting of the data gathered in compliance with Part I.B.1. shall be on a monthly basis. Reporting of all data gathered shall comply with the requirements of Part I.E. (General Requirements). Monitoring results shall be summarized for each calendar month and reported on Division approved discharge monitoring report (DMR) forms (EPA form 3320-1). One form shall be mailed to the Water Quality Control Division...so that the DMR is received by the Division by the 28th day of the following month...If no discharge occurs during the reporting period, "No Discharge" shall be reported...The Discharge Monitoring Report forms shall be filled out accurately and completely in accordance with the requirements of this permit and the instructions on the forms." *(Note: Part I.D.1. of the Permit includes a typographical error incorrectly referencing Part I.B.1. for the effluent limitations of the Permit. The effluent monitoring requirements are contained in Part I.A.2. of the Permit.)*

Part I.A. of the 2019 Permit, which states in part, "Beginning no later than the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from, and self monitoring samples taken in accordance with the monitoring requirements shall be obtained from permitted features:..."

Part I.C.1. of the 2019 Permit, which states in part, “In order to obtain an indication of the probable compliance or noncompliance with the effluent limitations specified in this Part, the permittee shall monitor all effluent parameters at the frequencies and sample type specified below. Such monitoring will begin immediately and last for the life of the permit unless otherwise noted. The results of such monitoring shall be reported on the Discharge Monitoring Reporting form.”

Part I.I.1. of the 2019 Permit, which states in part, “Samples and measurements taken for the respective identified monitoring points as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and approval by the Division.”

Part I.J.1. of the 2019 Permit, which states in part, “The permittee shall report the data gathered in compliance with this permit on a **monthly** basis. Reporting of all data gathered shall comply with the requirements of Part I.J and/or Part II.J of this permit. The permittee shall summarize monitoring results for each calendar month via the division’s NetDMR service...When submitting monitoring results via NetDMR, the Copy of Record shall reflect that the DMR was signed and submitted no later than the 28th day of the month following the reporting period.”

Notice of Violation/Cease and Desist Order IO-170317-1, which states in part, LKA shall “cease and desist from all violations of the Colorado Water Quality Control Act, §§25-8-803, C.R.S., its implementing regulations promulgated thereto, and the Permit.”

REQUIRED CORRECTIVE ACTION

Based upon the foregoing factual and legal determinations and pursuant to §25-8-602 and §25-8-605, C.R.S., LKA is hereby ordered to:

40. Cease and desist from all violations of the Colorado Water Quality Control Act, §§25-8-101 through 25-8-803, C.R.S., its implementing regulations promulgated thereto and the 2019 Permit.

Furthermore, the Division hereby orders LKA to comply with the following specific terms and conditions of this Order:

41. LKA shall immediately begin sampling and monitoring effluent discharges from the Facility in accordance with the requirements of Part I.A. and Part I.C.1. of the 2019 Permit, paying special attention to outfall location(s), sampling frequency and sample type. LKA shall immediately develop a comprehensive and detailed description of its sampling and monitoring procedures at the Facility. This description shall include, at a minimum, the following items: 1) the name(s) and title(s) of any individual(s) responsible for sampling effluent at the Facility, along with a copy(s) of any written contract(s) and/or scope of services for the individual(s), as applicable; 2) the procedure for ensuring all samples are collected in accordance with the frequency and sample-type requirements of the 2019 Permit; and 3) any other measures or tools utilized by LKA to ensure compliance with the sampling and monitoring requirements of the 2019 Permit. Within 14 calendar days of receipt of this Order, LKA shall submit its description to the Division, along with a written certification statement confirming that all sampling and monitoring is being conducted in accordance with the terms and conditions of the 2019 Permit. If, for any reason, LKA cannot immediately comply with all the sampling and monitoring requirements of the 2019 Permit, within 14 calendar days of receipt of this Order, LKA shall submit a detailed description outlining why compliance has not been and/or cannot

be achieved and what measures LKA is taking to ensure future compliance, along with a detailed timeline for any planned activities, as applicable.

42. Within 30 calendar days of receipt of this Order, LKA shall retain the services of a qualified individual or entity specifically experience in mine-related wastewater treatment to evaluate and recommend Facility improvements and/or mine wastewater management options that must be implemented by LKA to ensure compliance with the terms and conditions of the 2019 Permit, specifically the effluent limitations and monitoring requirements. This evaluation must consider, in detail, all contributing pollutant sources and pollutant concentrations for all parameters included in Part I.C.1. of the 2019 Permit and what techniques or technologies may be utilized to produce effluent that is *consistently* in compliance with the 2019 Permit. The evaluation shall include itemized cost estimates associated with each treatment technique and/or technology identified as an option for mine wastewater management.
43. Within 30 calendar days of receipt of this Order, LKA shall provide documentation to the Division that it has retained the services of the qualified individual or entity described in paragraph 42. This documentation shall include, at a minimum, a copy of the individual or entity's qualifications and a copy of the written contract or agreement for such services, including a copy of the scope of services to be provided. The Division reserves the right to reject the individual or entity if it finds, after reasonable inquiry and evaluation, the individual or entity does not meet the expected qualifications. Within seven calendar days of receipt of the documentation, the Division will review the qualifications and approve or deny the individual/entity. Should the Division deny the individual/entity, LKA will have 14 calendar days from notification from the Division to submit documentation for an alternative individual/entity.
44. Within 60 calendar days of receipt of this order, LKA shall submit to the Division a final report on the findings of the evaluation described in paragraph 42. Along with the findings of the evaluation, the report must identify the specific short-term and long-term measures that will be taken by LKA in order for the Facility to *consistently and reliably* produce effluent that is in compliance with the limitations identified in Part I.C.1. of the Permit. For each short-term and long-term measure identified, LKA shall also submit a time schedule for completion of each measure. The implementation schedule must identify completion of all measures by no later than September 30, 2020. The measures and time schedule submitted shall become a condition of this Order, and LKA shall implement the measures and time schedule as submitted unless notified by the Division, in writing, that alternate measures and/or time schedules are appropriate. If the Division imposes alternate measures and/or time schedules, they shall also become a condition of this Order.
45. Beginning in August 2019 and every calendar month thereafter, LKA shall submit monthly progress reports to the Division by the end of each calendar month. At a minimum, each report shall outline activities undertaken in the current month and planned activities for the next month to remain in compliance with this Order.
46. If LKA becomes aware of any situation or circumstance that causes LKA to become unable to comply with any condition or time schedule(s) set forth by this Order, LKA shall provide written notice to the Division within 5 calendar days of LKA becoming aware of such circumstance(s). LKA's notice shall describe what, if any, impacts will occur on LKA's ability to comply with the Colorado Water Quality Control Act and/or the 2019 Permit, and any impacts on the remaining conditions and/or time schedules specified by this Order, and what steps are being taken to mitigate the impacts.
47. All documents submitted under this Order shall use the same titles as stated in this Order, and shall reference both the number of this Order and the number of the paragraph pursuant to which the

document is required. Within 30 calendar days of receiving Division comments on any submitted documents, LKA shall revise the submitted document(s) to properly address the Division's comments and resubmit the document(s) for Division review.

ORDER FOR CIVIL PENALTY

48. Pursuant to §25-8-608(1), C.R.S. any person who violates any provision of the Colorado Water Quality Control Act, or of any permit issued under the Act, or any control regulation promulgated pursuant to the Act, or any final cease and desist order or clean-up order shall be subject to a civil penalty of not more than ten thousand dollars per day for each day during which such violation occurs.
49. Based upon the Findings of Fact and Notice of Violation above, the Executive Director, through her designee (hereinafter the "Executive Director"), has determined that a civil penalty is appropriate and warranted in this matter. Therefore, the Executive Director hereby imposes a civil penalty in the amount of \$411,491.00 against LKA for the violations cited above. The civil penalty was determined in accordance with the procedures outlined in the Division's Civil Penalty Policy (May 1, 1993). A copy of the civil penalty calculation is attached hereto as Exhibit A and is incorporated herein by reference.
50. If LKA does not contest the findings and penalty assessment set out above, the civil penalty shall be paid within 60 calendar days of the date of this Order. Method of payment shall be by certified or cashier's check drawn to the order of the "Colorado Department of Public Health and Environment," and delivered to:

Andrea Beebout
Colorado Department of Public Health and Environment
Water Quality Control Division
Mail Code: WQCD-CWE-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

LKA shall include with the payment a cover letter referencing the number of this Order.

NOTICES AND SUBMITTALS

51. For all documents, plans, records, reports and replies required to be submitted by this Order, the LKA shall submit an original and an electronic copy to the Division at the following address:

Andrea Beebout
Colorado Department of Public Health and Environment
Water Quality Control Division
Mail Code: WQCD-CWE-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Telephone: (303) 692-6498
Email: andrea.beebout@state.co.us

52. For any person submitting documents, plans, records and reports pursuant to this Order, that person shall make the following certification with each submittal:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

OBLIGATION TO ANSWER AND REQUEST FOR HEARING

53. Pursuant to §25-8-603, C.R.S. and 5 CCR 1002, §21.11 LKA is required to submit to the Division an answer affirming or denying each paragraph of the Findings of Fact and responding to the Notice of Violation. The answer shall be filed no later than 30 calendar days after receipt of this action.
54. Section 25-8-603, C.R.S. and 5 CCR 1002, §21.11 also provide that the recipient of a Notice of Violation may request the Division to conduct a public hearing to determine the validity of the Notice, including the Findings of Fact. Such request shall be filed in writing with the Division and include the information specified in 5 CCR 1002, §21.4(B)(2). Absent a request for hearing, the validity of the factual allegations and the Notice of Violation shall be deemed established in any subsequent Department proceeding. The request for hearing, if any, shall be filed no later than 30 calendar days after issuance of this action. The filing of an answer does not constitute a request for hearing.

APPEAL OF CIVIL PENALTY

55. Pursuant to 5 CCR 1002, §21.12(B) and 5CCR 1002, §21.4(A)(3)(b), an appeal of the determination of the civil penalty by the Executive Director shall be made in writing to the Division. Requests for such an appeal should be made in accordance with 5 CCR 1002, §21.12(B), shall be filed no later than 30 calendar days after issuance of this action, and shall include the information specified in 5 CCR 1002, §21.4(B)(2).

FALSIFICATION AND TAMPERING

56. Be advised, in accord with §25-8-610, C.R.S., that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Colorado Water Quality Control Act or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this article is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than ten thousand dollars, or by imprisonment in the county jail for not more than six months, or by both such fine and imprisonment.

POTENTIAL CRIMINAL PENALTIES

57. LKA is also advised that any person who recklessly, knowingly, intentionally, or with criminal negligence discharges any pollutant into any state waters commits criminal pollution if such discharge is made without a permit, if a permit is required by the Act for such discharge, or if such

discharge is made in violation of any permit issued under the Act or in violation of any Cease and Desist Order or Clean-up Order issued by the Division. By virtue of issuing this Order, the State has not waived its right to bring an action for penalties under §25-8-609, C.R.S., and may bring such action in the future.

RELEASE OR DISCHARGE NOTIFICATION

58. Pursuant to §25-8-601, C.R.S., LKA is further advised that any person engaged in any operation or activity which results in a spill or discharge of oil or other substance which may cause pollution of the waters of the state, shall notify the Division of the discharge. If said person fails to so notify, said person is guilty of a misdemeanor, and may be fined or imprisoned or both.

EFFECT OF ORDER

59. Nothing herein contained, particularly those portions requiring certain acts to be performed within a certain time, shall be construed as a permit or license, either to violate any provisions of the public health laws and regulations promulgated thereunder, or to make any discharge into state waters. Nothing herein contained shall be construed to preclude other individuals, cities, towns, counties, or duly constituted political subdivisions of the state from the exercise of their respective rights to suppress nuisances or to preclude any other lawful actions by such entities or the State.
60. For further clarification of LKA's rights and obligations under this Order LKA is advised to consult the Colorado Water Quality Control Act, §§25-8-101 to 803, C.R.S., and regulations promulgated thereunder, 5 CCR 1002.

Issued at Denver, Colorado, this 13th day of August, 2020

FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT



Nicole Rowan, P.E.
Clean Water Program Manager
WATER QUALITY CONTROL DIVISION

WASTEWATER COMPUTATION WORKSHEET

Entity Name: LKA International, Inc.	Permit Number: C00048119
Beneficial Use Classification: COGUUG29a - Aq Life Cold 1, Recreation E, Water Supply, Agriculture	Date of NOV/CDO/OCP: August 13, 2020 Number: IO-200813-1
Type of Facility: Hard Rock Mine	Flow: 0.02255 MGD

Part I - Effluent Violations Penalty Determination

Effluent Violations Penalty = (Potential Damage + Fault + History) x Days of Violation

A. Potential Damage Component

	Violation Type	Adjustment	Amount in Dollars
Line 1	Effluent Violations	NA	\$612 - \$2,128
	<p><i>Calculation:</i> The potential damage component is calculated based on the receiving water beneficial uses, type of pollutants, and percentage exceedance of effluent limitations.</p> <p>Potential Damage Component = Pollutant Parameter Point Value x Percent Exceedance Multiplier x \$200</p> <p>LKA International, Inc. (LKA) discharges mine water seepage and stormwater that has come into contact with waste rock piles at the Golden Wonder Mine, a hard rock mine that has gone through periods of activity but is currently inactive. Historically, the mine water seepage and stormwater collected and was conveyed to a limestone sump for passive treatment before discharging into Deadman Gulch. The passive limestone treatment was originally installed in 2009 and was improved in May 2015. During the spring of 2016, mine wastewater/acid mine drainage began to discharge from the level 6 pad portal. This mine wastewater ran across the level 6 pad, eventually commingling with the seepage and stormwater. As a result of this new condition and ongoing effluent violations at the facility, LKA began to pilot a passive iron slag treatment system. The pilot system was installed during the summer of 2017 and has not yet proven to be fully effective at meeting all effluent limitations of the permit. LKA has consistently reported effluent violations at the facility since 2015.</p> <p><u>Pollutant and Beneficial Use:</u></p> <p>Limits for pH are water quality based and were established for the protection of the aquatic life class 1 beneficial use of the receiving stream segment and therefore, a parameter point value of 6 was selected from the Beneficial Use Table (Figure 1 of the Civil Penalty Policy).</p> <p>Limits for total recoverable iron, potentially dissolved zinc, potentially dissolved silver, potentially dissolved copper, potentially dissolved lead, potentially dissolved selenium, total recoverable nickel, potentially dissolved cadmium, total recoverable arsenic, total recoverable nickel, total recoverable copper, potentially dissolved manganese, and total mercury are water quality based and were established for the protection of the aquatic life class 1 beneficial use of the receiving stream segment. Iron, zinc, silver, copper, lead, selenium, nickel, cadmium, arsenic, manganese, and mercury are metals and therefore, a parameter point value of 8 was selected from the Beneficial Use Table (Figure 1 of the Civil Penalty Policy).</p>		

	Violation Type	Adjustment	Amount in Dollars
	<p>Limits for Sulfide as H₂S are water-quality based and were established for the protection of the aquatic life class 1 beneficial use of the receiving stream segment. Sulfide as H₂S sulfide falls under "Sulfide, NO₂, Ammonia, Cl₂" in the Beneficial Use Table (Figure 1 of the Civil Penalty Policy) and therefore, a parameter point value of 8 was selected.</p> <p>Limits for total suspended solids ("TSS") are technology based and were derived from the federal effluent limitation guidelines. A parameter point value of 3 was selected from the Technology Based Limits table (Figure 2 of the Civil Penalty Policy).</p> <p>It should be noted that the river segment to which Golden Wonder Mine discharges (Deadman Gulch) has been listed on Colorado's Section 303(d) list as impaired for selenium, iron, copper, zinc, cadmium, manganese, and pH since 2010. The discharge from the Golden Wonder Mine is likely a significant contributing factor towards the impairment.</p> <p><u>Degree of Exceedance:</u> The percent exceedance multiplier values were determined based on the actual flow values that were reported on the DMRs each month and the percent by which the limit was exceeded for each specific effluent violation (Figure 3 of the Civil Penalty Policy). LKA failed to report a flow value on DMRs submitted for the June 2019 and August 2019 reporting periods, therefore for those periods, the Division conservatively utilized an average of the reported 2019 flow values.</p> <p>The attached <i>Civil Penalty Calculation Work Sheet</i> displays the calculated potential damage for the April through September 2017 and June 2019 through August 2019 reporting periods. Consistent with Division practice and Section (A)(1) of the Civil Penalty Policy, for any calendar day where there was more than one violation cited, the potential damage component of the penalty for that day shall be set using the largest penalty amount for any individual parameter. Therefore, for the purposes of this calculation the Division will follow this practice and utilize the penalties associated with the most significant effluent limit violation during the reporting period.</p>		
Line 2			N/A
	<i>Calculation:</i>		
Line 3			N/A
	<i>Calculation:</i>		
Line 4			N/A
	<i>Calculation:</i>		
Line 5	Potential Damage Total (Sum of Lines 1 through 4)	(Not to exceed \$6,000/day)	\$612 - \$2,128

B. Fault Component

		Amount in Dollars
Line 6	Fault: Category 3 <i>Justification:</i> This component is calculated based on the degree of fault that can be attributed to the violator and which may have caused or contributed to each violation cited. Part III.A.2. of the Civil Penalty Policy classifies penalties for fault into three fault categories: Category 1 - Any situation where the violator <u>could not reasonably have been expected to be aware</u> of the circumstances that led to the violation.	(Not to exceed \$3,000/day) \$2,500

	<p>Category 2 - Any situation where the violator <u>should have been aware</u> of the circumstances that led to the violation.</p> <p>Category 3 - Any situation where the violator <u>was aware</u> of the circumstances that led to the violation and failed to take necessary action.</p> <p>LKA is a mining company, which has owned and operated the Facility since 1979. LKA has held the Permit since 2009, which was obtained after the Bureau of Land Management and Environmental Protection Agency indentified seep discharges at the Facility.</p> <p>On October 2, 2014, the Division issued LKA a Notice of Violation/Cease and Desist Order alleging monitoring and reporting violations (NOV/CDO IO-141002-1). NOV/CDO IO-141002-1 laid out a series of corrective actions for LKA including the installation of a flow monitoring device and a plan/certification of future compliance with the requirements of the permit. On November 13, 2014, the Division received a Seepage Measurement Plan and Schedule from LKA which included plans for modifications to improve the passive limestone treatment system in place at the facility, as well as the installation of a flow monitoring device. This new system was to be installed no later than April 30, 2015, an extension of the original November 13, 2014 deadline. Due to the seasonal patterns of LKA's discharge, it was expected that the new system would be in place to accurately monitor and treat the spring and early summer discharges. However, the new system was not fully installed until June 22, 2015, two months after the already extended compliance schedule deadline. In addition, this treatment system proved to be ineffective at achieving compliance.</p> <p>Beginning in the spring of 2016, LKA ceased exploration activities at the Facility. As a result, acid mine drainage that was previously recirculated within the mine began to discharge out of the level 6 portal, commingling with stormwater and seep discharges before discharging to Deadman Gulch at Outfall 001A. On March 17, 2017, the Division issued LKA a Notice of Violation/Cease and Desist Order alleging effluent violations as well as monitoring and reporting violations ("NOV/CDO IO-170317-1"). NOV/CDO IO-170317-1 required LKA to perform several corrective actions to achieve compliance with the Permit. As a result, LKA installed a passive iron-slag treatment system designed to treat wastewater discharging from the level 6 portal. Since its installation in the summer of 2017, LKA's iron-slag treatment system has been ineffective at achieving compliance with the Permit.</p> <p>LKA has managerial, legal, and technical resources available at its disposal and was well aware of the prior violations, yet failed to implement a timely technical solution to address the quality of the water discharged from the site. In addition, the Division has provided significant compliance assistance to LKA throughout the 6 year enforcement process. Therefore the Division assigned a Category-3 level of fault. The Division conservatively assigned the midpoint of the Category-3 fault range for the effluent violations that occurred during the April through September 2017 and June 2019 through August 2019 reporting period, for a total of \$2,500/day.</p>
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C. History Component

			Amount in Dollars
Line 7	History: Category 5	(Not to exceed \$1,000/day)	\$400

	<p>Justification: Part III.A.3. of the Civil Penalty Policy classifies penalties for history into five categories ranging from \$0 to \$1,000/day of violation:</p> <p>Category 1 (\$1,000/day of violation) - Previous NOV/CDO issued for one or more violations cited in the current NOV within three years of the date of issuance of the current NOV. This category applies where the violator did not substantially comply with a final condition of the previous CDO of a superseding stipulated agreement.</p> <p>Category 2 (\$900/day of violation) - Previous NOV issued for one or more violations cited in the current NOV, within three years of the date of issuance of the current NOV.</p> <p>Category 3 (\$600-\$800/day of violation) - Previous NOV/CDO issued for violations, other than those cited in the current NOV, within three years of the date of issuance of the current NOV. This category applies where the violator did not substantially comply with a final condition of the previous CDO or a superseding stipulated agreement.</p> <p>Category 4 (\$400-\$600/day of violation) - Previous NOV issued for one or more violations, other than those cited in the current NOV, within three years of the date of issuance of the current NOV.</p> <p>Category 5 (up to \$400/day of violation)- Any effluent violation during the previous five years, other than those cited in the current NOV, which has been documented on a DMR or in written form.</p> <p>As described in line 6 above, LKA has been issued two previous NOV/CDO's, with the most recent (NOV/CDO IO-170317-1) alleging effluent violations for the same, and additional, parameters alleged in this Order. However, categories 1-4 of the history component of the civil penalty policy only apply to NOV/CDOs issued within 3 years of the current NOV.</p> <p>Part III.A.3. of the Civil Penalty Policy describes a Category-5 fault as "any effluent violation during the previous five years, other than those cited in the current NOV, which has been documented on a DMR or in written form." Due to the extensive history of effluent violations at the Facility, the Division assigned the maximum penalty amount of \$400/day.</p>
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D. Days of Violation Determination

		Days of Violation
Line 8	Total Days of Violation	72
	<p>Justification: The Civil Penalty Policy outlines several methodologies to determine the days of violation for penalty calculation purposes. One of these methods is to assign one day of violation for each day of sampling required by the permit. Another method of determining days of violation, specifically with respect to violations of effluent limits for metals, is to equate the number of days of violation to the number of days in the averaging period.</p> <p>LKA is considered a "major" facility by the state and federal government based on the toxic pollutant potential of the effluent. In addition, the state water that receives discharged effluent from the facility (Deadman Gulch) is 303(d) listed as impaired for several pollutants discharged from the Facility. Because of these factors, and because the discharge likely exceeded the permit limits on days that sampling was not required by the permit, the Division could assign one day of violation for each day in the averaging period. As noted in Line 1 above, LKA has reported exceedances of its permit effluent limitations since at least 2015, and prior to that was not conducting monitoring of its effluent. As such, the Division believes at least 275 days of violation occurred during 2017 and 2019.</p> <p>However, the Division conservatively chose to follow the first methodology and assigned one day of violation for each day of sampling required by the permit. The permit requires sampling for total</p>	

	<p>recoverable iron, potentially dissolved zinc, potentially dissolved silver, potentially dissolved copper, potentially dissolved lead, potentially dissolved selenium, total recoverable nickel, potentially dissolved cadmium, total recoverable arsenic, total recoverable nickel, total recoverable copper, potentially dissolved manganese, total mercury, and Sulfide as H₂S 2 days/week; TSS 5 days/week; and pH daily.</p> <p>The attached <i>Civil Penalty Calculation Work Sheet</i> displays the calculated potential damage for the April through September 2017 and June 2019 through August 2019 reporting periods. Consistent with Division practice and Section (A)(1) of the Civil Penalty Policy, for any calendar day where there was more than one violation cited, the potential damage component of the penalty for that day shall be set using the largest penalty amount for any individual parameter. As shown within the attached <i>Civil Penalty Calculation Work Sheet</i>, the largest daily potential damage amounts were for potentially dissolved copper. The Permit requires sampling for potentially dissolved copper 2 days/week, therefore the Division assigned a total of 8 days of violation for each reporting period, conservatively assigning a total of 72 days of violation.</p>
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E. Effluent Violations Multi-Day Penalty Calculation

		Amount in Dollars
Line 9	Multi-Day Penalty Amount	\$359,328
	<p><i>Calculation:</i> (Potential Damage + Fault + History) × Days of Violation</p> <p>April 2017: (\$2,128 + \$2,500 + \$400) × 8 = \$40,224</p> <p>May 2017: (\$2,128 + \$2,500 + \$400) × 8 = \$40,224</p> <p>June 2017: (\$2,080 + \$2,500 + \$400) × 8 = \$39,840</p> <p>July 2017: (\$2,080 + \$2,500 + \$400) × 8 = \$39,840</p> <p>August 2017: (\$2,080 + \$2,500 + \$400) × 8 = \$39,840</p> <p>September 2017: (\$2,080 + \$2,500 + \$400) × 8 = \$39,840</p> <p>June 2019: (\$2,080 + \$2,500 + \$400) × 8 = \$39,840</p> <p>July 2019: (\$2,080 + \$2,500 + \$400) × 8 = \$39,840</p> <p>August 2019: (\$2,080 + \$2,500 + \$400) × 8 = \$39,840</p> <p>TOTAL= \$359,328</p>	

Part II - Administrative Violations Penalty Determination

	Violation Type	Adjustment	Amount in Dollars															
Line 10	Failure to Use Required Sample Type	N/A	\$2,800															
	<p><i>Calculation:</i></p> <p>LKA failed to monitor its effluent in accordance with the sample type requirements of the Permit. Specifically, the Permit requires LKA to take composite samples of its effluent for all metals, TSS, and Sulfide as H₂S. LKA took grab samples of its effluent, as outlined in the following tables.</p> <table><tr><th colspan="5">LKA FAILURE TO PROPERLY SAMPLE</th></tr><tr><th>REPORTING PERIOD</th><th>OUTFALL</th><th>PARAMETER</th><th>ACTUAL SAMPLE TYPE</th><th>REQUIRED SAMPLE TYPE</th></tr><tr><td>June 1, 2017–June 30, 2017</td><td>001A</td><td>All 2010 Permit Metals, TSS, Sulfide</td><td>Grab</td><td>Composite</td></tr></table>			LKA FAILURE TO PROPERLY SAMPLE					REPORTING PERIOD	OUTFALL	PARAMETER	ACTUAL SAMPLE TYPE	REQUIRED SAMPLE TYPE	June 1, 2017–June 30, 2017	001A	All 2010 Permit Metals, TSS, Sulfide	Grab	Composite
LKA FAILURE TO PROPERLY SAMPLE																		
REPORTING PERIOD	OUTFALL	PARAMETER	ACTUAL SAMPLE TYPE	REQUIRED SAMPLE TYPE														
June 1, 2017–June 30, 2017	001A	All 2010 Permit Metals, TSS, Sulfide	Grab	Composite														

July 1, 2017–July 31, 2017	001A	All 2010 Permit Metals, TSS, Sulfide	Grab	Composite
August 1, 2017–August 31, 2017	001A	All 2010 Permit Metals, TSS, Sulfide	Grab	Composite
September 1, 2017–September 30, 2017	001A	All 2010 Permit Metals, TSS, Sulfide	Grab	Composite

LKA FAILURE TO PROPERLY SAMPLE				
REPORTING PERIOD	OUTFALL	PARAMETER	ACTUAL SAMPLE TYPE	REQUIRED SAMPLE TYPE
June 1, 2019–June 30, 2019	002A	All 2019 Permit Metals, Sulfate, Sulfide as H ₂ S, Calcium, Magnesium, Sodium, Bicarbonate as HCO ₃ , EC	Grab	Composite
July 1, 2019–July 30, 2019	002A	All 2019 Permit Metals, Sulfate, Sulfide as H ₂ S, Calcium, Magnesium, Sodium, Bicarbonate as HCO ₃ , EC	Grab	Composite
August 1, 2019–August 31, 2019	002A	All 2019 Permit Metals, Sulfate, Sulfide as H ₂ S, Calcium, Magnesium, Sodium, Bicarbonate as HCO ₃ , EC	Grab	Composite

In accordance with the Civil Penalty Policy, penalties for administrative non-compliance, including reporting violations, will be assessed on a per-day basis, taking into consideration (1) the actual or potential impacts on the Facility's ability to meet other Permit conditions; (2) the impact the violation had on the monitoring and reporting of treatment system performance and/or effluent data; and (3) the size (design flow) and operator certification level of the Facility. The maximum daily penalty for these types of administrative violations will be \$100 (in addition to any economic benefit that was gained). The Division believes LKA's failure to monitor resulted in an inaccurate representation of effluent discharged from the Facility. However, the Division conservatively assigned a penalty amount of \$50 per day of violation is appropriate for LKA's failure to use the required sample type. The Division assigned one day of violation for each day of sampling required by the Permit.

The 2010 Permit required sampling two days/week for all metals and Sulfide as H₂S, and five days/week for TSS. The Division conservatively assigned eight days of violation per reporting period,

	<p>for a total of 32 days of violation for the violations that occurred under the 2010 Permit.</p> <p style="text-align: center;">$32 \text{ days} \times \\$50 = \\$1,600$</p> <p>The 2019 Permit requires sampling two days/week for all metals, sulfate and Sulfide as H_2S and weekly sampling for calcium, magnesium, calcium, sodium, bicarbonate as HCO_3 and EC. The Division conservatively assigned eight days of violation per reporting period, for a total of 24 days of violation for the violations that occurred under the 2019 Permit.</p> <p style="text-align: center;">$24 \text{ days} \times \\$50 = \\$1,200$</p> <p style="text-align: center;">TOTAL $\\$1,600 + \\$1,200 = \\$2,800$</p>		
Line 11	Failure to Monitor at Required Frequency	N/A	\$3,300
	<p><i>Calculation:</i> The 2010 Permit required LKA to monitor its effluent at outfall 001A for TSS five days/week. Between June 2017 and September 2017, LKA monitored its effluent for TSS two days/week.</p> <p>The 2019 Permit requires monitoring for all metals, sulfate, and Sulfide as H_2S at outfall 002A two days/week. Between June 2019 and August 2019, LKA monitored its effluent for these parameters at outfall 002A one day/month. The 2019 Permit requires weekly monitoring for calcium, magnesium, sodium, bicarbonate as HCO_3, EC at outfall 002A. Between June 2019 and August 2019, LKA monitored its effluent for these parameters at outfall 002A one day/month.</p> <p>In accordance with the Civil Penalty Policy, penalties for administrative non-compliance, including reporting violations, will be assessed on a per-day basis, taking into consideration (1) the actual or potential impacts on the Facility's ability to meet other Permit conditions; (2) the impact the violation had on the monitoring and reporting of treatment system performance and/or effluent data; and (3) the size (design flow) and operator certification level of the Facility. The maximum daily penalty for these types of administrative violations will be \$100 (in addition to any economic benefit that was gained). The Division believes LKA's failure to monitor resulted in an inaccurate representation of effluent discharged from the Facility. However, the Division conservatively assigned a penalty amount of \$50 per day of violation is appropriate for LKA's failure to monitor at the required frequency.</p> <p>For violations that occurred under the 2010 Permit, the Division assigned one day of violation for each day of sampling missed by LKA, or 12 days per reporting period, for a total of 36 days of violation.</p> <p style="text-align: center;">$36 \text{ days of violation} \times \\$50 = \\$1,800$</p> <p>For violations that occurred under the 2019 Permit, the Division assigned one day of violation for each day of sampling missed by LKA, or 10 days per reporting period (seven days for metals, sulfate, and Sulfide as H_2S and three days for calcium, magnesium, sodium, bicarbonate as HCO_3, and EC), for a total of 30 days of violation.</p> <p style="text-align: center;">$30 \text{ days of violation} \times \\$50 = \\$1,500$</p> <p style="text-align: center;">TOTAL $\\$1,800 + \\$1,500 = \\$3,300$</p>		
Line 12	Late DMRs	N/A	\$5,000
	<p><i>Calculation:</i> LKA submitted the following DMRs late, prior to the issuance of the NOV/CDO:</p>		

LKA LATE DISCHARGE MONITORING REPORTS			
DISCHARGE MONITORING REPORTING PERIOD	OUTFALL NUMBER(S)	DMR DUE DATE	DMR RECEIPT DATE
Reporting Periods for 2018			
March 1, 2018–March 31, 2018	001A	4/28/2018	5/14/2018
1 st Quarter 2018 (January 1, 2018–March 31, 2018)	001Q, 001X	4/28/2018	5/14/2018
April 1, 2018–April 2018	001A	5/28/2018	6/5/2018
June 1, 2018–June 30, 2018	001A	7/28/2018	7/30/2018
2 nd Quarter 2018 (April 1, 2018–June 30, 2018)	001Q, 001X	7/28/2018	7/30/2018
October 1, 2018–October 31, 2018	001A	11/28/2018	12/7/2018
Reporting Periods for 2019			
December 1, 2019–December 31, 2019	002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A	1/28/2020	2/19/2020
4 th Quarter 2019 (October 1, 2019–December 31, 2019)	002Q, 002X, 003Q, 003X, 004Q, 004X	1/28/2020	2/5/2020
Reporting Periods for 2020			
March 1, 2020–March 31, 2020	002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A	4/28/2020	4/30/2020
1 st Quarter 2020 (January 1, 2020–March 31, 2020)	002Q, 002X, 003Q, 003X, 004Q, 004X	1/28/2020	2/5/2020

In accordance with Part III.B.2. of the Civil Penalty Policy, penalties for late DMRs will be \$250 per DMR if the correctly completed DMR is submitted prior to the issuance of the NOV. In cases where the Division has a long history of correspondence with the permittee regarding these types of violations, the penalty for each report may be increased by 100% per occurrence.

NOV/CDO IO-141002-1 and NOV/CDO IO-170317-1 both included violations for late and delinquent DMRs. The Division has also issued dozens of compliance advisories to LKA citing delinquent DMRs. These enforcement actions seemed to have little impact on LKA's pattern of late DMR reporting.

Therefore, the Division chose to increase the penalty amount by 100% per occurrence, for a total penalty of \$500 per late DMR submitted prior to issuance of the NOV/CDO.

$$10 \text{ late DMRs} \times \$500 = \$5,000$$

Line 13	Failure to Take Representative Samples	N/A	\$2,400
	<p>Calculation: The 2019 Permit required LKA to sample its effluent at specific outfall points, which are representative of the volume and nature of the monitored discharge. The Permit requires samples to be taken before the effluent joins or is diluted by any other waste stream, body of water, or substance. As outlined in the NOV, LKA failed to take representative samples of its effluent between June 2019 and August 2019.</p> <p>In accordance with the Civil Penalty Policy, penalties for administrative non-compliance, including reporting violations, will be assessed on a per-day basis, taking into consideration (1) the actual or potential impacts on the Facility's ability to meet other Permit conditions; (2) the impact the violation had on the monitoring and reporting of treatment system performance and/or effluent data; and (3)</p>		

	<p>the size (design flow) and operator certification level of the Facility. The maximum daily penalty for these types of administrative violations will be \$100 (in addition to any economic benefit that was gained). The Division believes LKA's failure to take representative samples of its effluent directly impacted the accuracy of analytical data submitted on LKAs DMRs. The Division assigned a penalty amount of \$100 per day of violation for LKA's failure to take representative samples.</p> <p>The 2019 Permit requires monitoring at varying frequencies. The majority of parameters require sampling 2x/week. Therefore, for the purposes of this penalty calculation, the Division conservatively assigned 8 days of violation per monitoring period, for a total of 24 days of violation.</p> <p style="text-align: center;">24 days of violation x \$100 = \$2,400</p>		
Line 14	Administrative Violation Total (Sum of Lines 10 through 13)		\$13,500

Part III - Base Penalty Total

		Amount in Dollars
Line 15	Base Penalty Total (Sum of Line 9 + Line 14)	\$372,828

Part IV - Application of Mitigating Circumstances

	Mitigating Circumstances	% Base Penalty Decrease	Amount in Dollars
Line 16	Factor A: Adhering to a Compliance Schedule	0%	\$0
	<i>Justification:</i> LKA did not meet the Division's entire required corrective actions outlined in previously issued NOV/CDOs within acceptable time periods. Because LKA failed to adhere to compliance schedules, no penalty mitigation applies.		
Line 17	Factor B: Steps Taken Beyond Required Actions	0%	\$0
	<i>Justification:</i> LKA did not complete any of the minimum required corrective actions and therefore did not take any other steps beyond those required. No penalty mitigation applies.		
Line 18	Factor C: Environmental Compliance Project	0%	\$0
	<i>Justification:</i> LKA did not implement an environmental compliance project. Therefore, no penalty mitigation applies.		
Line 19	Factor D: Other Mitigating Circumstances	0%	\$0
	<i>Justification:</i> No mitigating circumstances were identified.		
Line 20	Sum of Lines 16 through Line 19	0%	\$0
Line 21	Adjusted Base Penalty Total (Sum of Line 15 + Line 20)		\$372,828

Part V- Economic Benefit Consideration

			Amount in Dollars
Line 22	Economic Benefit		\$43,399
	<p><i>Justification:</i> In accordance with the Civil Penalty Policy, where the violator has benefited economically from noncompliance through savings on delayed or avoided design and construction costs, monitoring costs, etc., the violations are considered to be more serious and the Division will seek to recover the economic benefit as part of the overall penalty. The purpose of an economic benefit calculation is to determine the monetary savings associated with non-compliance, taking into consideration such factors as costs associated with capital investments in pollution control equipment and costs associated with operation and maintenance of such equipment. The goal is that civil penalties should at least recover the economic benefit from noncompliance to ensure that members of the regulated community have a strong economic incentive to comply with environmental laws on time. Funds not spent on environmental compliance are available for other profit-making activities or, alternatively, a violation avoids costs associated with obtaining additional funds for environmental compliance - a concept that is known in economics as opportunity cost. Economic benefit is "no fault" in nature. A violator need not have deliberately chosen to delay compliance (for financial or any other reasons). Economic benefit does not represent compensation to the state like a typical "damages" calculation, but instead is the minimum amount a violator must be penalized to return it to the position it would have been in had it complied on time.</p> <p>Effluent Violations</p> <p>As discussed in lines 1-9 above, LKA discharged mine wastewater that significantly exceeded the permit effluent limits. Even though the Division issued two formal enforcement actions that required LKA to address ongoing water quality problems and permit noncompliance, LKA failed to take the necessary actions to ensure that LKA could reliably and consistently comply. By failing to take the necessary steps to prevent and/or control the discharge of pollutants in excess of the permit limits, and thereby avoiding incurring costs associated with managing the wastewater, LKA realized an economic benefit from its noncompliance.</p> <p>After issuance of the 2017 NOV/CDO, LKA implemented an iron slag treatment system in an attempt to resolve the noncompliance. However, since its installation, the iron slag treatment system has been unable to treat mine wastewater at the level necessary for permit compliance.</p> <p>Typically, the Division would utilize cost estimates for an effective treatment system in its economic benefit analysis. In this case, the cost estimates for an effective treatment system are unknown and the Division does not have enough information to make a quantitative economic benefit analysis. Therefore, in accordance with Part III.C.2.a of the Civil Penalty Policy, the division chose to increase the initial fault assessment to the high point of the Category 3 fault range (\$3,000). This added penalty for economic benefit (\$500/violation) is likely a conservative estimate, but will recover some economic benefit realized by LKA for the non-compliance.</p> <p>April 2017: \$500 fault increase x 8 days = \$4,000 May 2017: \$500 fault increase x 8 days = \$4,000 June 2017: \$500 fault increase x 8 days = \$4,000 July 2017: \$500 fault increase x 8 days = \$4,000 August 2017: \$500 fault increase x 8 days = \$4,000 September 2017: \$500 fault increase x 8 days = \$4,000 June 2019: \$500 fault increase x 8 days = \$4,000 July 2019: \$500 fault increase x 8 days = \$4,000 August 2019: \$500 fault increase x 8 days = \$4,000 TOTAL = \$36,000</p>		

Failure to Monitor

As discuss in Line 11 above, LKA failed to monitor for several parameters at the frequency required by the Permit, and therefore avoided the cost of obtaining the samples as well as the cost of laboratory analysis. Pursuant to the Civil Penalty Policy, penalties associated with failure to monitor will consist of a base penalty per DMR (addressed in Line 11) plus the cost of analysis for each missing parameter. In this case, the Division determined the cost of analysis for each missing parameter. In this case, the Division determined the cost of analysis for each missing parameter based on the CDPHE Laboratory Services Division's current list of fees. Additionally, the Division conservatively estimates the cost of sampling (including obtaining a sample, paperwork, lab delivery, calculations, reporting, etc.) to be \$40 per sample.

The following table details the avoided cost LKA realized by failing to sample and analyze the Facility's effluent at the frequency required by the Permit during the following reporting periods:

REPORTING PERIOD	OUTFALL	PARAMETERS	COST PER SAMPLE (cost of sampling event(s) + cost of analysis)	NUMBER OF MISSED SAMPLES	TOTAL COST PER REPORTING PERIOD
June 2017	001A	TSS	\$56.40	12	\$676.80
July 2017	001A	TSS	\$56.40	12	\$676.80
August 2017	001A	TSS	\$56.40	12	\$676.80
September 2017	001A	TSS	\$56.40	12	\$676.80
June 2019	002A	All metals, sulfate, and Suflide as H ₂ S	\$190.00	7	\$1,330.00
		Calcium, magnesium, sodium, bicarbonate as HCO ₃ , EC.	\$78.00	3	\$234.00
July 2019	002A	All metals, sulfate, and Suflide as H ₂ S	\$190.00	7	\$1,330.00
		Calcium, magnesium, sodium, bicarbonate as HCO ₃ , EC.	\$78.00	3	\$234.00
August 2019	002A	All metals, sulfate, and Suflide as H ₂ S	\$190.00	7	\$1,330.00
		Calcium, magnesium, sodium, bicarbonate as HCO ₃ , EC.	\$78.00	3	\$234.00
TOTAL = \$7,399					

TOTAL
\$36,000 + \$7,399 = \$43,399

Part VII - Violation Penalty Total

			Amount in Dollars
Line 23	Civil Penalty: (Sum Line 21 + Line 22)		\$416,227

Part VIII - Ability to Pay Adjustment

			Amount in Dollars
Line 24	Ability to Pay Reduction: N/A		\$0
	<i>Justification:</i> The purpose of conducting an ability to pay analysis is to determine if the cost of the necessary penalty jeopardizes a violator's ability to continue operations and achieve compliance. LKA has claimed an ability to pay issue with regard to completing and funding necessary compliance measures and/or corrective actions. As outlined in the Civil Penalty Policy, the violator has the principal burden of establishing a claim of inability to pay a penalty. LKA has not recently submitted information clearly demonstrating an inability to pay a penalty. Therefore, an ability to pay assessment could not be performed and was not included in this penalty calculation.		

Part IX - Final Adjusted Penalty

			Amount in Dollars
Line 25	Total Civil Penalty: (Sum Line 23 + Line 24)		\$416,227