

April 12, 2016



Eric Grinstern
Environmental Quality Specialist
Michigan Department of Environmental Quality
350 Ottawa Ave. NW
Grand Rapids Michigan 49503-2341

Re: Alloy Resource Corporation's Response to March 23, 2016 Letter of Violation

This is the timely written response of Alloy Resource Corporation to the March 23 LOV. It responds to every request in the LOV by providing factual information regarding whether observations or statements in the LOV are inaccurate or do not constitute violations, as well as identifying the dates that alleged violations occurred, providing an explanation of the causes and duration of the alleged violations, stating whether the alleged violations are ongoing, summarizing the actions that have been taken and are proposed to be taken to correct alleged violations and the date by which such actions will take place, and identifying steps being taken to prevent a recurrence.

Before providing that detailed information, we need to review with DEQ that these latest allegations of violations still stem from performance testing in January 2015 under former plant management that was subsequently discharged. As explained to DEQ (see details in the attached memo), the current plant personnel and consultants have some gaps in their knowledge about the conditions and procedures of the January 2015 performance tests, and they were actually kept in the dark as to some things by that individual. They did their best to identify reasonable, supportable operating and material limits from that data. Over the course of 2015 and early 2016, through multiple letters of violation and the Consent Order, both we and DEQ have been repeatedly hashing through the same problematic data set and its consequences. We believe, and we hope DEQ agrees, that the content of the impending revised permit, and the results of the February 2016 performance testing, will finally allow us all to get past that situation, using reliable accurate data, operating for the first time with all of the new equipment (e.g., lime and carbon feed systems) and recording devices, and submitting reports based on that. In considering possible exceedances/deficiencies compared to operating or materials limits, DEQ is also urged to consider that based on the subsequent stack tests (particularly that in September 2015), exceedances of actual air emission limits has not been demonstrated.

The specific information requested in the LOV is provided below.

1. Factual information regarding whether observations or statements in the LOV are inaccurate or do not constitute violations, as well as identifying to the extent possible the

dates that alleged violations occurred, and an explanation of the causes and duration of the alleged violations.

a. With respect to counting alleged violations, performance testing dates should not be included. For purposes of stack testing only, the plant applied for and was granted approval for stack testing at higher operating conditions representative of the new furnace operation (higher scrap melt rates and baghouse temperatures). Those stack tests were run on September 23 and 24 and you were present to observe them.

(Note: In the following explanations, those marked with * are detailed further in the attached memorandum that identifies problematic aspects of the January 2015 performance test or its data, or of certain measurements made during production in an effort to implement the results of the January 2015 test. That memo also explains the actual limits derived from the January 2015 test.)

b. Chlorine: The chlorine limit actually established during the January 2015 performance test was 20 pounds per ton of charge/66 pounds per hour.* Based on this chlorine addition rate, the dates of alleged violation should be no more than the following:

May: 9 dates, on May 15, 16, 18, 19, 21, 22, 25, 26 and 27

June: 2 dates, on June 1 and 5

July: 0

August: 0

Sept: 0 (the only "exceedance" was during the September stack test, which does not count)

Oct: 0

Nov: 0

Dec: 0

c. Lime: Similarly, the lime injection feed rate actually established during the January 2015 performance test was 22 pounds per hour.* Based on this lime addition rate, and on the instances where rounding gave an appearance (appearance only) of an alleged violation, the dates of alleged violation should be no more than the following:

May: 1 date, on May 25 (Rounding appears to have affected the result for May 18)

June: 7 dates, on June 4, 5, 8, 17, 19, 20, and 25 (Rounding appears to have affected the results for June 2 and 3)

July: 1 date, on July 28

August: 0

Sept: 0

Oct: 0

Nov: 0 (Rounding appears to have affected the results for Nov 4, 11, 16, 23, and 30)

Dec: 1 date, on Dec 10 (Rounding appears to have affected the result for Dec 9, and the 40 hours of operation reported for Dec 1 is error and that date shouldn't count.)

d. Solid Reactive Flux: The January 2015 stack test cannot validly be used to establish this parameter because reactive flux was not used in three runs. The reactive flux limits should be 160 pounds per ton of charge.* Based on this solid flux addition rate, the dates of alleged violation should be no more than the following:

May: 0

June: 0

July: 0

August: Measured as lbs flux/ton of charge, 1 date, on Aug 24; measured as lbs flux/hour of operation, no alleged violation.

Sept: Measured as lbs flux/ton of charge, 2 dates, on Sept 28 and 29; measured as lbs flux/hour of operation, no alleged violation. (A third date, on Sept 23 was during the stack test and so doesn't count.)

Oct: Measured as lbs flux/ton of charge, 4 dates, on Oct 1, 2, 9, and 21; measured as lbs flux/hour of operation, 1 alleged violation, on Oct 1.

Nov: 0

Dec: 0

e. Aluminum throughput: The relevant limits are established at 6,600 pounds per hour for the large reverb furnace, and 12,000 pounds per hour for the combined furnaces. Based on those rates, the dates of alleged violation should be no more than the following:

May: 2 dates for the large furnace, on May 25 and 31. 0 for the group.

June: 3 dates for the large furnace, on June 11, 15 and 16. 0 for the group.

July: 0 for the large furnace and 0 for the group.

August: 3 dates for the large furnace, on Aug 5, 9 and 23. 1 for the group, on Aug 5.

Sept: 2 dates for the large furnace, on Sept 18 and 21. 0 for the group. (Rounding to the nearest whole-number hour would account for the apparent but not real exceedance on Sept 8)

Oct: 3 dates for the large furnace, on Oct 1, 26, and 27. 0 for the group. (Rounding to the nearest whole-number hour would account for the apparent but not real exceedances on Oct 19 and 22)

Nov: 4 dates for the large furnace, on Nov 12, 16, 19, and 24. 0 for the group.

Dec: 0 for the large furnace, on Dec 15. 0 for the group. (Rounding to the nearest whole-number hour would account for the apparent but not real exceedance on Dec 15)

f. Regarding reporting excursions under the special condition for FGMACT (referring to 40 CFR 63.1516(b)). Regarding reporting of excursions, note that the cited CFR paragraph has no deadline for such a report, and actually that the semi-annual report itself is the report to be filed (since, in the absence of excursions, then only a “no excess emissions” report need be filed). Because there is neither a deadline nor a separate report required, the LOV rightly does not assert that any number of alleged violations occurred, and the company agrees.

g. Alleged violations cannot be double-counted. The LOV alleges 2 permit violations for exceeding the chlorine limit and 2 for not attaining the lime addition rate. Assessing two penalties for each alleged violation would violate the Double Jeopardy Clause of the U.S. Constitution’s Fifth Amendment, and would therefore be invalid. The company is protected by, and this enforcement matter is subject to, the Fifth Amendment.

2. Whether the alleged violations are ongoing.

Because the plant ceased operation in mid-December 2015, except for conducting the February 2016 performance test, none of the alleged violations are ongoing.

3. Summary of the actions taken or proposed to correct alleged violations and the date by which such actions will take place, and steps being taken to prevent a recurrence.

There are number of such actions and steps, most or all of which you know about. They include:

- The new lime injection system was installed during July 2015 and should not suffer from the operational deficiencies of the prior system that became problematic during the January 2015 performance test.
- The carbon system (which is the Supplemental Environmental Project under the Consent Order) is installed, tested, and ready to use. It was used during the February 2016 performance testing. (The plant has not operated during 2016, except for performance testing, so that is the only time the carbon system has been used so far.)
- The new revised permit is pending.
- A performance test was conducted in February 2016 using the now-current equipment and it demonstrated the ability to operate the plant in compliance with air emission limits.
- We intend to ask, and hope DEQ agrees, for a meeting with you soon after the revised permit is issued in order to have express agreement and understanding on both sides of all relevant limits, data collection, and reporting. Some of the specific points to be covered include how time and other parameters are to be recorded.
- Soon after that meeting, and of course subject to its outcome, the plant will: revise its control procedures to tighten material usage controls, and improve internal reporting and communication; improve operating records and reporting procedure;

improve its operating calculations and reporting; daily recordkeeping methods will be made clearer; and personnel training and diligence will be improved.

- From the start of operations, the company will increase the set point for the lime feed by 20% as a precaution against under-use of lime.
- With DEQ's concurrence, the plant is willing to submit a corrected semiannual report.

Please contact Jerry Garman or our attorney Jim Enright with any response or if you need further information.

Sincerely,



Jerry Garman, EHS Manager

Encl.: Memorandum

c: Mike Kovalchick, MDEQ
Dennis Flanagan, General Manager
Mark Pickett, President