



Arizona Department of Environmental Quality
1110 West Washington, Phoenix, AZ 85007
Phone: (602) 771-2338
July 5, 2023

Subject: Air Quality Permit No. 71633. Place ID #5683 Renewal of Existing Permit

To ADEQ Air Quality Permit Division:

Excelsior Mining is requesting a renewal of existing Air Quality Permit No. 71633. Place ID #5683.

There have been no modifications or changes to Excelsior Mining's existing Air Quality Permit or to its equipment or processes since being issued to Excelsior Mining in 2019.

Contact information has changed: Robert Winton, SVP/GM is the Responsible Official and Preston McDonald, EHS Superintendent is the Facility Manager/Contact Person. Their contact information has been updated on Section 3.1 standard class II permit application form.

Included in the submission is Section 3.5 Equipment list and Section 3.6 Emission calculations for HTR 5 and HTR 6. There have been no changes or modifications to the equipment list since 2019.

If you have any questions, please feel free to contact me.

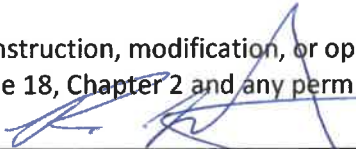
Sincerely,

A handwritten signature in blue ink, appearing to read "RW", is written over a horizontal line.

Robert Winton, SVP/GM
931-266-6856
rwinton@excelsiormining.com

I will assume responsibility for the construction, modification, or operation of the source in accordance with Arizona Administrative Code, Title 18, Chapter 2 and any permit issued thereof.

Signature of Responsible Official: _____



Printed Name of Signer/Official Title: _____

Robert Winton Sr. VP Operations

Date: 2023-07-05

Telephone Number: 931-266-6856

Section 3.5 - Equipment List

Equipment	NSPS	Maximum Rated Capacity	Make	Model	Equipment ID Number	Date of Manufacture
Solvent Extraction and Electrowinning						
SX Mixer Settler Train A (3 mixer/settler units)	None	5,177 ft ² (surface area)	In House Fabricated	In House Fabricated	SX-1	1990
SX Mixer Settler Train B (3 mixer/settler units)	None	5,299 ft ² (surface area)	In House Fabricated	In House Fabricated	SX-2	1990
SX Organic Recovery Sump Tank	None	725 ft ² (surface area)	In House Fabricated	In House Fabricated	CST-1	1990
Electrowinning Cell Block 1 (56 cells)	None	1,628 ft ² (surface area)	NA	NA	EW-1	NA
Electrowinning Cell Block 2 (32 cells)	None	1,560 ft ² (surface area)	NA	NA	EW-2	NA
PLS/Draindown Pond Evaporators	None	45 gal/min	SMI	420F	EVAP-1 through EVAP-6	2016
Heap Leach Evaporative Spray Nozzles	None	5.6 gal/min	Senninger	NA	HEAP-EVAP	2016
Auxiliary Operations and Equipment						
Electrolyte Heater	None	5.3 MMBtu/hr	Power Flame	M-004	HTR-5	N/A
Back, Ip Electrolyte Heater	None	5.3 MMBtu/hr	Power Flame	M-004	HTR-6	N/A
Unleaded Gasoline Storage Tank	None	1,000 gallons	Advance Pacific	1000 double wall UR rated 142 tanks	Unleaded 1	2006
Gunnison Pond Evaporator	EVAP-7 through EVAP -10	174 gal/min	SMI	Mega PoleCat	2018	N/A
Heap Leach Evaporative Spray Nozzles	HEAP-EVAP2	2.61 gal/min	BETE	TF8M	Various	N/A

SECTION 3.6 - EMISSION SOURCE FORM

The emissions calculated below are based on the evaporative equipment that was installed in 2019, the reduction in emissions due to replacing the electrolyte heaters. The previous electrolyte heaters (HTR-3 and HTR-4) were replaced by electrolyte heaters (HTR-5 and HTR-6) in 2019. Since 2019, there has been no modification or changes to HTR-5 and HTR-6.

Pollutant	Emissions (tons per year,			Permitting Exemption Threshold (Tons per year)	Minor NSR Triggered?
	Pre- Revision	Post- Revision	Difference		
PM ₁₀	9.18	13.97	4.79	7.5	No
PM _{2.5}	7.66	10.74	3.08	5	
NO _x	7.13	4.09	-3.04	20	
S _{O2}	0.04	0.03	-0.01	20	
VOC	4.25	5.02	0.77	20	
CO	5.99	1.72	-4.27	50	