

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

LAC Minerals (USA) LLC 582 County Road #55 Cerrillos, NM 87010

is authorized to discharge from the Cunningham Hill Mine located at 582 County Road # 55 in Cerrillos, Santa Fe County, NM, into Cunningham Gulch, thence into Galisteo Creek, which is an intermittent tributary of the Rio Grande in Segment 20.6.4.110 of Rio Grande Basin, from

Outfall 001: Latitude – N 35° 20' 15"; Longitude – W 106° 07' 59"

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit supersedes and replaces NPDES Permit No. NM0028711 previously in effect October 1. 2016.

This permit renewal, prepared by Matias C. Fernandez, Life Scientist, Permitting Section (6WD-PE), shall become effective on September 1, 2021

This permit and the authorization to discharge shall expire at midnight, August 31, 2026

Issued on August 20, 2021

Charles W. Maguire

Director

Water Division (6WD)

PART I REQUIREMENTS FOR NPDES PERMITS

A. <u>EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</u>

OUTFALL 001

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from Outfall 001 – overflows from open pit pool.

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT	DISCHARGE LIM	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
CHARACTERISTICS	CONCENTRATIO	N (mg/L UNLESS STATE	$\mathbf{E}\mathbf{D}$)		
			MEASUREMENT		
CONVENTIONAL	30-DAY AVG	DAILY MAX	FREQUENCY	SAMPLE TYPE	
Flow (MGD)	Report	Report	1/Day (*1)	Estimate	
Gross Alpha*	N/A	15 pCi/l	1/Month (*1)	Grab	
Total Selenium	N/A	5 μg/l	1/Month (*1)	Grab	

^{*} Gross alpha including radium 226, but excluding radon and uranium.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

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EFFLUENT		DISCHARGE LI	MITATIONS		
CHARACTERISTIC	S	Standard 1	Units	MONITORING REC	
	STORET			MEASUREMENT	
POLLUTANT	CODE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
pH (*5)	00400	6.6	9.0	1/week	Instantaneous Grab

EFFLUENT	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
CHARACTERISTICS				
WHOLE EFFLUENT TOXICITY				
TESTING	30-DAY AVG		MEASUREMENT	
(48-Hour Static Renewal) (*2)	MINIMUM	48-HR MINIMUM	FREQUENCY	SAMPLE TYPE
Daphnia pulex	Report	Report	1/Year	6-Hr Composite (*3)

SAMPLING LOCATION

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 001 prior to discharge to Cunningham Gulch.

FOOTNOTES

- *1 When discharge occurs. Samples shall be taken during the first 30 minutes of overflow discharge.
- *2 When discharge occurs. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.
- *3 See Part II, Whole Effluent Toxicity Testing Requirements for testing samples and composites requirements.

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B. <u>EFFLUENT CHARACTERISTIC ANALYSIS</u>

The permittee shall collect the first effluent sample within 30 minutes of the first discharge for analysis of effluent characteristics. A second effluent sample shall be collected within 30 days after the first sample is taken. Analytical requirements include total suspended solids (TSS), hardness (as CaCO3), and pollutants listed below:

POLLUTANTS	CAS No.	STORET
RADIOACTIVITY AND CHLORINE		
Aluminum, dissolved	7429-90-5	01106
Boron, dissolved	7440-42-8	01022
Cobalt, dissolved	7440-48-4	01037
Vanadium, dissolved	7440-62-2	01087
Ra-226 and Ra-228 (pCi/l)		11503
Tritium (pCi/l)		04124
Gross Alpha (pCi/l)		80029
Total Residual Chlorine	7782-50-5	50060
METALS AND CYANIDE		
Antimony, dissolved (P)	7440-36-0	01097
Arsenic, dissolved (P)	7440-38-2	01000
Cadmium, dissolved	7440-43-9	01025
Chromium, dissolved	18540-29-9	01034
Copper, dissolved	7440-50-8	01042
Lead, dissolved	7439-92-1	01049
Mercury, total	7439-97-6	71900
Nickel, dissolved (P)	7440-02-0	01065
Selenium, dissolved (P)	7782-49-2	01145
Silver, dissolved	7440-22-4	01077
Thalllium, dissolved (P)	7440-28-0	01059
Zinc, Dis.	7440-66-6	01080
Cyanide, weak acid dissociable	57-12-5	00718
DIOXIN		
2,3,7,8-TCDD	1764-01-6	34675
VOLATILE COMPOUNDS		
Tetrachloroethylene	127-18-4	34475
ACID COMPOUNDS		
Pentachlorophenol	87-86-5	39032
BASE/NEUTRAL		
Benzo(a)pyrene	50-32-8	34247

Hexachlorobenzene PESTICIDES AND PCBS	118-74-1	39700
Aldrin	309-00-2	39330
Gamma-BHC	58-89-9	39340
Chlordane	57-74-9	39350
4,4'-DDT and derivatives	50-29-3	39300
Dieldrin	60-57-1	39380
Alpha-Endosulfan	959-98-8	34361
Beta-Endosulfan	33213-65-9	34356
Endrin	72-20-8	39390
Heptachlor	76-44-8	39410
Heptachlor Epoixde	1024-57-3	39420
PCBs	1336-36-3	39516
Toxaphene	8001-35-2	39400

Note: Analytical methods shall have detect levels equivalent to or more sensitive than Minimum Quantification Levels listed in Appendix A to Part II. All analytes listed in EPA Application Form 2C shall be analyzed and reported for permit renewal application.

C. E - REPORTING OF MONITORING RESULTS

Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at https://netdmr.epa.gov. Until you are approved for Net DMR, you must report on the Discharge Monitoring Report Form EPA No. 3320-1 in accordance with the "General Instructions" provided on the form. No additional copies are needed if reporting electronically, however when submitting paper form EPA No. 3320-1, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D to the EPA and copies to NMED.

- 1. Reporting periods shall end on the last day of the months March, June, September, and December.
- 2. The permittee is required to submit regular quarterly reports as described above postmarked no later than the <u>28th</u> day of the month following each reporting period.