

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION
OIL CONSERVATION DIVISION**

IN THE MATTER OF

Navajo Refining Company, L.L.C.

No. WQA-OCD-CO-2013-001

**Second Amended Exhibit A to Amended and Supplemental Agreed Compliance Order
(September 2, 2014)**

Sampling and Operating Requirements

1. Beginning on the effective date of the Order, Navajo shall take the following actions:
 - a) Navajo shall sample injection fluid at the Facility sampling point designated by Navajo and approved by OCD (the "Sample Location") for selenium at least weekly until selenium concentrations remain below the Se Limit, for four (4) consecutive weeks. Samples shall be taken on the first business day of each week.
 - b) Once selenium concentrations remain below the Se Limit for four (4) consecutive weeks, Navajo may then reduce testing to once per month. Samples shall be taken on the first business day of each month.
 - c) Once selenium concentrations remain below the Se Limit for four (4) consecutive months, Navajo may then reduce testing to once per calendar quarter. Samples shall be taken on the first business day of each quarter.
 - d) If Navajo ceases injection at the wells, Navajo shall sample injection fluid at the Sample Location prior to ceasing injection. Then, upon resuming injection, Navajo shall sample the injection fluid at the Sample Location. No sampling identified in this Exhibit A shall be required when the Facility is not injecting at the wells.
 - e) Samples required by this paragraph 1 shall be analyzed using EPA Method 1311 and, for clarity, other samples taken by Navajo may be analyzed using any method.
 - f) For purposes of this Exhibit A (including, without limitation, Paragraphs 1(d), 6, 7, and 8), the term, "ceases injection", shall be limited to the cessation of injection at the wells due to actual or potential exceedances of the Se Limit. The term excludes cessation for all other reasons, such as equipment repair, maintenance or replacement and well testing (such as pressure fall off tests, annulus pressure tests, and mechanical integrity tests). Further, the obligation

to sample the injection fluid prior to cessation does not include emergency events or circumstances, where it is infeasible to conduct sampling prior to cessation of injection at the wells.

2. If a sample is split and sent concurrently to two laboratories, Navajo shall average the results for selenium concentration. Navajo may use any U.S. EPA-certified laboratory for the analysis, and the time limit for any action required under this Exhibit resulting from the receipt of a sample shall not begin until the receipt of all final sampling results.
3. If, at any time during the term of the Order, a sample of the injection fluid required under Paragraph 1, above, exceeds the Se Limit, Navajo shall take reasonable and prudent actions to address the exceedance, including the following:
 - a) promptly take appropriate action to reduce selenium loading or concentrations to return the Facility to compliance with the Se Limit;
 - b) obtain samples as deemed appropriate by Navajo and its consultants, in an effort to identify any potential sources of increased selenium to the wastewater treatment plant;
 - c) take such other actions as may be appropriate to address the exceedance; and
 - d) reinstitute weekly sampling and follow the same sampling schedule set forth at Paragraph 1 above.

Reporting During the Term of the Order

4. Navajo shall provide OCD by e-mail the results of the weekly, monthly and quarterly sampling required under Paragraph 1, above, within three (3) business days after its receipt of the data for that sample.
5. In addition to the requirements in paragraph 4 immediately above, Navajo shall provide OCD by e-mail (in lieu of the oral notification required by 20.6.2.1203 NMAC) the results of the first sample from the Sample Location that exceeds the Se Limit (after previously being in compliance) within twenty-four (24) hours after its receipt of the final data for that sample. Laboratory results greater than the Se Limit for samples taken after this exceedance but before samples again comply with the Se Limit are not required to be reported under this Paragraph.
6. If Navajo ceases injection at the wells, Navajo shall provide OCD by e-mail on the first business day after its receipt of the final data for each sample, the results of the samples from the Sample Location taken prior to ceasing, and after resuming, injection pursuant to Paragraph 1(d) above.

7. If Navajo ceases injection at the wells, Navajo shall notify OCD by e-mail within one (1) business day thereafter.
8. If Navajo ceases injection at the wells, Navajo shall notify OCD by e-mail that Navajo has resumed injection at the wells within one (1) business day thereafter.
9. Beginning November 2013, Navajo shall provide OCD with monthly interim progress reports detailing the status and timeline for actions taken by Navajo during the preceding calendar month under the Order. The monthly progress report shall be due the first business day of the following month and shall include the following:
 - a) a summary of all the results of sampling required pursuant to Paragraph 1, above, and copies of all supporting laboratory data;
 - b) a summary of the results of any optional sampling taken during the preceding calendar month (copies of laboratory data for such optional sampling shall be provided to OCD upon request); and
 - c) the calculation of stipulated penalties required under Section III, Paragraph 2 of the Order.
10. On or before November 21, 2013, Navajo shall provide to OCD by e-mail an interim progress report that summarizes its efforts to date to address the cause(s) of the exceedances of the Se Limit.
11. On or before December 4, 2013, Navajo shall advise OCD of the results of its further review of the sampling data and address any anomalies or discrepancies.

Remedy Selection and Implementation of Short-Term Plan

12. On or before December 13, 2013, Navajo shall complete a technical evaluation of potential short-term refinery process change(s) to reduce selenium concentrations in wastewater and provide OCD with a summary of Navajo's technical evaluation, above, including:
 - a) its selection of a short-term remedy(ies);
 - b) dates for completion of any necessary bench scale or other trials;
 - c) dates of anticipated installation of any selected technology(ies); and
 - d) dates of anticipated startup of any selected technology(ies).
13. Navajo shall construct and implement the remedy selected pursuant to paragraph 12 above (the "Remediation Project") in accordance with the following schedule of milestones and deadlines following OCD approval of same.

- a) Completion of scale-up trial and commencement of full-scale operation of an iron co-precipitation process via ferric chloride injection ("ICP") by February 1, 2014.
- b) Completion of construction and startup of a Phillips 66, trial SeRT® unit (approximate 100 gallons per minute capacity) by February 1, 2014.
- c) Confirmation of selenium reduction using trial SeRT® unit by March 31, 2014.
- d) Achievement of compliance with the Se Limit as measured at the Sample Location by September 15, 2014.

Completion of the foregoing items required by this Paragraph (including OCD approval and Navajo construction, implementation, and achievement of compliance with the Se Limit) shall be referred to as the "Remediation Project Completion." Notwithstanding the foregoing, Navajo may, after notice to OCD, cease operation of ICP at any time and still satisfy requirements for Remediation Project Completion, provided that Navajo continues to achieve compliance with the Se Limit (as measured at the Sample Location).

14. Reserved.

Long Term Project

15. Navajo has been working on a project to enhance its wastewater treatment system and is currently implementing Phase I of this project. Phase II of this project is in the design phase and specifically addresses selenium reduction. Navajo is prepared to select the selenium reduction technology and is planning to accelerate the implementation of this technology to quickly reduce selenium in the wastewater. All of the sampling and analysis is complete and the design basis has been approved. Depending on the efficacy of the trial SeRT® unit described in Paragraph 13, above, Navajo may elect to install and/or build a full capacity permanent SeRT® unit or modify the trial SeRT® unit. In addition, Navajo continues to evaluate alternative technologies for selenium removal. On or before September 30, 2014, Navajo shall advise OCD of its selection of long-term options for addressing selenium concentrations in wastewater, including any permitting that may be required and its decision regarding the implementation of the SeRT® technology.