



PIMA COUNTY
ENVIRONMENTAL QUALITY
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Ursula Kramer Nelson, P.E.
Director

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April 30, 2021

By E-MAIL
drhoades@fmi.com

Mr. David Rhoades, President and General Manager
Freeport-McMoRan Sierrita Inc.
6200 W. Duval Mine Rd.
Green Valley, AZ 85622

Re: FMSI Permit Renewal Application and Significant Revision 6067-111P Additional Information Request

Dear Mr. Rhoades:

Pima County Department of Environmental Quality (PDEQ) staff has reviewed Freeport-McMoRan Sierrita Inc.'s (FMSI) permit renewal application and significant revision, received July 29, 2020. As a result of the application review, pursuant to Pima County Code [17.12.010.F](#), PDEQ is requesting additional information to supplement and clarify information provided in FMSI's permit renewal application.

Please provide the additional information that is requested in the attached table titled "PDEQ Additional Information Request" on or before May 28, 2021. If you need more time to respond to this information request, please send us a written request for an extension specifying the additional time you will require.

If you have any questions call Rupesh Patel or me at 520-724-7400.

Thank You,



Janice Easley, P.E.
Air Permits Engineer

Copies to: Natalie Nunez, Freeport-McMoRan Sierrita Inc.
Senior Environmental Scientist: nnunez@fmi.com

PDEQ Additional Information Request

Application Page Number	Question/ Request Number	Permit Application Section Number	Comment/Question/Request
2.1	1	2	As part of this permit renewal application FMSI is also requesting a significant revision. Please provide the specific PCC 17.12.120 provision that triggers your request for a significant revision and why.
	2	2	Are you planning on submitting a suggested draft permit as you stipulated in the permit renewal application under section 2? If so when can PDEQ expect it?
	3	2	Several changes requested in the permit renewal application would remove requirements that were in the Consent Decree (Civil Action No. CIV 04-3/2 Filed on August 12, 2004). Please explain why PDEQ can now revise or remove these permit conditions.
	4	2.1.1 & 2.1.4	Please provide an edited equipment list of all equipment changes and edits referenced in the permit renewal application. Provide an edited version of the equipment list that is in the existing permit. Please use a strike through underline approach to show what exists and the proposed change or updates for correction.
2-3	5	2.1.2	Explain why operating the air pollution control equipment outside the manufacturer recommendations at an emission standard guarantee does or does not affect the pollution removal efficiency of the APC. Does the Farr Manufacturer guarantee the FMSI voluntary emission limitations if FMSI is operating at a higher exhaust rate than the maximum rated capacity of the APC?
	6		Please provide the test dates and test report data you are using to revise flow rates from the manufacturer specifications.
2-4	7	2.1.5	Please provide a list of the specific calculation methodologies that have been updated in this permit renewal application from previous calculation methodologies FMSI has proposed in past permit renewal applications and past emission inventories.
2-7	8	2.2.1	Have process fugitives been included in the PTE for point emissions or fugitive emissions? Please provide separate estimate of process fugitive emissions.
2-8	9	2.2.3	In Part B Condition XV.B.1 the table lists both emergency and non-emergency engines. We agree the engines listed as emergency are limited to 100 hours per year for maintenance and testing. All others without a separate hourly limitation can run 8760 and the PTE should reflect that. In the previous renewal application submitted in December 2013 all but one non-emergency engine had a voluntary limit of 1000 hours. So now you are suggesting changing all the non-emergency generators that are listed in the current permit (except the hydromet #3, tailings mobile radio Hill, lime porta batch and PCAF) to emergency generators limited to 100 hours for maintenance and testing only. Is this correct? The only time they can be operated other than testing and maintenance is for emergency purposes.
2-9	10	2.3.1	Part A VII.B in the current permit does not refer to exceedances.
	11	2.3.1	Where is the reference II.H.7.a.v in permit condition II.H.5?

PDEQ Additional Information Request

2-12	12	2.3.6	Source V-018 through V-033 Testing Frequency: This is not the same testing frequency that is in the current permit. Why should it be changed? The current permit requires 5 scrubbers to be tested during the permit term "one per year." This frequency suggests you are requesting only one Scrubber, in the group 018-033, to be tested during the 5 yr permit term instead of 5.
2-13	13	2.3.9	The current CEMS QAP, Page 45, has a suggested daily CEMS checklist that includes, item 3, check all CEMS flow rate settings. The Sample Daily Inspection Checklist lists "Sample Flow lpm" and "Bypass Flow lpm." What exactly are those checks and would the changes in Section 2.3.9 include removing those checks?
3-7	14	3.1.3.2	Source ID 312 was proposed as a 12,000 acfm FARR GS48. The current equipment list does not list the Farr Model. What is the Model? Also what is the Farr Model of ID 311?
3-12	15	3.1.7.1	Why are two manufacturer dates listed on the permit renewal application equipment list for several pieces of equipment in the Moly Plant?
3-13	16	3.1.7.3	What constitutes a "set" of dryers?
3-18	17	3.1.7.9	How much ammonium hydroxide was used in 2020?
3-20	18	3.1.9.2	Provide the SDS and or VOC content of the diluent and copper extraction reagents. Provide the amount of each substance used per year over the last 3 years.
3-22	19	3.1.10.1	Is the quicklime in the form of pellets or powder when it is delivered?
3-24	20	3.1.11	Are there VOC and/or HAP emissions from fuel oil transfers and mixing operations?
7.1	21	7.5	What is the origin of the throughput limitation of 55,845,000 TPY of material processed? Is this a result of a calculation above which would have triggered PSD?
10-2	22	Table 10.1	Are there diesel storage tanks on site that are larger than 40,000 gallons? How many diesel fuel and fuel oil tanks are located at the facility and what is the combined capacity of the storage tanks? What is the total diesel fuel throughput annually?
	23		Provide a list of processes where dry reagents are added to liquid tanks. Determine whether any of the processes where dry reagents are added to liquid tanks emit any VOC and/or HAP emissions to the atmosphere that FMSI is claiming as an insignificant or trivial activity and note this on the list. (If these tanks emit VOCs and/or HAP they may not be considered insignificant or trivial.)
G-2	24	G.2.2	Please provide statistical analysis of performance test results referred to in this section.
G-3	25	G.3.2.1	Please provide statistical analysis of performance test results referred to in this section.
	26	G.3.2.2	Which specific performance test results were used to determine the emissions from the Molybdenum Leach Fume Scrubber?
	27	G.3.2.3	Provide the statistical analyses of performance test results referred to in this section.

PDEQ Additional Information Request

G-31	28	G.21.2	Please provide the 2009 Henderson mill testing report and the Freeport-McMoRan Technology Center study titled "Hydrogen Sulfide and Carbon Dioxide Emissions from Flotation Cell Operations Under Targeted Conditions" conducted by Hazen Research Inc.
G-35	29	G.25	Please make available the "AERO Xanthate Handbook for AERO 350 [Potassium amyl xanthate]" Table G.45 or provide a copy of the table.
I-4	30	I.3.2.2	Please explain why 0.55% moisture is not listed on the table I.1. The only moisture % listed for all crushing and screening operations in Table I.1 is 2% .
I-6	31	I.4.2.2	Please explain; tables I.1 list 2% moisture content for all crushing and screening material. If that is correct; shouldn't you be using a controlled emission factor?
I-6	32	I.5.2.1	Please provide the August 22, 2002 test report referred to in this section.