

MANAGEMENT SYSTEM AUDIT REPORT

Initial Audit

Marathon Oil Company / Bakken Assets

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The Marathon Oil Company Consent Decree (Civil Action No. 1:24-cv-136) ("Consent Decree") requires third-party audits for facilities on the Fort Berthold Indian Reservation in North Dakota and New Well Pads as defined by the Consent Decree to ensure compliance with Marathon's approved Air Pollution Source Management System ("Management System"). Such audit, conducted in accordance with the relevant provisions of the Third-Party Audit Work Plan Version 1.0 and the Air Pollution Source Permitting and Registration Management System and Recordkeeping Procedure Version 1.0 ("Management System SOP"), is referred to as the "Management System Audit".

Following the Management System Audit, Trinity has prepared the attached Third-Party Audit Report ("Audit Report"). The Audit Report includes the following: (a) description of the work completed; (b) identification of any noncompliance with Management System requirements; and (c) recommended corrective action for any identified non-compliance.

This Audit Report covers the initial Management System Audit period of September 17, 2024, through March 17, 2025, according to the timeline specified in the Consent Decree.

MANAGEMENT SYSTEM AUDIT

This Management System Audit is based on the scope outlined in the Third-Party Audit Work Plan, as follows:

- 1) Review Marathon's Management System to ensure compliance with requirements of the CD, including:
 - a) Use of electronic database to estimate Actual Emissions on a monthly basis and compare to PTE from start of production for New Well Pads or submission of Permit for existing Well Pads;
 - b) Generation of reports or similar to notify personnel and prompt reapplication of the Emissions Calculations SOP on a monthly basis if Actual Emissions exceed Allowable Emissions;
 - c) The submission and periodic update of the Emissions Calculations SOP;
 - d) Compliance with recordkeeping as described in Marathon's Management System SOP including:
 - i) Permits and Part 2 Registrations, as applicable, for each covered Well Pad along with calculation documentation;
 - ii) An organization chart by job title identifying all personnel, including contractors, with any responsibility or role related to emissions calculations; and
 - iii) All records of corrective actions taken by Marathon to ensure compliance with Emissions Calculations SOP.
 - iv) Confirmation of that Non-compliances from the Permit Audit are addressed.
 - e) Designated Supervisor appointment and review of all PTE calculations in compliance with Management System.
 - f) Application of quality assurance and quality control practices.
 - g) Verification that Marathon shut-in production within 24 hours of discovery that Air Permit Wide Actual Emissions exceeded Air Permit Wide PTE, recalculated Air Permit Wide PTE, and submitted a revised Permit application.
 - h) Documentation and data sourcing for calculations for each Permit application in an electronic database including the following inputs:
 - i) Compositions and molecular weights (tank vapor and treater sales gas streams);
 - ii) Pressurized liquid sample(s) from Separator or Heater Treater and relevant laboratory analyses conducted for each covered Well Pad;
 - iii) Gas sample(s) from the initial Separator or Heater Treater and relevant gas laboratory analyses collected for each covered Well Pad;
 - iv) Data verification for new well pads within 60 Days of initial production data;
 - v) Volume of flared gas;
 - vi) Original inputs and results of all process simulations conducted for each covered Well Pad emissions calculation;
 - vii) The make and model of each flare installed; and
 - viii) All final spreadsheets of emissions calculations for each source.
 - i) Documentation of EPA required notification of shut-in production in periodic reports.

In accordance with the above scope, Trinity evaluated the following information:

- ▶ Item 1.a. – Trinity reviewed the emission factors developed for each site as well as the PTE data collection, both of which are uploaded to the electronic databases (CAMP and Sphera Environmental Accounting software). This was completed for each site that has already been incorporated into the databases. Sphera is used for actual emission calculations from start of production for New Well Pads and submitted Permit applications for existing Well Pads. Actual Emissions from Sphera are compared to PTE from CAMP using Sigma as the electronic database.

- ▶ Item 1.b. – According to the information provided by Marathon, no facility approached a limit that would have triggered a report or similar notification that an Actual Emission exceeded an Allowable Emission. Notwithstanding, Marathon provided a simulated report to Trinity along with an explanation of personnel who would receive such a report or similar notification to ensure the process would prompt reapplication of the Emissions Calculations SOP on a monthly basis.
- ▶ Item 1.c. – There were no unapproved revisions of the Emissions Calculations SOP during the audit period. Trinity notes the Emissions Calculations SOP version 2.0 dated 9/4/2024 was approved by EPA on 9/10/2024.
- ▶ Item 1.d.i. – Trinity reviewed a subset of files in Open Text document management system to verify that copies of Permits and Part 2 Registrations for each covered Well Pad, including calculation documentation, are maintained per the Management System SOP.
- ▶ Item 1d.ii. – Trinity confirmed that an organizational chart is maintained per the Management System SOP which provides a general overview by job title identifying personnel, including contractors, with roles and responsibilities related to emissions calculations.
- ▶ Item 1.d.iii. – Trinity verified that all records of corrective actions taken by Marathon to ensure compliance with Emissions Calculations SOP, including those denoted in the Permit Audit, are maintained per the Management System SOP.
- ▶ Item 1.d.iv. – Trinity reviewed the records for sites subject to a non-compliance determination as part of the Permit Audit to confirm that corrective actions were implemented and documented per the Management System SOP.
- ▶ Item 1.e. – Trinity confirmed that a Designated Supervisor was appointed to verify and certify that PTE determinations are completed in accordance with the Emissions Calculations SOP, and such supervisor reviewed the PTE calculation submitted in each Group 1 site permit application.
- ▶ Item 1.f. – Trinity verified that Marathon has established quality assurance and quality control practices through its permit review and supervisory review process and reviewed that those processes were completed and documentation retained.
- ▶ Item 1.g. – According to information available from Marathon, no site has exceeded Air Permit Wide PTE triggering the shut-in of production.
- ▶ Item 1.h.i.–iv. – Trinity reviewed the Open Text electronic database to verify that documentation and data sourcing for calculations for each Permit regarding composition and molecular weight (tank vapor and treater sales gas streams), pressurized liquid samples, and gas samples from Separator or Heater Treater, and data verification for New Well Pads within 60 days of initial production data, are maintained as required.
- ▶ Item 1.h.v. – Trinity reviewed records of the volume of flared gas using a representative subset of sites over randomly selected period of dates. Trinity confirmed that the data is maintained in ProCount per the Management System SOP.
- ▶ Item 1.h.vi. – Trinity reviewed the original inputs and results of process simulations using a representative subset of sites. Through this subset of sites, Trinity confirmed that the documents are located in Open Text and the appropriate files are present.
- ▶ Item 1.h.vii. – Trinity reviewed the make and model of each flare associated with the Group 1 facilities and confirmed the data is present in the SAP database, per the Management System SOP.
- ▶ Item 1.h.viii. – Trinity reviewed all final spreadsheets for Group 1 facilities to verify all records are maintained and accessible upon request. Trinity used a subset of sites to confirm that the documents are located in Open Text.
- ▶ Item 1.i. – According to information provided by Marathon, there was no required notification of shut-in production.

Identified non-compliance items are described in Appendix A, including the recommended corrective actions.

APPENDIX A. NON-COMPLIANCE ITEM DESCRIPTIONS

Marathon Bakken Management System Audit
Noncompliance Items

Item Number	Process	Facility Name(s)	Management System Requirement	Description of Non Compliance	Reference	Suggested Corrective Action	Date Marathon was Notified	Corrective Action Taken	Explanation if Corrective Action Differs from Suggested Corrective Action	Target Completion Date	Actual Completion Date
1	QA/QC Procedures	Baker USA CTB, Burshia USA CTB, Crow Flies High USA Well Pad, Goldberg USA CTB, Howard USA CTB, Jack Pennington USA CTB, Jones USA CTB, Ness USA CTB, Lang USA CTB, Thorson USA CTB, Marion USA 44-10TFH, Gladys USA CTB, Reed USA CTB, Skogstad 41-28H, Walking Eagle USA CTB, Prairie Chicken USA CTB, Clarks Creek USA CTB, Ardis USA CTB, Oates USA CTB, Shirley Pennington USA CTB, Axell USA CTB, Guy Carlson CTB, Vance Strommen 2, Jennie, Middleton	<p>Marathon has designated the HES Supervisor for BAK Emissions Project Team as the Designated Supervisor and to be responsible for:</p> <p>5.1. Overseeing the requirements of the CD pertaining to permitting; and</p> <p>5.2. Ensuring all regulatory requirements for permitting are met for each Well Pad and New Well Pad.</p> <p>As part of this review, the designated supervisor certifies that the permit has been audited with the EPA- approved third party auditor and all non-compliance, if any, have been addressed.</p>	Final calculations loaded into Sphera do not match the calculations that were audited for compliance with the emission calculation SOP. Trinity cannot verify if the final calculations for the permit application were completed in accordance with the SOP.	Consent Decree Paragraph C.21.b.3	Ensure third-party audit is completed for all as-submitted emission calculations for final permit applications.	3/11/2025	The third-party audit was completed for all calculations loaded into Sphera.		5/11/2025	4/8/2025