Permit #: **28.0702-02**

Effective Date: **October 10, 2012**

Expiration Date: **October 10, 2017**

SOUTH DAKOTA DEPARTMENT OF

ENVIRONMENT AND NATURAL RESOURCES

TITLE V AIR QUALITY PERMIT

Steven M. Pirner, P.E., Secretary
Department of Environment and Natural Resources

Under the South Dakota Air Pollution Control Regulations

Pursuant to Chapter 34A-1-21 of the South Dakota Codified Laws and the Air Pollution Control Regulations of the State of South Dakota and in reliance on statements made by the owner designated below, a permit to operate is hereby issued by the Secretary of the Department of Environment and Natural Resources. This permit authorizes such owner to operate the unit(s) at the location designated below and under the listed conditions:

A. Owner

1. Company Name and Mailing Address

Rocky Mountain Pipeline System LLC
1575 Hwy 150 South Suite E
Evanston, WY 82930

2. Actual Source Location if Different from Above

3225 Elgin Street
Rapid City, SD 57701

3. Permit Contact

Tom McCormick
(307) 783-8336

4. Facility Contact

Tom McCormick
(307) 783-8336

5. Responsible Official

Troy Valenzuela
(307) 783-8336

B. Permit Revisions or Modifications

Not applicable

C. Type of Operation

Refined petroleum pipeline distribution terminal

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

1.0 Standard Conditions

1.1 Operation of source

In accordance with Administrative Rules of South Dakota (ARSD) 74:36:05:16.01(8), the owner or operator shall operate the units, controls, and processes as described in Table 1-1 in accordance with the statements, representations, and supporting data contained in the complete permit application submitted and dated January 10, 2012, unless modified by the conditions of this permit. Except as otherwise provided herein, the control equipment shall be operated at all times in accordance with the manufacturer's specification and in a manner that achieves compliance with the conditions of this permit. The application consists of the application forms, supporting data, and supplementary correspondence. If the owner or operator becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in an application, such information shall be promptly submitted.

Table 1-1 – Description of Permitted Units, Operations, and Processes

Unit	Description	Maximum Capacity	Control Equipment
#1	A submerged-fill truck loading rack to load product into trucks.	Not applicable	Vapor combustor
	John Zink vapor combustor fired with natural gas.	52 million Btus per hour	
#2	Tank 10-53 - 1962 above ground external floating roof storage tank	424,620 gallons	Not applicable
#3	Tank 10-54 - 1962 above ground external floating roof storage tank	424,620 gallons	Not applicable
#4	Tank 11-1 - 1962 above ground fixed roof storage tank	475,860 gallons	Not applicable
#5	Tank 12-1 - 1989 above ground internal floating roof storage tank	510,468 gallons	Not applicable
#6	Tank 14-1 – 1962 above ground external floating roof storage tank	581,580 gallons	Not applicable
#7	Tank 17-1 - 1962 above ground fixed roof storage tank	705,180 gallons	Not applicable
#8	Tank 20-27 - 1962 above ground fixed roof storage tank	845,880 gallons	Not applicable
#9	Tank 24-1 - 1962 above ground external floating roof storage tank	1,015,140 gallons	Not applicable
#10	Tank 24-2 - 1962 above ground external floating roof storage tank	1,015,140 gallons	Not applicable
#11	Tank 24-3 - 1968 above ground fixed roof storage tank	1,015,140 gallons	Not applicable
#12	Tank 33-1 - 1962 above ground external floating roof storage tank	1,381,800 gallons	Not applicable

Unit	Description	Maximum Capacity	Control Equipment
#13	Tank 33-2 - 1969 above ground internal floating roof storage tank	1,381,842 gallons	Not applicable
#14	Tank 33-3 - 1969 above ground internal floating roof storage tank	1,381,842 gallons	Not applicable
#16	1988 Industrial Manufacturing Systems electrical generator	40 Kilowatts	Not applicable

1.2 Duty to comply

In accordance with ARSD 74:36:05:16.01(12), the owner or operator shall comply with the conditions of this permit. An owner or operator who knowingly makes a false statement in any record or report or who falsifies, tampers with, or renders inaccurate, any monitoring device or method is in violation of this permit. A violation of any condition in this permit is grounds for enforcement, reopening this permit, permit termination, or denial of a permit renewal application. The owner or operator, in an enforcement action, cannot use the defense that it would have been necessary to cease or reduce the permitted activity to maintain compliance. The owner or operator shall provide any information requested by the Secretary to determine compliance or whether cause exists for reopening or terminating this permit.

1.3 Property rights or exclusive privileges

In accordance with ARSD 74:36:05:16.01(12), the State's issuance of this permit, adoption of design criteria, and approval of plans and specifications does not convey any property rights of any sort, any exclusive privileges, any authorization to damage, injure or use any private property, any authority to invade personal rights, any authority to violate federal, state or local laws or regulations, or any taking, condemnation or use of eminent domain against any property owned by third parties. The State does not warrant that the owner's or operator's compliance with this permit, design criteria, approved plans and specifications, and operation under this permit, will not cause damage, injury or use of private property, an invasion of personal rights, or violation of federal, state or local laws or regulations. The owner or operator is solely and severally liable for all damage, injury or use of private property, invasion of personal rights, infringement of federal, state or local laws and regulations, or taking or condemnation of property owned by third parties, which may result from actions taken under the permit.

1.4 Penalty for violating a permit condition

In accordance with South Dakota Codified Laws (SDCL) 34A-1-39 and 34A-1-47, a violation of a permit condition may subject the owner or operator to civil or criminal prosecution, a state penalty of not more than $10,000 per day per violation, injunctive action, administrative permit action, and other remedies as provided by law.

1.5 Inspection and entry

In accordance with SDCL 34A-1-41, the owner or operator shall allow the Secretary to:

1. Enter the premises where a regulated activity is located or where pertinent records are stored;
2. Have access to and copy any records that are required under this permit;
3. Inspect operations regulated under this permit; and/or
4. Sample or monitor any substances or parameters for the purpose of assuring compliance.

1.6 Severability

In accordance with ARSD 74:36:05:16.01(11), any portion of this permit that is void or challenged shall not affect the validity of the remaining permit requirements.

1.7 Permit termination, modification, or revocation

In accordance with ARSD 74:36:05:46, the Secretary may recommend that the Board of Minerals and Environment terminate, modify, or revoke this permit for violations of SDCL 34A-1 or the federal Clean Air Act or for nonpayment of any outstanding fee or enforcement penalty.

1.8 Credible evidence

In accordance with ARSD 74:36:13:07, credible evidence may be used for the purpose of establishing whether the owner or operator has violated or is in violation of this permit. Credible evidence is as follows:

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at the source:
   a. A monitoring method approved for the source pursuant to 40 CFR § 70.6(a)(3) and incorporated in this permit; or
   b. Compliance methods specified in an applicable plan;
2. The following testing, monitoring, or information gathering methods are presumptively credible testing, monitoring, or information-gathering methods:
   a. Any monitoring or testing methods approved in this permit, including those in 40 CFR Parts 51, 60, 61, and 75; or
   b. Other testing, monitoring, or information-gathering methods that produce information comparable to that produced by any method in section (1) or (2)(a).

2.0 Permit Fees

2.1 Annual air fee required

In accordance with ARSD 74:36:05:06.01, the owner or operator shall submit an annual administrative fee and an annual fee. The fee is based on actual emissions in accordance with ARSD 74:37.

2.2 Annual operational report

In accordance with ARSD 74:37:01:06, the Secretary will supply the owner or operator with an annual operational report in January of each year. The owner or operator shall complete and

submit the operational report to the Secretary by March 1 of each year. The responsible official shall sign the operational report in the presence of a notary public.

2.3 Annual air fee

In accordance with ARSD 74:37:01:08, the Secretary will notify the owner or operator of the required annual air emission fee and administrative fee by June 1 of each year. The fees shall accrue on July 1 and are payable to the Department of Revenue by July 31 of each year.

3.0 Permit Amendments and Modifications

3.1 Permit flexibility

In accordance with ARSD 74:36:05:30, the owner or operator shall have the flexibility to make changes to the source during the term of this permit. The owner or operator shall provide the Secretary written notice at least seven days in advance of the proposed change (NOTE: The Secretary will forward a copy of the written notice to EPA). The written notice shall include a brief description of the change, the date on which the change is to occur, any change in emissions, the proposed changes to the permit, and whether the requested revisions are for an administrative permit amendment, minor permit amendment, or permit modification.

The Secretary will notify the owner or operator whether the change is an administrative permit amendment, a minor permit amendment, or a permit modification. A proposed change that is considered an administrative permit amendment or a minor permit amendment can be completed immediately after the Secretary receives the written notification. The owner or operator must comply with both the applicable requirements governing the change and the proposed permit terms and conditions until the Secretary takes final action on the proposed change.

A proposed change that is considered a modification cannot be constructed until the Secretary takes final action on the proposed change. Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

3.2 Administrative permit amendment

In accordance with ARSD 74:36:05:33, the Secretary has 60 days from receipt of a written notice to verify that the proposed change is an administrative permit amendment. As provided in ARSD 74:36:01:03, the Secretary considers a proposed change an administrative permit amendment if the proposed change accomplishes one of the following:

1. Corrects typographical errors;
2. Changes the name, address, or phone number of any person identified in this permit or provides a similar minor administrative change at the source;
3. Requires more frequent monitoring or reporting by the source;
4. The ownership or operational control of a source change and the Secretary determines that no other change in this permit is necessary. However, the new owner must submit a

certification of applicant form and a written statement specifying the date for transfer of operating permit responsibility, coverage, and liability; or
5. Any other changes that the Secretary and the administrator of EPA determines to be similar to those requirements in this condition.

3.3 Minor permit amendment

In accordance with ARSD 74:36:05:38, the Secretary has 90 days from receipt of a written notice or 15 days after the end of EPA's 45-day review period, whichever is later, to take final action on a minor permit amendment. Final action consists of issuing or denying a minor permit amendment or determining that the proposed change is a permit modification. As provided in ARSD 74:36:05:35, the Secretary considers a proposed change to be a minor permit amendment if the proposed change:

1. Does not violate any applicable requirements;
2. Does not involve significant changes to existing monitoring, reporting, or record keeping requirements;
3. Does not require or change a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; or
4. Does not seek to establish or change a permit term or condition for which the source has assumed to avoid an applicable requirement, a federally enforceable emission cap, or an alternative emission limit. An alternative emission limit is approved pursuant to regulations promulgated under section 112(i)(5) of the federal Clean Air Act.

3.4 Permit modification

In accordance with ARSD 74:36:05:39, an owner or operator may apply for a permit modification. A permit modification is defined in ARSD 74:36:01:10 as a physical change in or change in the operation of a source that results in at least one of the following:

1. An increase in the amount of an air pollutant emitted by the source or results in the emission of an air pollutant not previously emitted;
2. A significant change to existing monitoring, reporting, or record keeping requirements in the permit;
3. The change requires or changes a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; or
4. The change seeks to establish or change a permit term or condition for which there is a corresponding underlying applicable requirement that the source has assumed to avoid an applicable requirement, a federally enforceable emissions cap assumed to avoid classification as a modification under a provision of the Title I of the Clean Air Act, or an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Clean Air Act.

Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

3.5 Permit revision

In accordance with ARSD 74:36:05:40, the Secretary may reopen and revise this permit to meet requirements of SDCL 34A-1 or the federal Clean Air Act.

3.6 Testing new fuels or raw materials

In accordance with ARSD 74:36:11:04, an owner or operator may request permission to test a new fuel or raw material to determine if it is compatible with existing equipment before requesting a permit amendment or modification. A complete test proposal shall consist of the following:

1. A written proposal that describes the new fuel or raw material, operating parameters, and parameters that will be monitored and any testing associated with air pollutant emissions during the test;
2. An estimate of the type and amount of regulated air pollutant emissions that will result from the proposed change; and
3. The proposed schedule for conducting the test. In most cases the owner or operator will be allowed to test for a maximum of one week. A request for a test period longer than one week will need additional justification. A test period shall not exceed 180 days.

The Secretary shall approve, conditionally approve, or deny in writing the test proposal within 45 days after receiving a complete proposal. Approval conditions may include changing the test schedule or pollutant sampling and analysis methods. Pollutant sampling and analysis methods may include, but are not limited to performance testing, visible emission evaluation, fuel analysis, dispersion modeling, and monitoring of raw material or fuel rates.

If the Secretary determines that the proposed change will result in an increase in the emission of a regulated air pollutant or result in the emission of an additional regulated air pollutant, the Secretary shall give public notice of the proposed test for 30 days. The Secretary shall consider all comments received during the 30-day public comment period before making a final decision on the test.

The Secretary will not approve a test if the test would cause or contribute to a violation of a national ambient air quality standard.

4.0 Permit Renewals

4.1 Permit effective

In accordance with ARSD 74:36:05:07, this permit shall expire five years from date of issuance unless reopened or terminated for cause.

4.2 Permit renewal

In accordance with ARSD 74:36:05:08, the owner or operator shall submit an application for a permit renewal at least 180 days before the date of permit expiration if the owner or operator wishes to continue an activity regulated by this permit. The current permit shall not expire and shall remain in effect until the Secretary takes final action on the timely permit renewal application.

4.3 Permit expiration

In accordance with ARSD 74:36:05:28, permit expiration terminates the owner's or operator's right to operate any unit covered by this permit.

5.0 Recordkeeping and Reporting

5.1 Recordkeeping and reporting

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall maintain all monitoring data, records, reports, and pertinent information specified by this permit for five years from the date of sample, measurement, report, or application unless otherwise specified in this permit. The records shall be maintained on site for the first two years and may be maintained off site for the last three years. All records must be made available to the Secretary for inspection. All notifications and reports shall be submitted to the following address:

South Dakota Department of Environment and Natural Resources
PMB 2020, Air Quality Program
523 E. Capitol, Joe Foss Building
Pierre, SD 57501-3182

5.2 Signatory Requirements

In accordance with ARSD 74:36:05:12 and ARSD 74:36:05:16.01, all applications submitted to the Secretary shall be signed and certified by a responsible official. A responsible official for a corporation is a responsible corporate officer and for a partnership or sole proprietorship is a general partner or the proprietor, respectively. All reports or other information submitted to the Secretary shall be signed and certified by a responsible official or a duly authorized representative. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Secretary; and
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

The responsible official shall notify the Secretary if an authorization is no longer accurate. The new duly authorized representative must be designated prior to or together with any reports or information to be signed by a duly authorized representative.

5.3 Certification statement

In accordance with ARSD 74:36:05:16.01(14)(a), all documents required by this permit, including application forms, reports, and compliance certification, must be certified by a responsible official or a duly authorized representative. The certification shall include the following statement:

> "I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document and all attachments are true, accurate, and complete."

5.4 Monitoring log

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall maintain a monitoring log. The monitoring log shall contain the following information.

1. Maintenance schedule for each piece of control equipment listed in Table 1-1. At a minimum, the maintenance schedule shall meet the manufacturer's recommended schedule for maintenance. The following information shall be recorded for maintenance:
   a. Identify the unit;
   b. The date and time maintenance was performed;
   c. Description of the type of maintenance;
   d. Reason for performing maintenance;
   e. Signature of person performing maintenance;
2. The owner or operator shall maintain relevant records of the occurrence and duration of each startup, shutdown, or malfunction of process equipment and/or air pollution control equipment; and
3. The following information shall be recorded within two days of each emergency exceedance:
   a. The date of the emergency exceedance and the date the emergency exceedance was reported to the Secretary;
   b. The cause(s) of the emergency;
   c. The reasonable steps taken to minimize the emissions during the emergency; and
   d. A statement that the permitted equipment was at the time being properly operated.

5.5 Tank truck vapor tightness documentation

In accordance with ARSD 74:36:07:23, as referenced to 40 C.F.R. § 60.505(a), the tank truck vapor tightness documentation for each gasoline tank truck which is to be loaded at the terminal shall be kept on file at the terminal in a permanent form available for inspection.

5.6 Tank truck vapor tightness documentation updates

In accordance with ARSD 74:36:07:23, as referenced to 40 C.F.R. § 60.505(b), the owner or operator shall update each gasoline tank truck file at least once per year to reflect current test results as determined by Method 27. This documentation shall include the following information at a minimum:

1. Test title: Gasoline Delivery Tank Pressure Test - EPA Reference Method 27;
2. Tank owner and address;
3. Tank identification number;
4. Testing location;
5. Date of test;
6. Tester name and signature;
7. Witnessing inspector, if any: name, signature, and affiliation; and
8. Test results: Actual pressure change in 5 minutes, millimeters of water (average for 2 runs).

5.7 Leak inspection record

In accordance with ARSD 74:36:07:23, as referenced to 40 C.F.R. § 60.505(c), the owner or operator shall maintain on file at the terminal for at least 2 years a record of each monthly leak inspection required under condition 8.9. The following information must be contained in the file, at a minimum:

1. Date of inspection;
2. Findings (may indicate no leaks discovered; or location, nature, and severity of each leak);
3. Leak determination method;
4. Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days); and
5. Inspector name and signature.

5.8 Record of notifications

In accordance with ARSD 74:36:07:23, as referenced to 40 C.F.R. § 60.505(d), the owner or operator shall keep documentation of all notifications required under condition 8.4 (4) on file at the terminal for at least 2 years.

5.9 Annual compliance certification

In accordance with ARSD 74:36:05:16.01(14), the owner or operator shall submit an annual compliance certification letter to the Secretary by March 1 of each year this permit is in effect (NOTE: The Secretary will forward a copy of the certification letter to EPA). The certification shall contain the following information:

1. Methods used to determine compliance, including: monitoring, record keeping, performance testing and reporting requirements;
2. The source is in compliance and will continue to demonstrate compliance with all applicable requirements;
3. In the event the source is in noncompliance, a compliance plan that indicates how the source has or will be brought into compliance; and
4. Certification statement required in permit condition 5.3.

5.10 Reporting permit violations

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall report all permit violations. A permit violation should be reported as soon as possible, but no later than the first business day following the day the violation was discovered. The permit violation may be reported by telephone to the South Dakota Department of Environment and Natural Resources at (605) 773-3151 or by FAX at (605) 773-5286.

A written report shall be submitted within five days of discovering the permit violation. Upon prior approval from the Secretary, the submittal deadline for the written report may be extended up to 30 days. The written report shall contain:

1. Description of the permit violation and its cause(s);
2. Duration of the permit violation, including exact dates and times; and
3. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the permit violation.

6.0 Control of Regulated Air Pollutants

6.1 Visibility limit

In accordance with ARSD 74:36:12:01, the owner or operator may not discharge into the ambient air an air contaminant of a density equal to or greater than that designated as 20 percent opacity from any permitted unit, operation, or process listed in Table 1-1. This provision does not apply when the presence of uncombined water is the only reason for failure to meet the requirement.

6.2 Visibility exceedances

In accordance with ARSD 74:36:12:02, an exceedance of the operating limit in permit condition 6.1 is not considered a violation during brief periods of soot blowing, start-up, shutdown, or malfunctions. Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure caused entirely or in part by poor maintenance, careless operation, preventable equipment breakdown, or any other cause within the control of the owner or operator of the source is not a malfunction and is considered a violation.

6.3 Air emission exceedances – emergency conditions

In accordance with ARSD 74:36:05:16.01(18), the Secretary will allow for an unavoidable emission exceedance of a technology-based emission limit if the exceedance is caused by an emergency condition and immediate action is taken by the owner or operator to restore the operations back to normal. An emergency condition is a situation arising from a sudden and reasonably unforeseeable event beyond the control of the source, including acts of God. An emergency shall not include an emission exceedance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. The owner or operator shall notify the Secretary within two working days of the incident and take all steps possible to eliminate the excess emissions. The notification must provide a

description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. If the notification is submitted orally, a written report summarizing the information required by the notification shall be submitted and postmarked within 30 days of the oral notification

6.4 Circumvention not allowed

In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.12, the owner or operator may not install, use a device, or use a means that conceals or dilutes an air emission that would otherwise violate this permit. This includes operating a unit or control device that emits air pollutants from an opening other than the designed stack, vent, or equivalent opening.

6.5 Minimizing emissions

In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.11(d), the owner or operator shall at all times, when practicable, maintain and operate all permitted units in a manner that minimizes air pollution emissions.

6.6 Daily gasoline throughput restrictions for Unit #1

In accordance with ARSD 74:36:05:16.01(8), the owner or operator shall restrict the gasoline throughput for Unit #1 to less than **33,075,000** average gallons in any rolling 30-day period.

6.7 12-month rolling gasoline throughput restrictions for Unit #1

In accordance with ARSD 74:36:05:16.01(8), the owner or operator shall restrict the gasoline throughput for Unit #1 to less than or equal to **402,412,500** gallons per 12-month rolling period.

7.0 Performance Tests

7.1 Performance test may be required

In accordance with ARSD 74:36:11:02, the Secretary may request a performance test during the term of this permit. A performance test shall be conducted while operating the unit at or greater than 90 percent of its maximum design capacity, unless otherwise specified by the Secretary. A performance test conducted while operating less than 90 percent of its maximum design capacity will result in the operation being limited to the percent achieved during the performance test. The Secretary has the discretion to extend the deadline for completion of performance test required by the Secretary if circumstances reasonably warrant but will not extend the deadline past a federally required performance test deadline.

7.2 Test methods and procedures

In accordance with ARSD 74:36:11:01, the owner or operator shall conduct the performance test in accordance with 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M. The Secretary may approve an alternative method if a performance test specified in 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M is not federally applicable or federally required.

7.3 Representative performance test

In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.8(c), performance tests shall be conducted under such conditions as the Secretary shall specify to the owner or operator based on the representative performance of the unit being tested. The owner or operator shall make available to the Secretary such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in this permit.

7.4 Submittal of test plan

In accordance with ARSD 74:36:11:01, the owner or operator shall submit the proposed testing procedures to the Secretary at least 30 days prior to any performance test. The Secretary will notify the owner or operator if the proposed test procedures are approved or denied. If the proposed test procedures are denied, the Secretary will provide written notification that outlines what needs to be completed for approval.

7.5 Notification of test

In accordance with ARSD 74:36:11:03, the owner or operator shall notify the Secretary at least 10 days prior to the start of a performance test to arrange for an agreeable test date when the Secretary may observe the test. The Secretary may extend the deadline for the performance test in order to accommodate schedules in arranging an agreeable test date.

7.6 Performance test report

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall submit a performance test report to the Secretary within 60 days after completing the performance test or by a date designated by the Secretary. The performance test report shall contain the following information:

1. A brief description of the process and the air pollution control system being tested;
2. Sampling location description(s);
3. A description of sampling and analytical procedures and any modifications to standard procedures;
4. Test results;
5. Quality assurance procedures and results;
6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
7. Raw data sheets for field sampling and field and laboratory analyses;
8. Documentation of calculations;
9. All data recorded and used to establish parameters for compliance monitoring; and
10. Any other information required by the test method.

7.7 Performance test to verify compliance

In accordance with ARSD 74:36:11:02, the owner or operator shall conduct a stack performance test on Unit #1 for volatile organic compounds to demonstrate compliance with the applicable

emission limits in permit condition 11.1. The stack performance test shall be conducted within 90 days of the issuance of this permit.

8.0 40 CFR Part 63 Subpart R – Gasoline Distribution

8.1 Gasoline throughput and operational parameter restrictions

In accordance with ARSD 74:36:08:12, as referenced to 40 CFR § 63.420(a)(1) and (c)(1), the owner or operator shall not exceed the value of the gasoline throughput or operational parameters listed in Table 9-1 in any 30-day rolling period.

Table 8-1 – Gasoline Throughput and Operational Parameter Values

CF	T_F	CE	T_E	T_{ES}	T_I	C	K	Q	OE
0.161	0	0	**4**	0	3	**10,000**	2.16E-07	**1,719,123**	**0.685**

Where:

- CF = Fuel factor (1.0 for reformulated and 0.161 for all other gasoline);
- T_F = The number of fixed roof gasoline storage tanks with no internal floating roofs;
- CE = Control efficiency of the vapor processing system on the storage vessels;
- T_E = The number of external floating roof gasoline storage tanks with only primary roof seals;
- T_{ES} = The number of external floating roof gasoline storage tanks with primary and secondary roof seals;
- T_I = The number of fixed roof gasoline storage tanks with an internal floating roof;
- C = The number of pumps, valves, connectors, load arm valves, and open ended lines in gasoline service;
- K = 4.59E-09(EF+L) for racks without controlled vapor collection and processing systems where:
- EF = emission rate limitation on potential to emit for the gasoline cargo tank loading rack vapor process (miligrams per liter);
- L = 13 milligrams per liter for gasoline cargo storage tanks meeting the test criteria for a vapor tight gasoline tank truck;
- Q = Gasoline throughput limit in barrels per day (convert to liters/day); and
- OE = Total HAP from other emission sources not specified by the other parameters.

8.2 Proposed change to gasoline throughput or operational parameters

In accordance with ARSD 74:36:08:12, as referenced to 40 CFR § 63.420(c)(2) and 63.428(i)(4), the owner or operator may submit a written notice to request a change to the gasoline throughput or any operational parameters listed in Table 9-1 prior to an exceedance of the gasoline throughput or operational parameter. The written notice shall consist of the following:

1. Name of facility, permit number, and reference to this permit condition;
2. A description of the change and the potential emissions resulting from the change;

3. A written proposal that lists the existing operational parameters, operational parameter changes, the screening equation, and the result of the screening equation;
4. The proposed schedule for changing the operational parameter(s); and
5. A signed certification as described in permit condition 5.3.

A request to change the gasoline throughput or operational parameter in Table 8-1 is considered a minor permit amendment if the proposed change is entered in Equation 8-1 and result in a value of "E_T" less than one and the Secretary determines no other state or federal requirements are applicable. A proposed change that results in an "E_T" equal to or greater than one is considered a permit modification.

Equation 8-1 – Screening Equation for an Area Source

$$E_T = CF\left[0.59(T_F)(1-CE) + 0.17(T_E) + 0.08(T_{ES}) + 0.038(T_I) + 8.5\times10^{-6}(C) + KQ\right] + 0.04(OE)$$

Where:

- E_T = Emissions screening factor for bulk gasoline terminals;
- CF = Fuel factor (1.0 for reformulated and 0.161 for all other gasoline);
- T_F = The number of fixed roof gasoline storage tanks with no internal floating roofs;
- CE = Control efficiency of the vapor processing system on the storage vessels;
- T_E = The number of external floating roof gasoline storage tanks with only primary roof seals;
- T_{ES} = The number of external floating roof gasoline storage tanks with primary and secondary roof seals;
- T_I = The number of fixed roof gasoline storage tanks with an internal floating roof;
- C = The number of pumps, valves, connectors, load arm valves, and open ended lines in gasoline service;
- K = 4.5E-9(EF + L) for racks with controlled vapor collection and processing system;
- EF = emission rate limitation on potential to emit for the gasoline cargo tank loading rack vapor processor outlet emissions (35 mg/l);
- L = 13 mg per liter for gasoline cargo tanks meeting the requirement to satisfy the test criteria for a vapor tight gasoline tank truck in§ 60.51;
- Q = Gasoline throughput limit in barrels/day (convert to liters/day); and
- OE = Total HAP from other emission sources not specified by the other parameters.

8.3 NESHAP for gasoline distribution requirements

A proposed change to an operational parameter in Table 8-1 that results in an "E_T" value equal to or greater than one as calculated by Equation 8-1 will require the owner or operator to comply with ARSD 74:36:08:12, as referenced to 40 CFR, Part 63, Subpart R before the proposed change may be implemented.

8.4 Daily gasoline throughput and operational parameter records

In accordance with ARSD 74:36:08:12, as referenced to 40 CFR § 63.420(c)(2) and 40 CFR § 63.428(i)(2), the owner or operator shall maintain daily records and a 30 day rolling total to

document that the gasoline throughput and operational parameters listed in Table 8-1 have not been exceeded.

8.5 Annual gasoline throughput and operational parameter report

In accordance with ARSD 74:36:08:12, as referenced to 40 CFR § 63.420(c)(2) and 40 CFR § 63.428(i)(3), the owner or operator shall submit an annual report to the Secretary. The annual report shall include the following information:

1. Name of facility, permit number, reference to this permit condition, identifying the submittal as an annual report, and calendar dates covered in the reporting period; and
2. A statement that the gasoline throughput and operational parameters in Table 8-1 have not been exceeded during the reporting period.

The annual report must be postmarked no later than 30 days (January 30th) after the end of the reporting period.

9.0 Storage Tank Requirements

9.1 Internal floating roof specifications for tanks

In accordance with ARSD 74:36:07:14, as referenced to 40 CFR § 60.112b(a)(1), the owner or operator shall install and maintain a fixed roof with an internal floating roof on Tank #12-1. The internal floating roof shall meet the following specifications:

1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside the storage vessel. The internal floating roof shall be floating on the liquid surface at all times except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and accomplished as rapidly as possible;
2. The internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
    a. A liquid mounted seal. A liquid mounted seal means a foam or liquid filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank;
    b. A double-seal system. A double-seal system is two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor mounted, but both seals must be continuous; or
    c. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof;

3. Each opening in a non-contact internal floating roof, except for automatic bleeder vents and the rim space vents, is to provide a projection below the liquid surface;
4. Each opening in the internal floating roof, except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains, is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when in use;
5. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg supports. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting;
6. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening;
7. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover; and
8. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

9.2 Tank dimension records

In accordance with ARSD 74:36:07:14, as referenced to 40 CFR § 60.116b(a) and (b), the owner or operator shall maintain records showing the dimension and an analysis showing the capacity of Tank #12-1. These records must be maintained for the life of the tank.

9.3 Record of products stored in tanks

In accordance with ARSD 74:36:07:14, as referenced to 40 CFR § 60.116b(a) and (c), the owner or operator shall maintain a record of the volatile organic liquid stored, the period of storage, and the maximum true vapor pressure of the liquid during the respective storage period for Tank #12-1. These records must be maintained for at least two years from the date of such record.

9.4 Tank inspection record

In accordance with ARSD 74:36:07:14, as referenced to 40 CFR §§ 60.115b(a)(2) and 60.116b(a), the owner or operator shall maintain records of each inspection performed as required by permit condition 9.7 and 9.8. Each record shall identify the tank on which the inspection was performed and shall contain the date the tank was inspected, and the observed condition of the seals, internal floating roof, and fittings. Each record must be maintained for at least two years from the date of such record.

9.5 Notification of visual tank inspections

In accordance with ARSD 74:36:07:14, as referenced to 40 CFR § 60.113b(a)(5), the owner or operator shall notify the Secretary in writing at least 30 days prior to the filling or refilling for which a visual inspection or periodic tank inspection of Tank #12-1 as required in permit

conditions 9.7 and 9.8. If the visual inspection was not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Secretary at least seven days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Secretary at least 7 days prior to the refilling.

9.6 Tank defect report

In accordance with ARSD 74:36:07:14, as referenced to 40 CFR §§ 60.115b(a)(3) and (4) and 60.116b(a), if any defects described in permit condition 10.7 and 10.8 are detected during an inspection, a report shall be submitted to the Secretary within 30-days of the inspection. Each report shall identify the storage vessel, the nature of each defect, the date the storage vessel was emptied (if applicable), the date each defect was repaired, and a list of each repair made. A copy of this report must be maintained for at least two years.

9.7 Visual inspection prior to filling

In accordance with ARSD 74:36:07:14, as referenced to 40 CFR § 60.113b(a)(1), the owner or operator shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service) prior to filling Tank #12-1 with volatile organic liquid. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

9.8 Periodic tank inspections

In accordance with ARSD 74:36:07:14, as reference to 40 CFR § 60.113b(a)(2) through (4), the owner or operator shall visually inspect Tank #12-1 on a periodic basis as specified below:

1. If the storage vessel is equipped with a liquid mounted primary seal, mechanical shoe primary seal, or double seal system, visually inspect the internal floating roof and the primary seal or secondary seal (if one is in service) at least once every 12 months after the initial fill. The visual inspection may be conducted through manholes and roof hatches on the fixed roof. A failure occurs if the internal roof is not resting on the surface of the volatile organic liquid inside the storage vessel, there is liquid accumulated on the roof, the seal is detached, or there are holes or tears in the seal fabric. The owner or operator shall either repair the internal floating roof and/or the primary seal or secondary seal or empty or remove the storage vessel from service within 45 days of discovering a failure. The owner or operator may request a 30-day extension if the tank cannot be repaired or emptied within 45 days of discovering a failure. The written request for the 30-day extension shall be included with the report required in permit condition 9.6. The Secretary will grant a 30-day extension if the extension request documents that alternate storage capacity is unavailable and specifies a schedule of actions the owner or operator will take that will assure that the equipment will be repaired or the vessel will be emptied as soon as possible; and

2. The owner or operator shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If a double seal system is installed, this type of visual inspection shall occur at intervals no greater than five years. A visual inspection of other seal systems shall occur at intervals no greater than 10 years. The owner or operator shall repair internal floating roof defects, holes, tears, or other openings in the primary or secondary seal or the seal fabric, gaskets that no longer close off the liquid surfaces from the atmosphere, or slotted membrane with more than 10 percent open area before refilling the storage vessel with volatile organic liquids.

9.9 Storage tank alarm

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall install, operate, and maintain an alarm system on Tank #12-1 that warns the owner or operator when the liquid surface drops below the height of the support legs.

10.0 Standards for Bulk Gasoline Terminals

10.1 Vapor collection system design and emission limit

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(a) and (b), the owner or operator shall equip the gasoline loading rack with a vapor collection system designed to collect the total organic compounds vapors displaced from the tank trucks during product loading. The emissions to the atmosphere from the vapor collection system due to the loading of liquid product in to gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded.

10.2 Product loading into vapor-tight gasoline tank trucks

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(e), liquid product shall only be loaded into vapor-tight gasoline tank trucks, in which the owner or operator has implemented the following procedures:

1. Obtain vapor tightness documentation described in permit condition 10.12 for each gasoline tank truck loaded at the facility;
2. Record the tank identification number as each gasoline tank truck is loaded at the facility;
3. Within two weeks after the corresponding tank is loaded, crosscheck each tank identification number obtained in paragraph (2) with the file of tank vapor tightness documentation;
4. If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter;
5. If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually;

6. If either the quarterly or semiannual cross-check reveals that these conditions were not maintained, the source must return to biweekly monitoring until such time as these conditions are again met;
7. Notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the facility within one week after the loading has occurred; and
8. Take steps to assure that the non-vapor-tight gasoline tank truck will not be reloaded at the facility until vapor tightness documentation for that tank is obtained**.**

10.3 Vapor collection system compatibility

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(f), the owner or operator shall act to assure loading of gasoline tank trucks are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.

10.4 Vapor collection systems connected during product loading

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(g), the owner or operator shall act to assure the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck. Examples of action to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the loading rack.

10.5 Gauge pressure limit in the delivery tank.

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(h), the vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 Pascal during product loading. This level shall not be exceeded when measured by the procedures specified in permit condition 10.10.

10.6 Pressure vacuum vent design

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(i), the pressure vacuum vent in the bulk gasoline terminal's vapor collection system shall not begin to open at a system pressure less than 4,500 Pascal.

10.7 Monthly leak detection during product loading

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(j), the owner or operator shall inspect the vapor collection system, the vapor processing system, and the loading rack handling gasoline each calendar month during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. Leak detection methods incorporating sight, sound, or smell are acceptable. Each leak detected shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.

10.8 Monitoring for leaks before testing

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.503(b), immediately before the performance test required to determine compliance with permit condition 10.1 or 10.5, the owner or operator shall use 40 CFR Part 60 Appendix A, Method 21 to monitor for leakage of vapor all potential sources in the terminal's vapor collection system equipment

while a gasoline tank truck is being loaded. The owner or operator shall repair all leaks with readings of 10,000 parts per million (as methane) or greater before conducting the performance test.

10.9 Vapor combustor performance test requirements

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.503(c), the owner or operator shall conduct an initial performance test to demonstrate compliance with permit condition 10.1 within 60 days after achieving maximum operating rate or within 180 days of initial startup, whichever is later. The initial performance tests and any proceeding performance tests shall comply with the following procedures:

1. The performance test shall be six hours long during which at least 300,000 liters of gasoline is loaded. If this is not possible, the test may be continued the same day until 300,000 liters of gasoline is loaded or the test may be resumed the next day with another complete six hour period. If the test is resumed the following day, the 300,000 liter criterion does not have to be met. However, as much as possible, testing should be conducted during the six hour period in which the highest throughput normally occurs;
2. If the vapor combustor is intermittent in operation, the performance test shall begin at a reference vapor holder level and shall end at the same reference point. The test shall include at least two startups and shutdowns of the vapor combustor. If this does not occur automatically, the system shall be manually controlled;
3. The emission rate of total organic compounds shall be computed using Equation 10-1;

Equation 10-1 – Total Organic Compound Emission Rate

$$E = K \sum_{i=1}^{n} ((V_{esi} C_{ei})/(L 10^6))$$

Where:

- E = Emission rate of total organic compound, in milligrams per liter of gasoline loaded;
- V_{esi} = Volume of air-vapor mixture exhausted at each interval (i), in standard cubic meters;
- C_{ei} = Concentration of total organic compounds at each interval (i), in parts per million;
- L = Total volume of gasoline loaded, in liters;
- n = Number of testing intervals;
- i = Emission testing interval of 5 minutes; and
- K = Density of calibration gas, 1.83 x 10^6 for propane and 2.41 x 10^6 for butane, in milligrams per standard cubic meter.

4. The performance test shall be conducted in intervals of 5 minutes. For each interval "i", readings from each measurement shall be recorded and the volume exhausted (V_{esi}) and the corresponding average total organic compounds concentration (C_{ei}) shall be determined. The sampling system response time shall be considered in determining the average total organic compounds concentration corresponding to the volume exhausted;
5. 40 CFR Part 60, Appendix A, Method 2B shall be used to determine the volume of air-vapor mixture exhausted at each interval;

6. 40 CFR Part 60, Appendix A, Method 25A or 25B shall be used to determine the total organic compound concentration at each interval. The calibration gas shall be either propane or butane. The owner or operator may exclude the methane and ethane content in the exhaust vent by any method that is approved by the Secretary; and
7. During the performance test, the volume of gasoline (L) dispensed from the loading rack shall be determined from terminal records or readings from gasoline dispensing meters at the loading rack.

10.10 Performance tests for vapor collection and liquid loading equipment

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.503(d), the owner or operator shall conduct an initial performance test to demonstrate compliance with permit condition 10.5 within 60 days after achieving maximum operating rate or within 180 days of initial startup, whichever is later. The initial performance tests and any proceeding performance tests shall comply with the following procedures:

1. A pressure measurement device (i.e., liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to 500 millimeters of water gauge pressure with ±2.5 millimeter of water precision, shall be calibrated and installed on the terminal's vapor collection system at a pressure tap located as close as possible to the connection with the gasoline tank truck; and
2. During the performance test, the pressure shall be recorded every 5 minutes while a gasoline truck is being loaded. The highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.

10.11 Tank truck vapor tightness documentation

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.505(a), the tank truck vapor tightness documentation required by paragraph (1) in permit condition 10.2 shall be maintained on file in a permanent form at the terminal.

10.12 Tank truck vapor tightness documentation annual update

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.505(b), the owner or operator shall update each gasoline tank truck file at least once per year to reflect current test results as determined by 40 CFR Part 60 Appendix A Method 27. This documentation shall include the following information at a minimum:

1. Test title: Gasoline Delivery Tank Pressure Test – 40 CFR Part 60 Appendix A Method 27;
2. Tank owner and address;
3. Tank identification number;
4. Testing location;
5. Date of test;
6. Tester name and signature;
7. Witnessing inspector, if any: name, signature, and affiliation; and

8. Test results: Actual pressure change in 5 minutes, millimeters of water (average for 2 runs).

10.13 Monthly leak inspection record

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.505(c), the owner or operator shall maintain for at least two years, a record of each monthly leak inspection required under permit condition 10.7. At a minimum, the following information must be contained in the file:

1. Date of inspection;
2. Findings (may indicate no leaks discovered; or location, nature, and severity of each leak);
3. Leak determination method;
4. Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days); and
5. Inspector name and signature.

10.14 Record of notifications

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.505(d), the owner or operator shall maintain documentation of all notifications required in paragraph (7) of permit condition 10.2 for at least two years.

10.15 Alternative recordkeeping requirements

In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.505(e), the owner or operator may comply with the following as an alternative to keeping records at the terminal for each gasoline cargo tank test results required in permit condition 10.11, 10.13, and 10.14:

1. An electronic copy of each record is instantly available at the terminal provided the copy of each record is an exact duplicate image of the original paper record with certifying signatures and the Secretary is notified in writing that the terminal is in compliance with this requirement; or
2. If the owner or operator uses a terminal automation system to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (i.e., via a card lock-out system), a copy of the documentation is made available (i.e., via facsimile) for inspection by permitting authority representatives during the course of a site visit or within a mutually agreeable time frame.

10.16 Continuous monitoring system for vapor combustion unit (Unit #1)

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11092(b)(1)(iii), the owner or operator shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications a continuous monitoring system while gas vapors are displaced to the vapor processor systems as specified below:

1. A continuous parameter monitoring system capable of measuring temperature shall be installed in the firebox or in the ductwork immediately downstream from the firebox in a position before any substantial heat exchange occurs; or
2. As an alternative to paragraph (1), the owner or operator may choose to meet the following requirements:
    a. The presence of a thermal oxidation system pilot flame shall be monitored using a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, installed in proximity of the pilot light, to indicate the presence of a flame. The heat-sensing device shall send a positive parameter value to indicate the pilot flame is on, or a negative parameter value to indicate that the pilot flame is off; and
    b. Develop and submit to the Secretary a monitoring and inspection plan that describes the owner or operator's approach for meeting the following requirements:
        i. The thermal oxidation system shall be equipped to automatically prevent gasoline loading operations from beginning at any time that the pilot flame is absent;
        ii. The owner or operator shall verify, during each day of operation of the loading rack, the proper operation of the assist-air blower and the vapor line valve. Verification shall be through visual observation, or through an automated alarm or shutdown system that monitors system operation. A manual or electronic record of the start and end of a shutdown event may be used;
        iii. The owner or operator shall perform semiannual preventive maintenance inspections of the thermal oxidation system, including the automated alarm or shutdown system for those units so equipped, according to the recommendations of the manufacturer of the system;
        iv. The monitoring plan shall specify conditions that would be considered malfunctions of the thermal oxidation system during the inspections or automated monitoring performed under paragraphs (ii) and (iii), describe specific corrective actions that will be taken to correct any malfunction, and define what the owner or operator would consider to be a timely repair for each potential malfunction; and
        v. The owner or operator shall document any system malfunction, as defined in the monitoring and inspection plan, and any activation of the automated alarm or shutdown system with a written entry into a log book or other permanent form of record. Such record shall also include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the monitoring and inspection plan, as well as an estimate of the amount of gasoline loaded during the period of the malfunction.

10.17 Operating parameter value

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11092(b)(3) and (4) and (c), the owner or operator shall determine an operating parameter value (i.e., temperature) based on the parameter data monitored during the performance test required in permit condition 10.19, supplemented by engineering assessments and manufacturer's recommendations. The owner or operator shall submit the operating parameter value, monitoring frequency, and supporting documentation that sufficiently demonstrates continuous compliance with the emission limit in permit condition 10.2 to the Secretary for written approval. For additional performance tests, the

owner or operator shall document the reasons for any change in the operating parameter value since the previous performance test.

10.18 Operating requirements

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11092(d), the owner or operator shall comply with the following:

1. Operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the operating parameter value established in permit condition 10.17;
2. Operation of the vapor processing system in a manner exceeding or going below the operating parameter value, as appropriate, shall constitute a violation of the emission standard in permit condition 10.2, except as specified in paragraph (3); and
3. For the monitoring and inspection, as required under paragraph (2)(b) in permit condition 10.20, malfunctions that are discovered shall not constitute a violation of the emission standard in permit condition 10.2 if corrective actions as described in the monitoring and inspection plan are followed. The owner or operator must:
    a. Initiate corrective action to determine the cause of the problem within 1 hour;
    b. Initiate corrective action to fix the problem within 24 hours;
    c. Complete all corrective actions needed to fix the problem as soon as practicable consistent with good air pollution control practices for minimizing emissions;
    d. Minimize periods of startup, shutdown, or malfunction; and
    e. Take any necessary corrective actions to restore normal operation and prevent the recurrence of the cause of the problem.

10.19 Annual certification test for gasoline cargo tanks

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11092(f), an annual certification test for gasoline cargo tanks shall be conducted and follow the procedures outlined in 40 CFR Part 60 Appendix A-8, Method 27. The test shall be conducted using a time period (t) for the pressure and vacuum tests of 5 minutes. The initial pressure (P_i) for the pressure test shall be 460 millimeters (mm) of water (18 inches of water), gauge. The initial vacuum (V_i) for the vacuum test shall be 150 mm of water (6 inches of water), gauge. The maximum allowable pressure and vacuum changes (Δ p, Δ v) for all affected gasoline cargo tanks is 3 inches of water, or less, in 5 minutes.

10.20 Records of test results

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11094(b), the owner or operator shall maintain records of the tests results for each gasoline cargo tank loading at the facility as specified below:

1. Annual certification testing performed in accordance with permit condition 10.19; and
2. The documentation file shall be kept up-to-date for each gasoline cargo tank loading at the facility. The documentation for each test shall include, as a minimum, the following information:
    a. Name of test: Annual Certification Test—Method 27 or Periodic Railcar Bubble Leak Test Procedure;

b. Cargo tank owner's name and address;
c. Cargo tank identification number;
d. Test location and date;
e. Tester name and signature;
f. Witnessing inspector, if any: Name, signature, and affiliation;
g. Vapor tightness repair: Nature of repair work and when performed in relation to vapor tightness testing; and
h. Test results: Test pressure; pressure or vacuum change, mm of water; time period of test; number of leaks found with instrument; and leak definition.

10.21 Alternative records of test results

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11094(c), as an alternative to keeping records at the terminal of each gasoline cargo tank test result as required in permit condition 10.20, an owner or operator may comply with one of the following recordkeeping methods:

10.22 Continuous monitoring and other records

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11094(f), the owner or operator shall maintain the following records:

1. Keep an up-to-date, readily accessible record of the continuous monitoring data required in permit condition 10.9, 10.16, and 10.17. The records shall indicate the time intervals during which loadings of gasoline cargo tanks have occurred or, alternatively, shall record the operating parameter data only during such loadings. The date and time of day shall also be indicated at reasonable intervals on this record; or
2. Record all data and calculations, engineering assessments, and manufacturer's recommendations used in determining the operating parameter value in permit condition 10.17;
3. Keep an up-to-date, readily accessible copy of the monitoring and inspection plan required in permit condition 10.16; and
4. Keep an up-to-date, readily accessible record of all system malfunctions, as specified in permit condition 10.16.

10.23 Records of malfunctions

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11094(g), the owner or operator shall maintain the following records:

1. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the vapor combustion unit and associated monitoring equipment; and
2. Records of actions taken during periods of malfunction to minimize emissions in accordance with permit condition 6.7, including corrective actions to restore malfunctioning process and the vapor combustion unit and associated monitoring equipment to its normal or usual manner of operation.

10.24 Semiannual compliance report

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR §§ 63.11087(e), 63.11089(g) and 63.11095(a), (b), and (d), the owner or operator shall submit a semiannual report to the Secretary that contains the following information:

1. For a storage vessel complying with paragraph (3)(a) or (3)(b) of permit condition 10.4, the following information shall be included in the semiannual report:
   a. A description of the floating roof and a certification the internal floating roof or external floating roof meets the specification requirements in permit condition 10.5 or 10.6, respectively;
   b. If the annual visual inspection of an internal floating roof is conducted during the reporting period and a failure as described in paragraph (2) of permit condition 10.9 occurs, the report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made;
   c. If a seal gap measurement required by paragraph (1) of permit condition 10.11 occurs during the reporting period, the owner or operator shall furnish the date of measurement, the raw data obtained in the measurement, and the calculations described in paragraph (2) and (3) of permit condition 10.11;
   d. If the seal gap measurement required in paragraph (1) of permit condition 10.11 exceeds the limitations in paragraph (4) of permit condition 10.11, the report shall identify the vessel, the information in paragraph (1)(c), and the date the vessel was emptied or the repairs made, and date of repairs;
2. For a storage vessel complying with paragraph (3)(c) of permit condition 10.4, if an inspection occurs during the reporting period and if it results in an inspection failure, the information required in paragraph (2) of permit condition 10.15;
3. For each equipment leak inspection, the number of equipment leaks not repaired within 15 days after detection and the following information:
   a. The date on which the leak was detected;
   b. The date of each attempt to repair the leak;
   c. The reasons for the delay of repair; and
   d. The date of successful repair;
4. For storage vessels complying with Chapter 11.0 after January 10, 2011, as allowed in permit condition 10.1, the storage vessel's Notice of Compliance Status information can be included in the semiannual report in lieu of filing a separate Notification of Compliance Status report;
5. Each instance of a non-vapor-tight gasoline cargo tank loading at the facility in which the owner or operator failed to take steps to assure that such cargo tank would not be reloaded at the facility before vapor tightness documentation for that cargo tank was obtained;
6. Each reloading of a non-vapor-tight gasoline cargo tank at the facility before vapor tightness documentation for that cargo tank is obtained by the facility in accordance with permit condition 10.20;
7. Each exceedance or failure to maintain, as appropriate, the monitored operating parameter value determined in permit condition 10.1. The report shall include the monitoring data for the days on which exceedances or failures to maintain have occurred,

and a description and timing of the steps taken to repair or perform maintenance on the vapor collection and processing systems or the continuous monitoring system;

8. Each instance in which malfunctions discovered during the monitoring and inspections required under permit condition 10.16 were not resolved according to the necessary corrective actions described in the monitoring and inspection plan. The report shall include a description of the malfunction and the timing of the steps taken to correct the malfunction; and
9. The number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limit to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction to minimize emissions in accordance with permit condition 6.7, including actions taken to correct a malfunction.

The semiannual report shall be postmarked no later than the 30th day following the end of each semiannual period (January 30th and July 30th).

11.0 Emergency Generator MACT Requirements

11.1 Date to comply with emergency generator requirements

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6595(a)(1), the owner or operator shall comply with the applicable requirements specified in this chapter on and after May 3, 2013.

11.2 Maintenance requirements for emergency generator

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6603(a), the owner or operator shall:

1. Change oil and oil filter every 500 hours of operation or annually, whichever comes first;
2. Inspect air cleaner every 1,000 hours or operation, or annually, whichever comes first; and
3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If an emergency generator is operating during an emergency and it is not possible to shut down the engine in order to perform the maintenance requirements on the schedule or if performing the maintenance requirements on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the maintenance requirements can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The maintenance requirements should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The owner or operator must report any failure to perform the maintenance requirements on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable**.**

11.3 Minimizing emissions from emergency generator

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6605, the owner or operator shall be in compliance with the requirements in this chapter at all times. The owner or operator shall at all times operate and maintain the emergency generator, including associated monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if the requirements in this chapter have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the emergency generator.

11.4 Operate emergency generator according to manufacturer's instructions

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6625(e) and 63.6640(a), the owner or operator shall operate and maintain the emergency generator according to the manufacturer's emission-related written instructions or develop a maintenance plan which provides to the extent practicable for the maintenance and operation of the emergency generator in a manner consistent with good air pollution control practice for minimizing emissions.

11.5 Installation and operation of a non-resettable hour meter

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6625(f) and 63.6635(a) and (b), the owner or operator shall install, operate, and maintain a non-resettable hour meter on the emergency generator. Except for a non-resettable hour meter malfunction and associated repairs, the non-resettable hour meter must monitor the operation of the emergency generator continuously at all times the emergency generator is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the non-resettable hour meter. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

11.6 Minimizing startup time

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(h), the owner or operator shall minimize the emergency generator's time spent at idle during startup and minimize the emergency generator's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

11.7 Alternative maintenance schedule

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(i), the owner or operator may utilize an oil analysis program in order to extend the specified oil change requirement in permit condition 11.2. The oil analysis must be performed at the same frequency specified for changing the oil in permit condition 11.2. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows:

1. Total Base Number is less than 30 percent of the Total Base Number of the oil when new;

2. Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
3. Percent water content (by volume) is greater than 0.5.

If all of these condemning limits are not exceeded, the owner or operator is not required to change the emergency generator's oil. If any of the limits are exceeded, the owner or operator must change the emergency generator's oil within 2 days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the owner or operator must change the emergency generator's oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

11.8 Operation of emergency generator

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6640(f), the owner or operator shall operate the emergency generator according to the following requirements:

1. There is no time limit on the use of emergency generator in emergency situations;
2. The owner or operator may operate the emergency generator for the purpose of maintenance checks and readiness testing, provided the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the emergency generator. Maintenance checks and readiness testing of the emergency generator is limited to 100 hours per year. The owner or operator may petition the Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating Federal, State, or local standards require maintenance and testing of the emergency generator beyond 100 hours per year; and
3. The owner or operator may operate the emergency generator up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except the owner and operator may operate the emergency generator for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The emergency generator may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the emergency generator operation must be terminated immediately after the owner or operator is notified the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this

paragraph, as long as the power provided by the financial arrangement is limited to emergency power.

Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) of this permit condition, is prohibited. If the owner or operator does not operate the engine according to the requirements in this permit condition, the emergency generator will no longer be considered an emergency generator and will need to meet all applicable requirements for non-emergency generator in 40 CFR §§ 63.6580 through 63.6675, inclusive.

11.9 Recordkeeping for emergency generator

In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6655 and 63.6660, the owner or operator shall maintain the following records:

1. Records of all required maintenance performed on the emergency generator to demonstrate compliance with permit condition 11.2 or 11.7;
2. Records of all required maintenance performed on the non-resettable hour meter;
3. Records of hours of operation identifying the reason for operation of the emergency generator to demonstrate compliance with permit condition 11.6 and 11.8; and
4. Records of how the owner or operator complied with operating the emergency generator according to the manufacturer's emission-related instruction or the owner or operator's maintenance plan required in permit condition 11.4.

All records shall be maintained in a form suitable and readily available for expeditious review for 5 years following the date of each occurrence, measurement, maintenance, report or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site.

11.10 Circumvention not allowed.

In accordance with ARSD 74:36:08:03, as referenced to 40 CFR § 63.4(b), no owner or operator shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to the use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere.

12.0 MACT Requirements for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities

12.1 Compliance deadline

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR §§ 63.11083(b), 63.11087(b), 63.11088(c), and 63.11089(e), the owner or operator shall meet the requirements in Chapter 12.0 by January 10, 2011, except that storage vessels equipped with floating roofs and not meeting the

requirements in permit condition 12.4 must be in compliance at the first degassing and cleaning activity after January 10, 2011 or by January 10, 2018, whichever is first.

12.2 Requirements for loading rack

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11088(a), the owner or operator shall construct, operate and maintain a loading rack that meets the following requirements:

1. A vapor collection system designed to collect the total organic compound vapors displaced from cargo tanks during product loading;
2. Reduce emissions of total organic compounds to less than or equal to 80 milligrams per liter of gasoline loaded into gasoline cargo tanks at the loading rack; and
3. Limit the loading of gasoline in gasoline cargo tanks that are vapor tight using procedures specified in permit condition 10.2 through 10.7, inclusive.

12.3 Gasoline storage tanks exempt from requirements

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11087(f), the owner or operator of a gasoline storage tank subject to and complies with the requirements in Chapter 8.0 is deemed in compliance with Chapter 12.0.

12.4 Requirements for gasoline storage tanks

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11087(a), the owner or operator shall meet the following requirements for gasoline storage tanks:

1. Each gasoline storage tank with a capacity of less than 75 cubic meters (19,813 gallons) shall be equipped with a fixed roof that is mounted to the storage tank in a stationary manner and maintain all openings in a closed position at all times when not in use;
2. Each gasoline storage tank with a capacity of less than 151 cubic meters (39,900 gallons) and a throughput of 480 gallons per day or less shall be equipped with a fixed roof that is mounted to the storage tank in a stationary manner and maintain all openings in a closed position at all times when not in use. The gallons per day throughput is calculated by summing the current day's throughput, plus the throughput for the previous 364 days, and then dividing that sum by 365;
3. Each gasoline storage tank with a capacity greater than or equal to 75 cubic meters (19,813 gallons) and not meeting the criteria specified in paragraph (1) or (2) shall meet the following:
    a. Equip each gasoline storage tank with a fixed roof and an internal floating roof that meets the specifications in permit condition 12.5; and
    b. Equip each gasoline storage tank with an external floating roof that meets the specifications in permit condition 12.6; or
    c. Equip and operate each internal and external floating roof gasoline storage tank as specified in permit condition 12.7;
4. Equip each surge control tank with a fixed roof that is mounted to the tank in a stationary manner and a pressure/vacuum vent with a positive cracking pressure of no less than 0.50 inches of water and maintain all openings in a closed position at all time when not in use.

12.5 Internal floating roof specifications

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11087(a), a fixed roof and an internal floating roof installed to meet the requirements of paragraph (3)(a) of permit condition 12.4 shall meet the following specifications:

1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside the storage vessel. The internal floating roof shall be floating on the liquid surface at all times except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and accomplished as rapidly as possible;
2. The internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
   a. A foam or liquid filled seal mount in contact with the liquid. A liquid mounted seal means a foam or liquid filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank; or
   b. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof; and
3. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

12.6 External floating roof specifications

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11087(a), an external floating roof installed to meet the requirements of paragraph (3)(b) of permit condition 12.4 shall meet the following specifications. An external floating roof means a pontoon-type or double-deck type cover that rest on the liquid surface in a vessel with no fixed roof:

1. The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device shall consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal:
   a. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. The seal shall completely cover the annular space between the edge of the floating roof and tank wall; and
   b. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion; and
2. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the

roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible; and

3. If the owner or operator installs an external roof after January 10, 2011, the external roof shall also meet the following requirements:
   a. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface;
   b. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use;
   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports;
   d. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting;
   e. Automatic bleeder vents and rim space vents are to be gasketed; and
   f. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

12.7 Other options for internal and external floating roof specifications

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11087(a), an internal and external floating roof installed to meet the requirements of paragraph 3(c) of permit condition 12.4 shall meet the following specifications:

1. The internal floating roof shall be equipped with one of the following seal configurations:
   a. A liquid-mounted seal; or
   b. A mechanical shoe seal;
2. The external floating roof shall be equipped with one of the following seal configurations:
   a. A liquid-mounted seal and a secondary seal; or
   b. A mechanical shoe seal and a secondary seal. The upper end of the shoe(s) shall extend a minimum of 61 centimeters (24 inches) above the stored liquid surface; and
   c. If the external floating roof is equipped with a liquid-mounted seal or mechanical shoe seal, or a vapor-mounted seal and secondary seal, as of November 9, 2006, the seal options specified in paragraph (2)(a) and (2)(b) do not apply until the next time the storage vessel is completely emptied and degassed, or November 9, 2016, whichever occurs first.
3. If the external floating roof is not equipped with the requirements in paragraph (2) by January 10, 2011, the owner or operator shall equip the external floating roof with the following:
   a. Each opening except those for automatic bleeder vents (vacuum breaker vents) and rim space vents shall have its lower edge below the surface of the stored liquid;
   b. Each opening except those for automatic bleeder vents (vacuum breaker vents), rim space vents, leg sleeves, and deck drains shall be equipped with a deck cover. The deck cover shall be equipped with a gasket between the cover and the deck;

c. Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be equipped with a gasketed lid, pallet, flapper, or other closure device;
d. Each opening for a fixed roof support column may be equipped with a flexible fabric sleeve seal instead of a deck cover;
e. Each opening for a sample well or deck drain (that empties into the stored liquid) may be equipped with a slit fabric seal or similar device that covers at least 90 percent of the opening, instead of a deck cover;
f. Each cover on access hatches and gauge float wells shall be designed to be bolted or fastened when closed;
g. Each opening for an unslotted guidepole shall be equipped with a pole wiper, and each unslotted guidepole shall be equipped with a gasketed cap on the top of the guidepole;
h. Each opening for a slotted guidepole shall be equipped with a pole wiper and a pole float or a pole wiper and a pole sleeve. The wiper or seal of the pole float shall be at or above the height of the pole wiper; and
i. If the floating roof does not meet the requirements in paragraph (3) as of November 9, 2006, these requirements do not apply until the next time the vessel is completely emptied and degassed, or November 9, 2016, whichever occurs first.

4. Each internal or external floating roof shall meet the following operational requirements:
   a. The floating roof shall float on the stored liquid surface at all times, except when the floating roof is supported by its leg supports or other support devices (i.e., hangers from the fixed roof);
   b. When the storage vessel is storing liquid, but the liquid depth is insufficient to float the floating roof, the process of filling to the point of refloating the floating roof shall be continuous and shall be performed as soon as practical;
   c. Each cover over an opening in the floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access;
   d. Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be closed at all times, except when required to be open to relieve excess pressure or vacuum, in accordance with the manufacturer's design; and
   e. Each unslotted guide pole cap shall be closed at all times except when gauging the liquid level or taking liquid samples.

12.8 Monthly equipment leak inspections and log book

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11089(a), (b), (c), and (d) the owner or operator shall perform a monthly leak inspection of all equipment in gasoline service. “In gasoline service” means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors. The monthly leak inspection shall meet the following requirements:

1. The inspection detection methods may include sight, sound, and smell;
2. Maintain a log book to document each inspection. The log book shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, and/or diagram(s) showing the location of all equipment in gasoline service;

3. If a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Detection of a liquid or vapor leak shall be recorded in the log book and the date the repair is completed; and
4. Repairs of leaking equipment may be delayed if the repair is not feasible within 15 days. The reason for the delay and the date each delayed repair is completed shall be documented in the log book.

12.9 Periodic internal floating roof tank inspections

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR §§ 63.11087(c) and 63.11092(e)(1), the owner or operator shall inspect an internal floating roof meeting the specifications paragraph (3)(a) of permit condition 12.4 as follows:

1. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with volatile organic liquids. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel;
2. For a storage vessel equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or secondary seal (if one is in service) at least once every 12 months after the initial fill. The visual inspection may be conducted through manholes and roof hatches on the fixed roof. A failure occurs if the internal roof is not resting on the surface of the volatile organic liquid inside the storage vessel, there is liquid accumulated on the roof, the seal is detached, or there are holes or tears in the seal fabric. The owner or operator shall either repair the internal floating roof and/or the primary seal or secondary seal or empty or remove the storage vessel from service within 45 days of discovering a failure. The owner or operator may request a 30-day extension if the tank cannot be repaired or emptied within 45 days of discovering a failure. The Secretary will grant a 30-day extension if the extension request documents that alternate storage capacity is unavailable and specifies a schedule of actions the owner or operator will take that will assure that the equipment will be repaired or the vessel will be emptied as soon as possible;
3. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with volatile organic liquids. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraph (2); and

4. For all the inspections required by paragraph (1) through (3), the owner or operator shall notify the Secretary in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Secretary the opportunity to inspect the storage vessel prior to refilling. If the inspection is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Secretary at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Secretary at least 7 days prior to the refilling.

12.10 Periodic internal floating roof tank inspection for other option

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR §§ 63.11087(c) and 63.11092(e)(1), the owner or operator shall inspect an internal floating roof meeting the specifications in paragraph (3)(c) of permit condition 12.4 as follows:

1. Before the storage vessel is initially filled, the owner or operator shall visually inspect the floating roof deck, deck fittings, and rim seal within the storage vessel. The inspection may be performed entirely from the top side of the floating roof, as long as there is a visual access to all deck components (i.e., liquid-mounted seals, mechanical shoe seal).
2. At least once per year the internal floating roof shall be inspected. A tank-top inspection shall be conducted by visually inspecting the floating roof deck, deck fittings, and rim seal through openings in the fixed roof. Identification of holes or tears in the rim seal is required only for the seal that is visible from the top of the storage vessel;
3. Each time a storage vessel is completely emptied or degassed, or every 10 years, whichever occurs first, the internal floating roof shall be inspected. The inspections shall be conducted by visually inspecting the floating roof deck, deck fittings, and rim seals from within the storage vessel. The inspection may be performed entirely from the top side of the floating roof, as long as there is visual access to all deck components (i.e., liquid-mounted seals, mechanical shoe seal); and
4. Any of the following conditions constitutes an inspection failure:
    a. Stored liquid on the floating roof;
    b. Holes or tears in the primary or secondary seal (if one is present);
    c. Floating roof deck, deck fittings, or rim seals that are not functioning as designed, failure to comply with the operational requirements in permit condition 12.7;
    d. Failure to comply with operational requirements in paragraph (4) of permit condition 12.7; and
    e. Gaps of more than 0.32 centimeters (1/8 inch) between the deck fitting gasket, seal, or wiper (if required) and any surface that it is intended seal.
5. Conditions causing an inspection failure shall be repaired as follows:
    a. If the inspection is performed while the storage vessel is not storing liquid, repairs shall be completed before the refilling of the storage vessel with liquid; and
    b. If the inspection is performed while the storage vessel is storing liquid, repairs shall be completed or the vessel removed from service within 45 days. If a repair cannot be completed and the vessel cannot be emptied within 45 days, the owner or operator

may use up to 2 extensions of up to 30 additional days each. Documentation of a decision to use an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be completely emptied as soon as practical.

12.11 Periodic external floating roof tank inspections

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR §§ 63.11087(c) and 63.11092(e)(2), after installing the external flowing roof meeting the requirements of paragraph (3)(b) of permit condition 12.4, the owner or operator shall:

1. Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency:
   a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with volatile organic liquids and at least once every 5 years thereafter;
   b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with volatile organic liquids and at least once per year thereafter;
   c. If any vessel ceases to store volatile organic liquids for a period of 1 year or more, subsequent introduction of volatile organic liquids into the vessel shall be considered an initial fill for the purposes of paragraph (1)(a) and (1)(b);
2. Determine gap widths and areas in the primary and secondary seals individually by the following procedures:
   a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports;
   b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32 centimeter diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location;
   c. The total surface area of each gap described in paragraph (2)(b) shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance;
3. Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (4).
4. Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the following requirements:
   a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cubic centimeters per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 centimeters. For mechanical shoes, one end of the mechanical shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 61 centimeters

above the stored liquid surface. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope;

b. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (4)(c). The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cubic centimeters per meter of tank diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. There are to be no holes, tears, or other openings in the seal or seal fabric;

c. If a failure that is detected during inspections required in paragraph (1) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested. The extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible;

5. Notify the Secretary 30 days in advance of any gap measurements required by paragraph (1) to afford the Secretary the opportunity to have an observer present;
6. Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.
   a. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this permit condition exist before filling or refilling the storage vessel with volatile organic liquids; and
   b. For all the inspections required by paragraph (6), the owner or operator shall notify the Secretary in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Secretary the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (6) is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Secretary at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Secretary at least 7 days prior to the refilling.

12.12 Periodic external floating roof tank inspection for other option

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11087(c) and 63.11092(e)(2), after installing the external flowing roof meeting the requirements of paragraph (3)(c) of permit condition 12.4, the owner or operator shall inspect the external floating roof on the following schedule:

1. Within 90 days after the initial filling of the storage vessel, the primary and secondary rim seals shall be inspected as specified in permit condition 12.13;
2. The secondary seal shall be inspected at least once every year and the primary seal shall be inspected at least every 5 years, as specified in permit condition 12.13;

3. Each time the storage vessel is completely emptied and degassed, or every 10 years, whichever occurs first, the external floating roof shall be inspected by visually inspecting the floating roof deck, deck fittings, and rim seal within the storage vessel. The inspection may be performed entirely from the top side of the floating roof, as long as there is a visual access to all deck components. Any of the following conditions constitutes inspection failure:
    a. Stored liquid on the floating roof;
    b. Holes or tears in the primary or secondary seal (if one is present);
    c. Floating roof deck, deck fittings, or rim seals that are not functioning as designed, failure to comply with the operational requirements in permit condition 12.7;
    d. Failure to comply with operational requirements in paragraph (4) of permit condition 11.7; and
    e. Gaps of more than 0.32 centimeters (1/8 inch) between the deck fitting gasket, seal, or wiper (if required) and any surface that it is intended seal.
4. If the owner or operator determines that it is unsafe to perform the floating roof inspections specified in paragraphs (1) and (2), the owner or operator shall comply with the following requirements:
    a. The inspections shall be performed no later than 30 days after the determination that the floating roof is unsafe.
    b. The storage vessel shall be removed from liquid service no later than 45 days after determining the floating roof is unsafe. If the vessel cannot be emptied within 45 days, the owner or operator may utilize up to two extensions of up to 30 additional days each. If the vessel cannot be emptied within 45 days, the owner or operator may utilize up to two extensions of up to 30 additional days each. Documentation of a decision to use an extension shall include an explanation of why it was unsafe to perform the inspection, documentation that alternative storage capacity is unavailable, and a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

12.13 External floating roof other option inspection procedures

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11092(e)(2), the owner or operator shall inspect an external floating roof meeting the requirements of paragraph (3)(c) of permit condition 12.4 as follows:

1. Seal gap inspections for external floating roofs shall determine the presence and size of gaps between the rim seals and the wall of the storage vessel. Rim seals shall be measured for gaps at one or more levels while the external floating roof is floating by the following procedures:
    a. The inspector shall hold a 0.32 centimeter (1/8 inch) diameter probe vertically against the inside of the storage vessel wall, just above the rim seal, and attempt to slide the probe down between the seal and the vessel wall. Each location where the probe passes freely (without forcing or binding against the seal) between the seal and the vessel wall constitutes a gap;
    b. The length of each gap shall be determined by inserting the probe into the gap (vertically) and sliding the probe along the vessel wall in each direction as far as it

will travel freely without binding between the seal and the vessel wall. The circumferential length along which the probe can move freely is the gap length;

c. The maximum width of each gap shall be determined by inserting probes of various diameters between the seal and the vessel wall. The smallest probe diameter should be 0.32 centimeter, and larger probes should have diameters in increments of 0.32 centimeter. The diameter of the largest probe that can be inserted freely anywhere along the length of the gap is the maximum gap width;
d. The average width of each gap shall be determined by averaging the minimum gap width (0.32 centimeter) and the maximum gap width;
e. The area of a gap is the product of the gap length and average gap width; and
f. The ratio of accumulated area of rim seal gaps to storage vessel diameter shall be determined by adding the area of each gap, and dividing the sum by the nominal diameter of the storage vessel. This ratio shall be determined separately for primary and secondary rim seals;

2. Any exceedance of the following gap requirements constitutes inspection failure:
   a. The ratio of seal gap area to vessel diameter for the primary seal shall not exceed 212 square centimeters per meter of vessel diameter (10 square inches per foot of vessel diameter) and the maximum gap width shall not exceed 3.81 centimeters (1.5 inches);
   b. The ratio of seal gap area to vessel diameter for the secondary seal shall not exceed 21.2 square centimeters per meter (1 square inch per foot), and the maximum gap width shall not exceed 1.27 centimeters (0.5 inches), except when the secondary seal must be pulled back or removed to inspect the primary seal; and
3. Conditions causing an inspection failure shall be repaired as follows:
   a. If the inspection is performed while the storage vessel is not storing liquid, repairs shall be completed before the refilling of the storage vessel with liquid; and
   b. If the inspection is performed while the storage vessel is storing liquid, repairs shall be completed or the vessel removed from service within 45 days. If a repair cannot be completed and the vessel cannot be emptied within 45 days, the owner or operator may use up to 2 extensions of up to 30 additional days each. Documentation of a decision to use an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be completely emptied as soon as practical.

12.14 Recordkeeping requirements for gasoline storage tanks

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR §§ 63.11087(e) and 63.11094(a), the owner or operator shall maintain the following records for internal or external floating roofs complying with paragraph (3)(a) or (3)(b) of permit condition 13.4:

1. Maintain a record of each inspection performed on an internal floating roof as required in permit condition 12.9. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the internal floating roof (i.e., seals, fittings, internal floating roof);

2. Maintain a record of each gap measurement performed as required in permit condition 12.11. Each record shall identify the storage vessel in which the measurement was performed and contain the following:
    a. The date of measurement;
    b. The raw data obtained in the measurement;
    c. The calculations described in paragraph (2) and (3) of permit condition 12.11.

12.15 Recordkeeping requirements for gasoline storage tanks using other option

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR §§ 63.11087(e) and 63.11094(a), the owner or operator shall maintain the following records for internal or external floating roofs complying with paragraph (3)(c) of permit condition 12.4:

1. Maintain a record of the dimensions of the storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored;
2. If a floating roof passes inspection, a record shall be maintained that includes an identification of the storage vessel that was inspected and the date of the inspection.
3. If the floating roof fails inspection, a record shall be maintained that includes the following:
    a. Identification of the storage vessel that was inspected;
    b. The date of the inspection;
    c. A description of all inspection failures;
    d. A description of all repairs and the dates they were made; and
    e. The date the storage vessel was removed from service, if applicable;
4. A record shall be maintained of external floating roof seal gap measurements, including the raw data obtained and any calculations performed;
5. Maintain a record of the date when a floating roof is set on its legs or other support devices, the date when the roof was refloated, and indicate whether the process of refloating was continuous; and
6. If the owner or operator elects to use an extension in accordance with paragraph (5)(b) of permit condition 12.10, paragraph (4) of permit condition 12.12, or paragraph (3)(b) of permit condition 12.13, the documentation required by those paragraphs shall be maintained.

12.16 Recordkeeping requirements for equipment leaks

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR §§ 63.11089(g) and 63.11094(d), the owner or operator shall prepare and maintain a record describing the types, identification number, and locations of all equipment in gasoline service. If the owner or operator elects to implement an instrument program as part of the monthly leak inspection under permit condition 12.8, the record shall contain a full description of the program.

12.17 Log book requirements for leaks

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR §§ 63.11089(g) and 63.11094(e), the owner or operator shall maintain a log book that records the following for each leak that is detected during the monthly leak inspections required in permit condition 12.8:

1. The equipment type and identification number;
2. The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell);
3. The date the leak was detected and the date of each attempt to repair the leak;
4. Repair methods applied in each attempt to repair the leak;
5. "Repair delayed" and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak;
6. The expected date of successful repair of the leak if the leak is not repaired within 15 days; and
7. The date of successful repair of the leak.

12.18 Records for storage vessels with fixed roofs

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § 63.11087(e), if a storage vessel is meeting the requirements in paragraph (2) of permit condition 12.4, the owner or operator shall maintain a daily gasoline throughput, in gallons, for the storage vessel and a gallons per day throughput calculated by summing the current day's throughput, plus the throughput for the previous 364 days, and then dividing that sum by 365.

12.19 Testing requirements for vapor combustion unit (Unit #1)

In accordance with ARSD 74:36:08:106, as referenced to 40 CFR § §63.11092(a) and 63.11093(c), the owner or operator shall conduct a performance test on the vapor processing and collection system within 180 days of the issuance of this permit. The performance test shall be conducted to determine compliance with permit condition 12.2 and follow the procedures in permit condition 7.7 or use an alternative test method and procedures in accordance with the alternative testing method requirements in 40 CFR § 63.7(f). The owner or operator shall notify the Secretary in accordance with Chapter 7.0 prior to initiating this performance test.