



VERIFICATION PROTOCOL

Version 1.1

Adopted: September 27, 2013; Amended: June 13, 2016



PROCEDURE REVIEW

This procedure will be reviewed to ensure efficacy following the completion of each series of conformance audits or no later than every two years, whichever is earlier.

The Audit Scope is defined by the following Onsite Auditing Activities to be conducted following an Operator’s submission of their Application for Certification to the Center for Responsible Shale Development (“CRSD”):

1. The auditor shall identify and review onsite physical evidence directly related to conformance with applicable standards.
2. The auditor shall identify and review onsite materials and equipment related to the accuracy of onsite recordkeeping needed to determine conformance with applicable standards.
3. The auditor’s review may encompass all points relevant to the CRSD standards.
4. The frequencies and auditor guidance outlined below shall not be construed to limit the auditor from conformance verification against the CRSD standards.

SCHEDULE AND SCOPE OF REVIEW

1. Pre-Audit Review

Prior to conducting the Initial Certification Audit, Annual Conformance Assurance Audit, or Biennial Re-Certification Audit, CRSD, Unconventional Exploration and Development Company (“Company”) and the Audit Service Provider (“Auditor”) shall hold a Pre-Audit Review Meeting to establish the audit scope, boundaries, field audit sample set and proposed audit schedule. The Pre-Audit Review Meeting should also establish the Company’s readiness for each audit.

2. Initial Certification Audit

The Initial Certification Audit to evaluate a Company’s conformance to CRSD’s Performance Standards is conducted upon a Company’s Initial Application for Certification. The Initial Certification Audit is conducted to evaluate the Company’s equipment, processes and systems against CRSD’s Performance Standards through documentation review, interviews and observations of a sample of the Company’s operations and assets.

Desk – 90 day operational window:

1. Each Company shall work with CRSD and the Auditor to develop a schedule for submitting, or making available to the Auditor on an ongoing basis, all materials deemed by the Auditor necessary to evaluate conformance during the first 90 days from the Company’s date of application for certification. Each Company agrees to respond to reasonable additional requests for information from the Auditor in a timely manner.
2. All documents necessary to determine conformance with applicable standards shall be produced, or made available to the Auditor within 120 days of the date of the Company’s application.
3. The Auditor shall identify and review all plans, reports and records submitted by the Company relating to conformance with CRSD standards during the first 90 days following Application for Certification and any identified issues relating to the drafting or interpretation of those standards.

Field – 90 day operational window:

1. The Company will provide a schedule of relevant activities and relevant inventory of sites to the Auditor.
2. The Auditor will select a representative suite of sites to be audited in conformance with the nominal frequencies listed below for each Company with discretion to visit as many sites as necessary to verify conformance.
3. The Auditor and Company will develop an audit schedule to maximize efficiency.

Notice:

- a. The Company representative to the CRSD will receive 48 hours of advance notice of a scheduled visit to the site. While it is anticipated that the Auditor will have full access to the site, the site operator is responsible for safe operations at the site and may restrict Auditor access to portions of the site where and for as long as deemed necessary in order to address any safety concerns.
- b. Any modifications relevant to any of the Performance Standards which are initiated following the notice of a scheduled site visit shall be documented by CRSD, the Company and/or the Auditor.

Auditor’s Initial Certification Report:

1. Within 60 days of the completion of the “90 day” field audits and receipt of all requested and collected information, the Auditor shall produce a report that documents the Company’s degree of conformance with the CRSD Performance Standards. If all information needed to determine conformance has not been received within 120 days of the Initial Application, or 90 days of the annual review date, as appropriate, the Auditor shall make a request for additional information and such information will be made available to the Auditor within 30 days of the request. Following this period, the Auditor shall prepare its report with respect to all other items and note the missing information that precludes a determination of conformance.
2. The Auditor’s report shall identify any specific areas where action or additional information is needed to provide for continuous conformance with the CRSD standards and any perceived barriers to sustained conformance.
3. Should the Company be unable to demonstrate conformance to the CRSD Performance Standards within 150 days of Application for Certification, the Auditor shall recommend that certification is not warranted. The Company, Audit Service Provider and CRSD shall hold a second Pre-Audit Review meeting and the Company shall reapply for certification.

3. Conformance Assurance Audit

The Conformance Assurance Audit is conducted annually following a Company’s initial Certification and between each subsequent Re-Certification Audit to assure the Company’s continued conformance to the CRSD Performance Standards. The Conformance Assurance Audit is conducted to evaluate the Company’s equipment, processes and systems against CRSD’s Performance Standards through documentation review, interviews and observations of a representative sample of the Company’s operations and assets.

Annual Desk Audits:

1. Each Company shall work with the Auditor to develop an “annual review date” for submitting or making available to the Auditor all materials deemed by the Auditor necessary to evaluate conformance during the prior year. Each Company agrees to respond to reasonable additional requests for information from the Auditor in a timely manner.
2. For the first year the annual review date shall be between 9 months and 15 months of the Initial Certification of the participating Company and annually thereafter other than in years of Re-Certification.
3. All documents necessary to determine conformance with applicable standards shall be produced, or made available to the Auditor within 60 days of the annual review date.
4. The Auditor shall identify and review all plans, reports and records submitted by the Company relating to the prior year’s conformance with CRSD standards and any identified issues relating to the drafting or interpretation of those standards.

Ongoing (annual cycle) Assurance Field Audits:

1. At the request of the Auditor, the Company will provide a schedule of relevant activities and site inventory.
2. The Auditor will select a representative suite of sites to be audited in conformance with the nominal frequencies listed below for each Company with the discretion to visit as many sites as is necessary to verify conformance.
3. The Auditor and Company will develop an audit schedule to maximize efficiency.

Notice:

- a. The Company representative to the CRSD will receive 48 hours of advance notice of a scheduled visit to the site. While it is anticipated that the Auditor will have full access to the site, the site operator is responsible for safe operations at the site and may restrict Auditor access to portions of the site where and for as long as deemed necessary in order to address any safety concerns.
- b. Any modifications, relevant to any of the Performance Standards, which are initiated following the notice of a scheduled site visit shall be documented by CRSD, the Company and/or the Auditor.

Auditor’s Annual Conformance Assurance Report:

1. Within 60 days of the completion of the “annual cycle” of field audits and receipt of all information deemed necessary, the Auditor shall produce a report that documents the Company’s degree of conformance with the CRSD standards. If all information needed to determine conformance has not been received within 120 days of the initial application or 90 days of the annual review date, as appropriate, the Auditor shall make a request for additional information and such information will be made available to the Auditor within 30 days of such request. Following this period, the Auditor shall prepare its report with respect to all other items and note the missing information that precludes a determination of conformance.
2. The Auditor’s report shall identify any specific areas where action or additional documentation is needed to provide for continuous conformance with the CRSD standards and any perceived barriers to sustained conformance.

4. Re-Certification Audit

The Re-Certification Audit is conducted upon a Company's Application for Certification subsequent to its Initial Certification and Annual Conformance Assurance Audit. The Re-Certification Audit is conducted to evaluate the Company's equipment, processes and systems against CRSD's Performance Standards through documentation review, interviews and observations of a sample of the Company's operations and assets.

Desk – 90 day operational window:

1. Each Company shall work with CRSD and the Auditor to develop a schedule for submitting, or making available to the Auditor on an ongoing basis, all materials deemed by the Auditor necessary to evaluate conformance during the first 90 days from the Company's date of Application for Re-Certification. Each Company agrees to respond to reasonable additional requests for information from the Auditor in a timely manner.
2. All documents necessary to determine conformance with applicable standards shall be produced, or made available to the Auditor within 120 days of the date of the Company's application.
3. The Auditor shall identify and review all plans, reports and records submitted by the Company relating to conformance with CRSD standards during the first 90 days following Application for Re-Certification and any identified issues relating to the drafting or interpretation of those standards.

Field – 90 day operational window:

1. The Company will provide a schedule of relevant activities and relevant inventory of sites to the Auditor.
2. The Auditor will select a representative suite of sites to be audited in conformance with the nominal frequencies listed below for each Company with discretion to visit as many sites as necessary to verify conformance.
3. The Auditor and Company will develop an audit schedule to maximize efficiency.

Auditor's Re-Certification Report:

1. Within 60 days of the completion of the "90 day" field audits and receipt of all requested and collected information, the Auditor shall produce a report that documents the Company's degree of conformance with the CRSD Performance Standards. If all information needed to determine conformance has not been received within 120 days of the Re-Certification Application, the Auditor shall make a request for additional information and such information will be made available to the Auditor within 30 days of the request. Following this period, the Auditor shall prepare its report with respect to all other items and note the missing information that precludes a determination of conformance.
2. The Auditor's report shall identify any specific areas where action or additional information is needed to provide for continuous conformance with the CRSD standards and any perceived barriers to sustained conformance.
3. Should the Company be unable to demonstrate conformance to the CRSD Performance Standards within 150 days of Application for Re-Certification, the Auditor shall recommend that Re-Certification is not warranted. The Company, Audit Service Provider and CRSD shall hold a second Pre-Audit Review meeting and the Company shall reapply for certification.



ONSITE VERIFICATION – RELEVANT STANDARDS AND AUDIT FREQUENCIES

It is anticipated that the Auditor's onsite inspection activities will provide information that will assist the Auditor in determining conformance with the following standards at a minimum, and that such activities may yield information relevant to all CRSD standards.

Whenever possible during an onsite audit, conformance to multiple standards should be verified and accrue to each standard's frequency.

When selecting locations and activities for verification visits and observations, the Company, CRSD and Auditor shall consider the following, at a minimum:

- Whether a location has been previously visited or observed and the stage of the location's development.
- Significant changes in technology, operations or activities of the Company or at specific locations.
- The age of the location (time of initial development) and longevity with the Company (Legacy or Acquisition during certification).
- New CRSD Standards or the Company's Application for Certification to CRSD standards to which it was not previously certified.

Performance Standard 3:

3.1 Any new pits designed shall be double-lined and equipped with leak detection

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	50% of drilling pits active during period
Conformance Assurance:	
Ongoing (annual cycle)	10% of drilling pits active during period
Re-Certification:	
90 day operational window	25% of active drilling operations during period

Auditor: Visually verify conformance to the standard as required.

3.2 Operators, by March 20, 2014 or initial date of application for certification (whichever is later), shall contain drilling fluid, when using oil-containing drilling fluids to drill a well, in a closed loop system at the well pad (e.g. no ground pits).

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	50% of active drilling operations during period
Conformance Assurance:	
Ongoing (annual cycle)	10% of active drilling operations during period
Re-Certification:	
90 day operational window (active sites)	25% of active drilling operations during period

Auditor: Visually verify conformance to the standard as required.

3.3 Operators, by March 20, 2015 or initial date of application (whichever is later), shall contain drilling fluid and flowback water in a closed loop system at the well pad, eliminating the use of pits for all wells.

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	50% of active drilling operations during period
Conformance Assurance:	
Ongoing (annual cycle)	10% of active drilling operations during period
Re-Certification:	
90 day operational window (active sites)	25% of active drilling operations during period

Auditor: Visually verify conformance to the standard as required.

Performance Standard 4:

4.1 When utilizing centralized impoundments for the storage of flowback and/or produced waters, Operators shall ensure that free hydrocarbons are removed from the water prior to storage and that new impoundments are double-lined with an impermeable material, equipped with leak detection and take measures to reasonably prevent hazards to wildlife. Total hydrocarbons should be substantially removed.

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	100% of centralized impoundments active during period
Conformance Assurance:	
Ongoing (annual cycle)	10% of centralized impoundments active during period
Re-Certification:	
90 day operational window (active sites)	25% of centralized impoundments active during period

Auditor:

1. Verify absence of hydrocarbon sheen
2. Visually ensure design conformance to standard i.e.:
 - a. Double lined
 - b. Leak detection
 - c. Wildlife control

Performance Standard 7:

- 7.1 *Operators shall design and install casing and cement to completely isolate the well and all drilling and produced fluids from surface waters and aquifers, to preserve the geological seal that separates fracture network development from aquifers, and prevent vertical movement of fluids in the annulus.*
- 7.2 *Operators will not use diesel fuel in their hydraulic fracturing fluids.*
- 7.3 *Operators will publically disclose the chemical constituents intentionally used in well stimulation fluids. Disclosures will include: information identifying the well, the operator and the dates of the well stimulation; the type and total volume of the base fluid; the type and amount of any proppant; all chemical additive products used in a well stimulation, including the name under which the product is marketed or sold, the vendor, and a descriptor of additive's purpose or purposes (e.g. biocide, breaker, corrosion inhibitor, etc.); the common name and Chemical Abstracts Service registry number for each chemical ingredient used in a stimulation fluid; the actual or maximum concentration of each chemical ingredient, expressed as a percent by mass of the total stimulation fluid. Chemical ingredients should be disclosed in a manner that does not link them to their respective chemical additive products. Disclosure of the above information will be offered to the relevant state agency and will also be posted on FracFocus.org. If an operator, service company or vendor claims that the identity of a chemical ingredient is entitled to trade secret protection, the operator will include in its disclosures a notation that trade secret protection has been asserted and will instead disclose the relevant chemical family name. Operators will implement measures consistent with state law to assist medical professionals in quickly obtaining trade secret information from the operator, service company or vendor holding the trade secret that may be needed for clinical diagnosis or treatment purposes.*
- 7.4 *Operators will also work toward use of more environmentally neutral additives for hydraulic fracturing fluid.*
- 7.5 *Mechanical integrity tests shall be performed when refracturing an existing well.*
- 7.6 *CRSD will develop a standard relating to the public disclosure of chemicals other than well stimulation fluids by September 1, 2013.*

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	Observed during site visits
Conformance Assurance:	
Ongoing (annual cycle)	Observed during site visits
Re-Certification:	
90 day operational window (active sites)	Observed during site visits

Auditor: Confirm stimulation fluid does not contain diesel.

Performance Standard 8:

8.1 Operators shall design each well pad to minimize the risk that drilling related fluids and wastes come in contact with surface waters and fresh groundwater.

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	50% of active drilling sites (pads) during period
Conformance Assurance:	
Ongoing (annual cycle)	10% of active drilling sites (pads) during period
Re-Certification:	
90 day operational window (active sites)	25% of active drilling sites (pads) during period

Auditor: Verify conformance to standard.

Performance Standard 9:

- 9.1 Beginning on January 1, 2014, in accordance with the conditions set forth in Paragraphs 3 and 4 below, an Operator must direct all pipeline-quality gas during well completion of development wells, and re-completion or workover of any well into a pipeline for sales.*
- 9.2 Any gas not captured and put in the sales pipeline may not be vented and must be flared in accordance with Standard No. 10 below.*
- 9.3 Acceptable reasons for sending gas to a flare and not directing gas into the sales line include:*
- a. Low content of flammable gas. Such low-flammability gas must be directed through a flare, past a continuous flame, to insure combustion begins when gas composition becomes flammable.*
 - b. For safety reasons.*
- 9.4 Circumstances unacceptable for sending gas to flare, instead of directing it into a sales line, are:*
- a. Beginning on January 1, 2014, a lack of a pipeline connection except for wells that are designated as either exploratory or extension wells using SEC definitions (however, companies should minimize flaring and maximize the use of reduced emissions completions on exploratory or extension wells, where possible);*
 - b. Inadequate water disposal capacity;*
 - c. Undersized flow back equipment, lack of flow back equipment or lack of equipment operating personnel.*

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	50% of relevant well completions during period
Conformance Assurance:	
Ongoing (annual cycle)	10% of relevant well completions during period
Re-Certification:	
90 day operational window (active sites)	25% of relevant well completions during period

Auditor: Verify conformance to standard.

Performance Standard 10:

10.1 *When flaring is permitted during well completion, re-completions or workovers of any well, pursuant to Standard No. 9 above, Operators must adhere to the following requirements:*

- a. *Operators must either use raised/elevated flares or an engineered combustion device with a reliable continuous ignition source, which have at least a 98% destruction efficiency of methane. No pit flaring is permitted.*
- b. *Flaring may not be used for more than 14-days on any development well (for the life of the well). Flaring may not be used for more than 30-days on any exploratory or extension wells (for the life of the well), including initial or recompletion production tests, unless operation requires an extension. If flaring continues beyond 30-days for an exploratory or extension well, Operators must document the extent of additional flaring and reasons requiring flaring beyond the 30-days.*
- c. *Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five minutes during any two consecutive hours.*

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	50% of relevant well completions during period
Conformance Assurance:	
Ongoing (annual cycle)	10% of relevant well completions during period
Re-Certification:	
90 day operational window	25% of relevant well completions during period

Auditor: Verify conformance to standard.

Performance Standard 11:

11.1 *The following standard applies only to nonroad dedicated diesel horizontal drilling rig engines at the well pad. CRSD encourages and supports the conversion of drilling rig engines to either dual-fuel, electricity or natural gas. The following emissions standards apply to the nonroad dedicated diesel drilling rig engines:*

- a. *By March 20, 2013, operator and contractor nonroad engines shall achieve horse power-hour weighted average site emissions equivalent to U.S. EPA Tier 2 nonroad diesel engine standards or better.*
- b. *By March 20, 2015, 25% of all operator and contractor engine utilization (hp) shall comply with U.S. EPA Tier 4 emissions standards for particulate matter (PM).*
- c. *By September 24, 2015, 75% of all operator and contractor engine utilization (hp) shall comply with U.S. EPA Tier 4 emissions standards for particulate matter (PM).*
- d. *By September 24, 2016, 95% of operator or contractor engine utilization (hp) shall comply with U.S. EPA Tier 4 emissions standards for particulate matter (PM).*
- e. *All nonroad equipment must use Ultra-Low Sulfur Diesel fuel (15 ppm of sulfur) at all times.*

11.2 *The following standard applies only to dedicated diesel fracturing pump engines at the well pad. CRSD encourages and supports the conversion of fracturing pump engines to either dual-fuel, electricity or natural gas.*

- a. *If the fracturing pump is a nonroad dedicated diesel engine powered solely by diesel fuel, then the following emissions standards apply:*
 - i. *By March 20, 2014, operator and contractor nonroad engines shall achieve horse power-hour weighted average site emissions equivalent to U.S. EPA Tier 2 nonroad diesel engine standards or better.*
 - ii. *By September 24, 2015/ March 20, 2016, 25% of all operator and contractor engine utilization (hp) shall comply with U.S. EPA Tier 4 emissions standards for particulate matter (PM).*
 - iii. *By September 24, 2016, 75% of all operator and contractor engine utilization (hp) shall comply with U.S. EPA Tier 4 emissions standards for particulate matter (PM).*
 - iv. *By September 24, 2017, 95% of all operator and contractor engine utilization (hp) shall comply with U.S. EPA Tier 4 emissions standards for particulate matter (PM).*
 - v. *These engines must use Ultra-Low Sulfur Diesel fuel (15 ppm of sulfur) at all times.*
- b. *If the fracturing pump is powered by a dedicated diesel heavy-duty vehicle engine, then the following emissions standards apply:*
 - i. *By March 20, 2013, 50% of the heavy-duty vehicle engines used to power fracturing pumps, must meet U.S. EPA's Final Emission Standards for 2007 and Later Model Year Highway Heavy-Duty Vehicles and Engines for particulate matter (PM) emissions.*
 - ii. *By September 24, 2014, 80% of the heavy duty vehicle engines used to power fracturing pumps, must meet U.S. EPA's Final Emission Standards for 2007 and Later Model Year Highway Heavy-Duty Vehicles and Engines for particulate matter (PM) emissions.*
 - iii. *These engines must use Ultra-Low Sulfur Diesel fuel (15 ppm of sulfur) at all times.*

11.3 *CRSD will develop a standard and implementation date for all other engines located at the well pad.*

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	Observed during site visits
Conformance Assurance:	
Ongoing (annual cycle)	Observed during site visits
Re-Certification:	
90 day operational window (active sites)	Observed during site visits

Auditor: Verify conformance to standard.

Performance Standard 12:

The following standard is only applicable to compressor engines dedicated to unconventional activities:

- 12.1 By March 20, 2014, existing compressor engines greater than 100 horsepower may not emit more than 1.5 grams of NOx per horsepower-hour.*
- 12.2 Any new, purchased, replacement, reconstructed, or relocated lean-burn engines greater than 100 horsepower and up to 500 horsepower may not emit more than 1.0 g/hp-hr for NOx; 2.0 g/hp-hr for CO; 0.70 g/hp-hr for VOCs.*
- 12.3 Any new, purchased, replacement, reconstructed, or relocated lean-burn engines greater than 500 horsepower may not emit more than 0.50 g/hp-hr for NOx; 47 ppmvd at 15% O2 or 93% reduction for CO; 0.25 g/hp-hr for VOCs; 0.05 g/hp-hr HCHO.*
- 12.4 Any new, purchased, replacement, reconstructed, or relocated rich-burn engines greater than 100 horsepower and up to 500 horsepower may not emit more than 0.25 g/hp-hr for NOx; 0.30 g/hp-hr for CO; 0.20 g/hp-hr for VOCs.*
- 12.5 Any new, purchased, replacement, reconstructed, or relocated rich-burn engines greater than 500 horsepower may not emit more than 0.20 g/hp-hr for NOx; 0.30 g/hp-hr for CO; 0.20 g/hp-hr for VOCs; 2.7 ppmvd at 15% O2 or 76% reduction for HCHO.*

Note: This standard will be updated to reflect any future determinations from regulatory agencies with regard to the NOx limitation.

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	50% of compressor stations
Conformance Assurance:	
Ongoing (annual cycle)	10% of compressor stations
Re-Certification:	
90 day operational window (active sites)	25% of compressor stations

Auditor: Confirm engines and emissions controls.

Performance Standard 13:

13.1 By October 15, 2013, all (existing or new) individual storage vessels at the well pad with VOC emissions equal to or greater than 6 tpy must install controls to achieve at least a 95% reduction in VOC emissions.

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	50% of new storage vessels (commissioned during period), and 10% of pre-existing vessels
Conformance Assurance:	
Ongoing (annual cycle)	10% of storage vessels
Re-Certification:	
90 day operational window (active sites)	25% of new storage vessels (commissioned during period), and 10% of pre-existing vessels

Auditor: Visually document installation of control equipment as required.

Performance Standards 14.2, 14.3, 14.5:

This standard is applicable to new and existing equipment dedicated to unconventional activities unless stated otherwise.

14.2 By October 15, 2013, pneumatic controllers (both existing and new) must be low – bleed, with a natural gas bleed rate limit of 6.0 scfh or less, or zero bleed when electricity (3-phase electrical power) is on-site.

14.3 New centrifugal compressors may not contain wet oil seals. Operators must replace worn out wet seals on existing centrifugal compressors with dry seals.

14.5 Eliminate VOC emissions associated with the prevention of well-bore freeze-up (only de minimis emissions are permitted).

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	50% of facilities with pneumatic controllers commissioned during period and 10% of pre-existing facilities with pneumatic controllers
Conformance Assurance:	
Ongoing (annual cycle)	5% of facilities with pneumatic controllers
Re-Certification:	
90 day operational window (active sites)	25% of facilities with pneumatic controllers commissioned during period and 5% of pre-existing facilities with pneumatic controllers.

Auditor: Visually document installation of equipment as required.

Performance Standard 14.6

This standard is applicable to new and existing equipment dedicated to unconventional activities unless stated otherwise.

14.6 *Existing and new compressors are required to be pressurized when they are off-line for operational reasons in order to reduce blowdown emissions.*

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	Observed during site visits
Conformance Assurance:	
Ongoing (annual cycle)	Observed during site visits
Re-Certification:	
90 day operational window (active sites)	Observed during site visits

Auditor: Document conformance.

Performance Standard 15:

15.1 *By March 20, 2014, 80% of all trucks used to transport fresh water or well flowback water must meet U.S. EPA’s Final Emission Standards for 2007 and Later Model Year Highway Heavy-Duty Vehicles and Engines for particulate matter (PM) emissions.*

15.2 *By September 24, 2015, 95% all trucks used to transport fresh water or well flowback water must meet U.S. EPA’s Final Emission Standards for 2007 and Later Model Year Highway Heavy-Duty Vehicles and Engines for particulate matter emissions.*

15.3 *All on-road vehicles and equipment must limit unnecessary idling to 5 minutes, or abide by applicable local or state laws if they are more stringent.*

15.4 *All on-road and non-road vehicles and equipment must use Ultra-Low Sulfur Diesel fuel (15 ppm of sulfur) at all times.*

Field Audit Frequency	
Initial Certification:	
90 day operational window (active sites)	Observed during site visits
Conformance Assurance:	
Ongoing (annual cycle)	Observed during site visits
Re-Certification:	
90 day operational window (active sites)	Observed during site visits

Auditor: Visually document conformance on sites.