# 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

## AMENDED AND SUPPLEMENTAL AGREED COMPLIANCE ORDER

Pursuant to the New Mexico Water Quality Act, NMSA 1978, Sections 74-6-1 through 74-6-17, as amended ("Act"), and the regulations promulgated under the Act, the Oil Conservation Commission and the Oil Conservation Division of the Energy Minerals and Natural Resources Department of the State of New Mexico (together, "OCD") issues this Amended and Supplemental Agreed Compliance Order, including Exhibit A attached hereto (together, the "Order") to Navajo Refining Company, L.L.C. ("Navajo"), directing compliance with the Act, the Water Quality Control Commission ("WQCC") Regulations and permits issued under the Act. As of the effective date hereof, this Order supersedes the Agreed Compliance Order issued on October 24, 2013 (the "October 24 Order").

## I. <u>FINDINGS AND DETERMINATIONS</u>

1. The Oil Conservation Commission is a "constituent agency" under the Act and is charged with administration and enforcement of the Act and regulations promulgated in accordance with the Act. NMSA 1978, Section 74-6-3 (K). The Oil Conservation Division of the Energy, Minerals and Natural Resources Department has concurrent authority with the Commission. NMSA 1978, Section 70-2-6(B).

2. Navajo is a Limited Liability Company doing business in New Mexico. Navajo is

an active entity with a principal address of 501 East Main Street, Artesia, New Mexico 88210.

3. Navajo owns and operates a petroleum refinery located at 501 East Main Street, Artesia, New Mexico ("Facility"), including an onsite wastewater treatment plant ("WWTP").

4. The WQCC has adopted regulations, pursuant to the Act, requiring permits for the injection of fluids and the operation of underground injection wells in New Mexico. 20.6.2.5004 NMAC. For wells at oil and gas operations, including refineries, the WQCC has delegated administration and enforcement of those regulations to OCD.

5. Pursuant to the New Mexico Water Quality Act and the Water Quality Control Commission Regulations, OCD issued permits OCD Permit Nos. UICI-008-01 (WDW-1), UICI-008-2 (WDW-2), and UICI-008-3 (WDW-3) to Navajo for the injection of non-hazardous refinery wastewater at Underground Injection Control Class I wells at the Facility (the "wells").

6. Pursuant to 42 U.S.C. § 6926(b), the U.S. Environmental Protection Agency ("EPA") provided final authorization to the State of New Mexico to maintain a hazardous waste program in lieu of the federal program under the Resource Conservation and Recovery Act. 72 Fed. Reg. 46,165 (Aug. 17, 2007).

7. On October 15, 2013, Navajo orally notified OCD and the New Mexico Environment Department ("NMED") that it received sampling results that reported selenium concentrations from wastewater injected at the wells on September 27, 2013 above the limit of less than 1.0 mg/L of selenium, based on the Toxicity Characteristic Leaching Procedure ("TCLP"), EPA Method 1311 (the "Se Limit"). Navajo advised OCD and NMED that it was investigating the reasons for the selenium concentrations and possible corrective actions.

8. On October 20, 2013, Navajo orally notified OCD and NMED that it received sampling results that reported selenium concentrations from wastewater injected at the wells on

October 15, 2013 above the Se Limit. Navajo took prompt steps to reduce selenium concentrations, such as changing to different crude oil and reducing refinery throughput. Furthermore, injection was halted and wastewater was only subsequently injected after receipt of data indicating that selenium concentrations were below the Se Limit.

9. On October 24, 2013, OCD issued Navajo an Agreed Compliance Order specifying further actions to assure that the wastewater injected at the wells did not exceed the selenium concentration allowed under the permits and assessing a civil penalty for past alleged violations. The October 24 Order requires Navajo to conduct sampling of wastewater for selenium on a specified schedule and to report the results to OCD. It also requires Navajo to evaluate potential remedial options.

10. Navajo immediately took steps to commence complying with the October 24 Order, including implementing a rigorous sampling regimen, continuing working with an outside engineering firm to address short-term selenium reduction measures, and developing a written refinery action plan, among other measures.

11. On November 5, 2013, Navajo orally notified OCD and NMED that it received sampling results that reported selenium concentrations from wastewater injected at the wells on October 31, 2013 above the Se Limit. Upon receiving the sampling results on November 5, Navajo ceased discharging wastewater to the wells.

12. On November 6, 2013, Navajo orally notified OCD and NMED that it received sampling results that reported selenium concentrations from wastewater injected at the wells on November 4, 2013 above the Se Limit and indicated the same for the discharge on November 2, 2013.

13. On November 7, 2013, Navajo orally notified OCD and NMED that it received sampling results that reported selenium concentrations from wastewater injected at the wells on November 5, 2013 above the Se Limit.

14. Navajo subsequently advised OCD and NMED that it is investigating the reasons for the reported selenium concentrations, including possible additional corrective actions to prevent future wastewater concentrations in excess of the Se Limit. Navajo has reviewed, and is continuing to actively review, short-term and long-term engineering options for reducing selenium concentrations in the Facility wastewater.

15. In the course of further assessing the data, Navajo, OCD and NMED have recognized certain anomalies in the results, including that selenium levels based on Method 1311 are in some instances greater than selenium levels based on a total selenium analysis. Navajo has engaged experts to further analyze the results and to share the outcome of such analysis with OCD and NMED before the results are deemed fully valid and reliable. Therefore, although Navajo will continue to pursue immediate corrective action based on the reported results at this time, Navajo reserves its right to assert that the prior results were invalid or unreliable in any future proceeding.

16. There is no known or anticipated damage or injury to public health or the environment resulting from the discharges identified above, since (1) the discharges were to Class I injection wells in formations that may not be used as a public drinking water supply and that are beneath the lowermost formation that contains 10,000 milligrams per liter or less total dissolved solids (TDS); and (2) upon injection, the wastewater was added to large volumes of wastewater already in the well formation such that resulting concentrations would be less than the Se Limit.

#### II. <u>CONCLUSIONS</u>

1. OCD has jurisdiction over the parties and subject matter in this proceeding.

2. Navajo is a person as defined by NMSA 1978, Section 74-6-2.I.

3. Based on the facts presented above, the lack of known or anticipated damage or injury to public health or the environment, the commitments made herein by Navajo, the company's long history of compliance with the OCD permits prior to the events described above, the lack of future anticipated damage or injury resulting from compliance with this Order, and other relevant considerations, OCD has determined Navajo need not be ordered to cease using wells WDW-1, WDW-2, or WDW-3 during the period of this Order. However, this paragraph shall not apply in the event: (A) new information not known by OCD at the time of this Order causes OCD to believe that Navajo will not be able to return to compliance pursuant to this Order; or (B) OCD determines that the continued use of the wells presents an imminent and substantial endangerment to human health and the environment; or (C) Navajo fails to diligently pursue the development and implementation of a remedy to reduce selenium concentrations as provided in Exhibit A to this Order.

### III. ORDER

1. Compliance Schedule

a. Navajo shall take the actions and meet the schedule set forth in Exhibit A to this Order.

b. Except where otherwise modified or extended pursuant to Section IV, Paragraph 1, Navajo's obligation to comply with this Order shall be deferred only to the extent and only for the duration that the failure in compliance is caused by "force majeure." For purposes of this Order, "force majeure" is defined as an event or set of circumstances which are

beyond Navajo's control and could not have been prevented by Navajo's reasonable action or due diligence, including any delay in required approvals, issuance of any necessary permits or other similar items. "Force majeure" shall not apply to any failure in compliance due to increased costs or Navajo's financial inability to carry out this Order. Navajo shall promptly notify OCD of any force majeure event that has resulted or will result in the inability of Navajo to comply with any obligation under this Order and shall provide OCD with a schedule for completing the obligations.

c. All reports, notifications and other submittals required under this Order shall be sent to OCD at the following address:

Oil Conservation Division New Mexico Energy, Minerals & Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505 Re: ACOW-6 e-mail: scott.dawson@state.nm.us carlj.chavez@state.nm.us

All such submittals shall be made electronically. Written amendment to this Order is not required for a change in the e-mail addresses specified above, and any such change in addresses may be made by e-mail.

2. Civil Penalties

a. Navajo will pay a civil penalty of \$26,000 (Twenty-six thousand dollars) to resolve all of the alleged violations set forth in this Order and the October 24 Order. Payment of this amount shall be remitted to OCD no later than 30 days after the effective date of this Order. Payment must be made to "State of New Mexico - General Fund" and shall be sent to the following address:

Director, Oil Conservation Division New Mexico Energy, Minerals & Natural Resources Department 1220 South St. Francis Drive

### Santa Fe, NM 87505 Re: ACOW-6

b. Navajo shall pay stipulated penalties in the amounts set forth below if the following violations of the Order occur:

(1) For violation of the Se Limit at the Sample Location until Remediation Project Completion (as defined at Paragraph 13 of Exhibit A): \$2,000 per violation for each of the first 20 violations in any calendar month and \$4,000 per violation for any additional violations in the same calendar month.

(2) For violation of the Se Limit after Remediation Project Completion until this Order is terminated: \$5,000 per violation for the first 10 violations in any calendar month; \$10,000 per violation for 11 or more violations in any calendar month.

(3) For the failure to meet the deadline for completion of construction of the Remediation Project (as defined at Paragraph 13 of Exhibit A) or for Remediation Project Completion: \$5,000 per day.

(4) For the failure to timely conduct sampling as required at Exhibit A:\$2,000 per day.

(5) For the failure to timely submit any report or notification as required at Exhibit A: \$1,000 per day.

(6) For violation of any requirement of this Order other than subparagraphs (1) - (5) above: \$500 per violation.

For purposes of subparagraphs (1) and (2) above, beginning on the sampling date for a sample that exceeds the Se Limit, every day of injection to the wells shall constitute a separate violation until the sampling date of the next sample that is below the Se Limit. For avoidance of doubt, stipulated penalties for an exceedance of the Se Limit shall not be assessed for days that injection

to the wells does not occur. A calculation of stipulated penalties shall be made by Navajo and included in each monthly progress report submitted to OCD under this Order, and payment shall be due within 30 days after each monthly progress report submittal. Should OCD object to a given penalty calculation, OCD shall notify Navajo within five (5) business days after receipt of the monthly progress report, and Navajo shall make payment within 10 days after the resolution of any such dispute. Any overpayment by Navajo shall be credited to further amounts due to OCD. Payment shall be by corporate check, certified check, or other guaranteed negotiable instrument made payable to the "State of New Mexico", and shall be sent to the following address:

Director, Oil Conservation Division New Mexico Energy, Minerals & Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505 Re: ACOW-6

#### IV. OTHER TERMS AND CONDITIONS

1. Termination, Modification and Extension.

a. Navajo and OCD have the right to modify or terminate this Order by written instrument signed by both parties. In addition, this Order will terminate when selenium concentrations remain below the Se Limit for four (4) consecutive quarters after Remediation Project Completion.

b. OCD may grant an extension of any deadline to perform any activity required pursuant to this Order. Navajo shall submit all requests for an extension of a deadline in writing to OCD. The request shall propose a new deadline for the activity and shall include the basis for the request. OCD shall respond in writing by approving, approving in part or denying the request as soon as possible, but no later than fifteen days after receipt. If OCD

approves in part or denies the request, the response shall specify the reasons for OCD's actions.

2. By signing this Order, Navajo expressly:

a. acknowledges the authority of OCD to render the above Findings And Determinations, Conclusions and Order;

b. agrees to comply with the Order;

c. waives any right, pursuant to the Act or otherwise, to a hearing either prior or subsequent to the entry of this Order or to an appeal from this Order; and

d. agrees that if it fails to comply with this Order, the Order may be enforced by suit or otherwise to the same extent and with the same effect as a final Order entered after notice and hearing in accordance with all terms and provisions of the Water Quality Act.

3. Nothing in this Order relieves Navajo of its liability should its operations fail to adequately investigate and remediate contamination that poses a threat to ground water, surface water, human health or the environment. In addition, nothing in this Order relieves Navajo of its responsibility for compliance with any other federal, state or local laws and/or regulations, including all other obligations under the Permits.

4. This Order may be executed in any number of counterparts (whether by facsimile, PDF, or original), each of which will be deemed to be an original and all of which together will constitute the same instrument.

Done at Santa Fe, New Mexico this / 4 day of November, 2013.

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION COMMISSION OIL CONSERVATION DIVISION

By: < Name: Jain Bailey

Title: Chair, Oil Conservation Commission Director, Oil Conservation Division

### ACCEPTANCE

Navajo Refining Company, L.L.C. hereby accepts the foregoing Order, and agrees to all of the terms and provisions as set forth in the Order,

Navajo Refining Company, L.L.C.

Michael D. Ohiky By: Name: Michael G. McKee

Title: Vice President and Refinery Manager

14 November 2013 Date:

## 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

### Exhibit A to Amended and Supplemental Agreed Compliance Order

#### **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 stops injection to 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 to 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.
- 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 stops injection to 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. Navajo shall notify OCD by e-mail that it 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 causes of the exceedences 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 commence permitting (if required) and construction of the remedy selected pursuant to paragraph 12 above (the "Remediation Project") following OCD approval of same. Thereafter, Navajo shall complete construction of the Remediation Project within 12 months after the later of (a) OCD approval of such remedy or (b) the issuance of any necessary permits for construction of same. Thereafter, Navajo shall achieve compliance with the Se Limit as measured at the Sampling Location within 6 months after completion of the construction of such remedy. 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."
- 14. Upon OCD approval of the selected remedy, OCD and Navajo shall amend this Exhibit A to establish milestones and deadlines for the construction and completion of the Remediation Project.

### 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. The project manager has been assigned and is currently working to purchase an existing SeRT® unit or to build a new unit as soon as possible. On or before May 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.