ADDENDUM:
Statement of Basis- Permit Minor Modification

PERMITTEE:	Soap Creek Associates, LLC
FACILITY:	Soap Creek Oil Field
PERMIT NUMBER:	MT-0023183
RESPONSIBLE OFFICIAL:	Rick VanSant, President Soap Creek Associates, Inc. 11603 Teller Street, Suite A Broomfield, Colorado 80020 (303) 444-5253
FACILITY CONTACT:	Jerry Wemple, Field Superintendent P.O. Box 107 St. Xavier, Montana 59075 (406) 666-2325 or (406) 665-5815 E-mail: jcwemple@aol.com
PERMIT TYPE:	Minor Industrial (Renewal) Indian Country
FACILITY LOCATION:	NW ¼ Section 34, Township 6 South, Range 32 East in Big Horn County, Montana
DISCHARGE POINT:	Outfall 001, Lat. 45.272500, Long. -107.778056

Permit and Statement of Basis (SoB) Modification Background:
Upon recent review of the Permit and SoB, the following typographical errors (including erroneous language carried forward from the previous permit and SoB) were identified and corrected by EPA R8 (corrections in **bold**):

1) In the Whole Effluent Toxicity (WET) section, page 16 of the SoB:

- Original statement: Chronic WET testing shall be performed on an **annually** basis by the Permittee for two species: ***Daphnia magna*** and *Pimephales promelas*.
- Corrected statement: Chronic WET testing shall be performed on an **annual** basis by the Permittee for two species: ***Ceriodaphnia dubia*** and *Pimephales promelas*.

2) In the Whole Effluent Toxicity (WET) section, page 17 of the SoB:

- Original language:

The static-renewal toxicity tests shall be conducted in accordance with the procedures set out in the latest revision of "Short-term Methods for **Measuring** the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", EPA-821/R-02-013 (October 2002). Chronic WET test shall be performed on two species; ***Daphnia magna*****, EPA 2021.0, as a 48-hr,**

static-renewal definitive test with renewals at each 24-hr interval, and *Pimephales promelas*, **EPA 2002.0, as a 96-hour** static-renewal definitive test with renewals at each 24-hr interval. Both tests shall utilize the standard dilution series of 100%, 75%, 50%, 25%, 12.5% and a 0 control, with moderately hard synthetic laboratory water for dilutions with test temperature set at 25°C.

~~**For the purpose of this Permit, *Daphnia magna* will be utilized as a toxicity indicator testing organism in lieu of *Ceriodaphnia dubia* due to its higher tolerance for the high TDS levels within the produced water from the wells. The high TDS levels will cause WET toxicity, and the purpose of the WET testing in this Permit is to monitor for other sources of toxicity. This approach will ensure that any WET tests performed will control toxicity from other pollutants which may be present in the discharge that would be masked by the level of TDS in the discharge.**~~ There is no WET limit in this current permit.

- Corrected language:

The static-renewal toxicity tests shall be conducted in accordance with the procedures set out in the latest revision of "Short-term Methods for **Estimating** the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", EPA-821/R-02-013 (October 2002). Chronic WET test shall be performed on two species; ***Ceriodaphnia dubia*, EPA 1002.0, as a static-renewal definitive test (until 60% or more of surviving control females have three broods (maximum test duration 8 days))** with renewals at each 24-hr interval, and *Pimephales promelas*, **EPA 1000.0, as a 7-day** static-renewal definitive test with renewals at each 24-hr interval. Both tests shall utilize the standard dilution series of 100%, 75%, 50%, 25%, 12.5% and a 0 control, with moderately hard synthetic laboratory water for dilutions with test temperature set at 25°C. There is no WET limit in this current permit.

3) In the Whole Effluent Toxicity (WET) section, page 17 of the SoB:

- Original language:

Chronic toxicity is present in the effluent when a chronic WET test demonstrates that one (or both) of the two statistical test endpoints, either the NOEC or the IC25, are at any effluent concentration less than the in-stream waste concentration (IWC). The IWC for this permit is has been determined to be 100% effluent for Outfall 001. ~~**If more than 10 percent control mortality occurs, the test is not valid.**~~ The test shall be repeated until **satisfactory control survival is** achieved.

- Corrected language:

Chronic toxicity is present in the effluent when a chronic WET test demonstrates that one (or both) of the two statistical test endpoints, either the NOEC or the IC25, are at any effluent concentration less than the in-stream waste concentration (IWC). The IWC for this permit is has been determined to be 100% effluent for Outfall 001. The test shall be repeated until **test acceptability criteria are** achieved.

4) In Section 5.2 Chronic Whole Effluent Toxicity (WET) Monitoring, on page 16 of the Permit:

- Original language:

The chronic static-renewal toxicity tests shall be conducted in accordance with the procedures set out in the latest revision of "Short-term Methods for **Measuring** the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", EPA-821/R-02-013 (October 2002), or most current edition. Chronic WET tests shall be performed on two species; ***Daphnia magna*,**

EPA 2021.0, as a 48-hr, static-renewal definitive test with renewals at each 24-hr interval, and *Pimephales promelas*, **EPA 2002.0, as a 96-hour** static-renewal definitive test with renewals at each 24-hr interval. Both tests shall utilize the following standard minimum dilution series of 100%, 75%, 50%, 25%, 12.5% and a 0 control, with moderately hard synthetic laboratory water for dilutions with test temperature set at 25°C.

~~**For the purpose of this Permit, *Daphnia magna* will be utilized as a toxicity indicator testing organism in lieu of *Ceriodaphnia dubia* due to its higher tolerance for the high TDS levels within the produced water from the wells. The high TDS levels will cause WET toxicity, and the purpose of the WET testing in this permit is to monitor for other sources of toxicity. This approach will ensure that any WET tests performed will control toxicity from other pollutants which may be present in the discharge that would be masked by the level of TDS in the discharge.**~~ There is no WET limit in this current permit.

- Corrected language:

The chronic static-renewal toxicity tests shall be conducted in accordance with the procedures set out in the latest revision of "Short-term Methods for **Estimating** the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", EPA-821/R-02-013 (October 2002), or most current edition. Chronic WET tests shall be performed on two species; ***Ceriodaphnia dubia*, EPA 1002.0, as a static-renewal definitive test (until 60% or more of surviving control females have three broods (maximum test duration 8 days))** with renewals at each 24-hr interval, and *Pimephales promelas*, **EPA 1000.0, as a 7-day** static-renewal definitive test with renewals at each 24-hr interval. Both tests shall utilize the following standard minimum dilution series of 100%, 75%, 50%, 25%, 12.5% and a 0 control, with moderately hard synthetic laboratory water for dilutions with test temperature set at 25°C. There is no WET limit in this current permit.

5) In Section 5.2 Chronic Whole Effluent Toxicity (WET) Monitoring, on pages 16-17 of the Permit:

- Original language:

Chronic toxicity is present in the effluent when a chronic WET test demonstrates that one (or both) of the two statistical test endpoints, either the NOEC or the IC25, are at any effluent concentration less than the in-stream waste concentration (IWC). The IWC for this permit is has been determined to be 100% effluent for Outfall 001. ~~**If more than 10 percent control mortality occurs, the test is not valid.**~~ If test acceptability criteria are not met for control survival, growth, or reproduction, the test shall be considered invalid and retesting should begin immediately. Failure to obtain a valid test result during the monitoring period may result in a failure to monitor in accordance with the Permit.

Regular chronic toxicity test results shall be reported on the Discharge Monitoring Report (DMR) submitted for the reporting period when the chronic toxicity monitoring was conducted (e.g., whole effluent results for the first twelve months (January-December) shall be reported with the DMR due the 28th of the month following (January). A laboratory reporting form consistent with the **"Suggested R8 WET Toxicity Test Report Form"**, including all chemical and physical data as specified shall also be submitted to the permit issuing authority as an attachment to the DMR. Copies of the format may be downloaded from the Region 8 web page at: **https://www.epa.gov/sites/production/files/2016-01/wet-laboratory-reporting-forms.xlsm.**

- Corrected language:

  Chronic toxicity is present in the effluent when a chronic WET test demonstrates that one (or both) of the two statistical test endpoints, either the NOEC or the IC25, are at any effluent concentration less than the in-stream waste concentration (IWC). The IWC for this permit is has been determined to be 100% effluent for Outfall 001. If test acceptability criteria are not met for control survival, growth, or reproduction, the test shall be considered invalid and retesting should begin immediately. Failure to obtain a valid test result during the monitoring period may result in a failure to monitor in accordance with the Permit.

  Regular chronic toxicity test results shall be reported on the Discharge Monitoring Report (DMR) submitted for the reporting period when the chronic toxicity monitoring was conducted (e.g., whole effluent results for the first twelve months (January-December) shall be reported with the DMR due the 28th of the month following (January). A laboratory reporting form consistent with the **Region 8 Toxicity Test Report Format for Chronic Whole Effluent Toxicity**, including all chemical and physical data as specified shall also be submitted to the permit issuing authority as an attachment to the DMR. Copies of the format may be downloaded from the Region 8 web page at: **https://www.epa.gov/npdes-permits/about-region-8s-npdes-permit-program#wet**.