Western States Petroleum Association
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Catherine H. Reheis-Boyd
President

September 20, 2012

Mr. Richard Bode (rbode@arb.ca.gov)
California Air Resources Board
1001 I Street,
Sacramento, CA 95814

RE: Comments on Proposed Amendments to Mandatory Reporting of Greenhouse Gas Emissions

Dear Mr. Bode:

The Western States Petroleum Association (WSPA) is a trade association that represents 27 companies that explore for, develop, refine, market and transport petroleum, petroleum products and natural gas in the Western U.S. Many members have operations in California and have worked diligently with you and your staff as we work through the issues involved in the implementation of AB 32 emission reduction targets.

WSPA appreciates the opportunity to comment on the California Air Resources Board (ARB)'s Attachment A, Proposed Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (title 17, California Code of Regulations 95100 et seq.), dated August 6, 2012. We also want to express our appreciation to you and your staff for their continued willingness to work with WSPA and its members on the proposed amendments to the Mandatory Reporting Regulation (MRR). Based on a preliminary review of Attachment A, WSPA would like to specifically express our appreciation to ARB for hearing our concerns related to the "field accuracy assessment" requirement and providing operators the choice to decide when and at what frequency any additional meter calibration assessments, above and beyond the current calibration requirements specified in Section 95103(k), should be performed.

WSPA members subject to meter calibration requirements know best the operation and calibration requirements of their meters, and therefore, WSPA supports ARB allowing them the flexibility to determine how best to ensure meter accuracy. However, WSPA has identified a few sections that we believe are in need of further clarification and have included them in our

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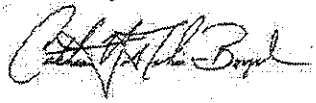
comments. Further, WSPA also appreciates ARB incorporating additional clarification in Section 95103(k)(7)(A) for financial transaction meters.

Our detailed comments are attached and we look forward to working with you in the future when ARB prepares additional changes as part of its expected 15-day comment package. Should you have any comments or questions, feel free to contact me or Mike Wang (mike@wspa.org; cell (626)590-4905).

Sincerely,



cc: Edie Chang (echang@arb.ca.gov)
David Edwards (dedwards@arb.ca.gov)
Mike Wang (mike@wspa.org)

Attachment: Comments on ARB MRR Revisions

Attachment: WSPA Comments

Specific Comments

WSPA has identified the following additional issues for ARB review and incorporation in the proposed MRR regulation.

Definitions

WSPA supports ARB's proposed definition for field accuracy assessment, and in particular making clear that the assessment is both voluntary, and should be done in a manner that does not interrupt operations or require removal of the meter or require a primary element inspection. However, we are concerned with the addition of the words "if possible" were added at the end of the definition. WSPA believes adding the words "if possible" could be interpreted that ARB may, require a facility operator to remove the meter, during a field accuracy assessment.

We recommend ARB delete the "if possible" from the definition so that it reads:

> (172) "Field accuracy assessment. Revise to read: means a test, check, or engineering analysis intended to confirm that a flow meter or other mass or volume measurement device is operating within an acceptable accuracy range. A field accuracy assessment should be conducted in a manner that does not interrupt operations or require removal of the meter or require primary element inspection~~, if possible~~.

Section 95101(a)(1)(B), (b)(2), (e), and Section 95101 Applicability for Petroleum and Natural Gas Systems. WSPA notes that the applicability threshold require petroleum and natural gas system facilities to include "process" emissions with respect to the 10,000 metric ton CO2e threshold while including process, fugitive, and vented emissions with respect to the 25,000 metric ton CO2e threshold. However, it is unclear from the current definitions which petroleum and natural gas systems are considered "process emissions."

WSPA recommends ARB clarify which sources are considered "process emissions".

Section 95102(311) Definitions. This section defines "Product data" as the sector-specific data specified in sub-articles 2 and 5 of this article, including requirements in 40 CFR Part 98. The ARB MRR requires several data reporting requirements for Petroleum and Natural Gas Systems including activity data reporting of Section 95157. It is unclear which sector specific data is considered "product" or "product data."

WSPA recommends ARB include a definition of "product" as follows:

> "Product means a commodity produced and used on site or sold to a third party by a facility … "
>
> Alternatively, WSPA recommends ARB identify which specific data points are considered product data for MRR purposes.

Section 95103(k)(1) Flow Measurement "Emissions Data Metering for GHG Reporting". While ARB's "Emissions Data Metering for GHG Reporting" dated March 1, 2012 guidance document is a valid and stand-alone document that provides necessary guidance to facility operator reporting requirements, WSPA recommended in our July 17 comment letter that ARB incorporate by reference the March 1, 2012 guidance document to ensure that both reporters and verifiers understand that meter calibrations conducted prior to January 1, 2012, under: 1) the old ARB 2007 MRR regulation, 2) Federal EPA 40 CFR requirements or 3) OEM manufacturers recommended procedures, would satisfy Section 95103(k) meter calibration requirements through 2012 and beyond, depending on the year such calibrations were conducted and meet the requirements of Section 95103(k)(4), (i.e., no less than 30 months or greater than 48 months).

Based on a review of Attachment A, it is not clear whether the provisions and intent of the ARB guidance document are adequately reflected, unless we have missed relevant language that addresses this issue. WSPA recommends ARB clarify in the regulation that the meter calibration guidance criteria as specified in the March 1, 2012 Guidance document, reflects the three options which operators could have utilized (prior to January 1, 2012) to satisfy the meter calibration requirements. WSPA believes it would be helpful to include, at a minimum, the various meter calibration options operators may have used (prior to January 1, 2012) to meet compliance with 95103(k) meter calibration requirements.

WSPA provides the following suggested language (bold underlined) for ARB consideration to Section 95103(k)(3):

> (3) For facilities and suppliers that become subject to this article after January 1, 2012, all flow meters and other measurement devices that provide data used to calculate GHG emissions or product data must be installed and calibrated no later than the date on which data collection is required to begin under this article. ***However, flow meters and measurement devices that were calibrated prior to January 1, 2012, based on either the requirements of the 2007 version of the mandatory reporting regulation, manufacturer's recommended procedures, or methods specified in 40 CFR Part 98, would not be required to conduct future re-calibrations provided the time interval between successive calibrations specified in 95103(k)(4) has not elapsed.***

Section 95103(k)(6) and (k)(6)(C) Meter Accuracy Requirement. As mentioned above, WSPA appreciates and supports the ARB revisions in Section 95103(k)(6)(B), by making the field accuracy assessment an optional requirement, thereby allowing individual operators to decide which (if any) meters they want to use to conduct a field accuracy assessment. However, WSPA does suggest a minor clarifying edit in Section 95103(k)(6), by adding the words "*if applicable*", after the sentence "..and field accuracy assessment". WSPA understands that the field accuracy assessment is voluntary, but we believe adding the words "if applicable" would make it clear that it is optional. In addition, we believe it would be more clear to add the words "by other means" to 95103(k)(6)(C).

WSPA recommends ARB incorporate the following language (bold underlined) to Section 95103(k)(6):

(6) In addition to the specific calibration and field accuracy assessment requirements ***if applicable*** specified below, all flow meter and other measurement devices covered by this part, regardless of type, must be selected, installed, operated, and maintained in a manner to ensure accuracy within ±5%.

(C) Pursuant to paragraph (k)(10) of this section, in the event of a failed calibration or recalibration, operators or suppliers who choose not to perform the annual field accuracy assessment specified in paragraph (6)(B) of this section for one or more mass or volume measurement devices must demonstrate data accuracy ***by other means*** going back multiple years to the most recent successful calibration. Multiple years of data may be deemed invalid if accuracy cannot be demonstrated by other means. For operators and suppliers who conduct the annual field accuracy assessment, and a device is found to be out of calibration, accuracy must be demonstrated ***by other means*** back to the most recent successful calibration or the most recent successful field accuracy assessment, whichever is most recent".

Section 95103(k)(6)(A)(1): ARB is proposing to add language to 95103(k)(6)(A) to clarify that 95109(b) may be used to obtain approval for alternate calibration methods if the specified methods are not feasible.

WSPA recommends ARB incorporate similar language (bold underlined) to Section 95103(k)(6)(A)(1) for primary element inspections:

"Section 95103(k)(6)(A)(1): Pressure differential devices must be inspected at a frequency specified in subparagraph (k)(4) of this section. The inspection must be conducted as described in the appropriate part of ISO 5167-2 (2003), or AGA Report No 3 (2003) Part 2, both of which are incorporated by reference, or a method published by an organization listed in 40 CFR §98.7 applicable to the analysis being conducted. If the device fails any one of the tests then the meter shall be deemed out of calibration. If OEM guidance for a particular pressure differential device recommends against disassembly and inspection of the device, disassembly and inspection requirements in this paragraph do not apply. Documentation of OEM guidance must be made available to verifiers and ARB upon request. ***If the methods specified in ISO 5167-2 (2003), AGA Report No 3 (2003) or 40 CFR §98.7 do not apply or are not possible for a particular device, the procedures in section 95109(b) must be followed to obtain approval for an alternative inspection procedure".***

Section 95103(k)(10): Meter Calibration Requirements

WSPA believes that it would help to clarify the requirements for meters or other measurement devices when they represent less than 5% of the total facility emissions.

WSPA recommends the following language revisions:

Section 95103(k)(10):

(10) If the results of an initial calibration, or a recalibration, or field accuracy assessment fail to meet the required accuracy specification, and the emissions or product data estimated using the data provided by the device represent more than

5 percent of total facility emissions or product data on an annual basis, the operator must demonstrate by other means to the satisfaction of the verifier or ARB that measurements used to calculate GHG emissions and product data still meet the ± 5% accuracy requirements going back to the last instance of successful field accuracy assessment or calibration of the device. ***When the emissions or product data estimated using the data provided by the device represent less than 5 percent of total facility emissions or product data on an annual basis, the operator must demonstrate to the satisfaction of the verifier or ARB this emission estimate of less than 5 percent of total facility emissions or product data, but there are no requirements to demonstrate accuracy back to the last instance of a successful field accuracy assessment or calibration for these devices.*** Where the results of an initial calibration, recalibration, or field accuracy assessment fail to meet the accuracy specification ***and the operator is not able to demonstrate by other means that the measurements still meet the +/- 5% accuracy requirements,*** the verifier shall note at a minimum a nonconformance as part of the emissions data verification statement.

Section 95102(a)(354) Definition of "Primary Refinery Products". WSPA noted that ARB added the word "finished" to "motor gasoline" in the primary refinery products definition (#354). WSPA requests that ARB clarify the context in which the term "finished" applies, and in particular, whether it is applicable to the transportation fuels reporting requirements. For example, the 2011 reporting year spreadsheet had separate line items for reporting blend stocks and ethanol, and therefore, raises a potential for confusion as to what has to be reported. WSPA requests ARB clarify what the "finished" reference applies to.

Section 95102(a) Definition for "Refiner". WSPA appreciates and supports the revisions ARB made to Section 95121(d)(5), by replacing the term petroleum refineries with "refiners". To ensure both operators and verifiers understand what the term "refiners" mean, WSPA recommends ARB include in Section 95102(a) the following new definition:

> *xx.* ***"Refiner" Means an individual entity or a corporate wide entity responsible for the reporting of transportation fuels required in this article.***

Section 95112 Electricity Generation and Cogeneration Units. ARB added a requirement to demonstrate accuracy of engineering estimates of energy flow to provide sufficient data quality for the state-wide inventory without the full metering and 5% accuracy requirements that are placed on data used for calculating cap-and-trade covered emissions. However, the proposed statement is unclear as to the level of accuracy required.

WSPA recommends that ARB revise the statement to:

> If engineering estimation is used to report disposition of generated energy or energy flow data that are used directly to determine covered emissions or covered product, facility operators must demonstrate ± 5% accuracy of the chosen engineering estimation method.

ARB has proposed in Section (b) a new requirement to report cogeneration units separately from other units even though these might be included in a common pipe. The proposed change would

not allow reporters to use the common pipe approach. Secondly, reporters will have to install and calibrate equipment level meters.

WSPA recommends that ARB allow reporters to use common pipe approach for calculating emissions and allow use of meters that do not meet the stringent accuracy requirements to allocate the emissions (calculated from quality assured common pipe meters) across the cogeneration and other units on the common pipe.

Section 95121(a)(1) and Section 95121(a)(2) Suppliers of Transportation Fuels. WSPA recommends ARB switch the order of Sections 95121(a)(1) and 95121(a)(2), as it makes the sections read better by referencing liquefied petroleum gas last in (a)(2), with respect to the following sections (b) and (d).

Section 95121(d)(5) Data Reporting Requirements. WSPA recommends ARB incorporate the following revisions in Section 95121(d)(5), to better clarify that refiners that supply liquefied petroleum gas to entities that are not licensed by the California Board of Equalization as a fuel supplier, must also report the volume of liquid petroleum gas in barrels supplied in California.

WSPA recommends the following language (bold italics) to Section 95121(d)

(d) Data Reporting Requirements. In addition to reporting the information required…

(5) In addition to the information required in 40 CFR 98.396, ~~petroleum refineries~~ *refiners* ***who supply liquefied petroleum gas to entities not licensed by the California Board of Equalization as a fuel supplier*** must also report the volume of liquefied petroleum gas in barrels supplied in California as well as the volumes of the individual components as listed in 40 CFR 98 Table MM-1, except for ***liquefied petroleum gas*** for which a final destination outside California can be demonstrated.

Section 95122 Supplier of Natural Gas, Natural Gas Liquids, Liquefied Petroleum Gas, Compressed Natural Gas, and Liquefied Natural Gas. WSPA requests that ARB clarify the definitions of NGL and LPG across the MRR and cap-and trade regulations for the natural gas processing industry segment. Gas processing plants that fractionate natural gas into natural gas liquids (NGLs) are subject to Section 95122 or 40 CFR Part 98 Subpart NN. For 2011, these facilities were required to report the volume and emissions associated with all NGLs (per Subpart NN) and LPG per the additional requirements of Section 95122. There is an overlap of the requirements because the LPG also meets the definition of an NGL. For natural gas fractionators, our understanding is that LPG is a subset of NGL

We understand that NGL and LPG have been defined separately in both the ARB MRR and cap-and-trade regulations and they agree. However, the relationship between them is unclear. During the verification process for 2011 data for onshore natural gas processing facilities, different verifiers had different interpretations of the relationship between the two. The verifiers are required to look at the cap-and-trade regulation to determine covered emissions and covered products. However, the inconsistent use of the words NGL, LPG, and fuels between the two

regulations caused significant confusion in understanding the covered emissions and covered product for gas processing plants.

Section 95129(d)(2) – Missing Data Provisions

For instances when the fuel consumption data capture rate is equal to or greater than 95.0 percent during the data year this section contains potentially costly alternatives to develop an estimate. Alternative measurement devices for each fuel flow meter would be very costly. Obtaining process data on a routine basis that would provide alternative fuel flow numbers would also, in many cases, be a costly endeavor. Note that this is for situations where 95% or more of the data is not missing.

We propose the following change (taken from language in 95129(c):

95129(d)(2)(A):

(A) *Single Fuel.* For missing data periods that occur when only one type of fuel is being combusted, the operator must provide substitute data for each missing data period as follows:

1. If the fuel consumption data capture rate is equal to or greater than 95.0 percent during the data year, ***the operator must substitute the arithmetic average of the values of that parameter immediately preceding and immediately following the missing data incident that are representative of the fuel type. If the "after" value has not been obtained by the time that the GHG emissions data report is due, the operator must use the "before" value for missing data substitution***. ~~the operator must develop an estimate based on available process data that are routinely measured and recorded at the unit (e.g., electrical load, steam production, operating hours) or fuel consumption data recorded at other upstream or downstream measurement points.~~

Section 95131(b)(9) Revisions of Emissions Data Report. In WSPA's July 17, 2012 comment submittal, WSPA recommended ARB incorporate amendments to Section 95131(b)(9), that clarified that emissions data reports that are revised as a result of review by the verification team and involve simple reporting errors, interpretation errors, oversights or changes outside the control of the reporter, would not signify a violation, except in the circumstance where the reporter failed to submit the revised emissions data report.

WSPA requests that ARB reconsider our initial comment and the following proposed language changes (in bold italics) to Section 95131(b)(9), which were set forth in our comments:

Emissions Data Report Modifications. As a result of data checks by the verification team and prior to completion of a verification statement(s), the reporting entity must make any possible improvements or corrections to the submitted emission data report, and submit a revised emission data report to ARB. ***If required improvements or corrections to the submitted report are a result of simple reporter error or simple interpretation errors, or oversight, or are outside the control of the reporter, such revisions shall not be deemed to be violations under Section 95107 for the original***

*data report. However, f*ailure to *submit a revised emissions data report* ~~do so~~ will result in an adverse verification statement. The reporting entity shall maintain documentation to support…

Section 95150(3) Definition of onshore natural gas processing source category industry segment. WSPA believes that it was not ARB's intention to exclude booster stations from the definition of this segment and recommends that ARB explicitly include booster stations in this definition. In addition, WSPA believes ARB meant to follow the EPA definition and therefore recommends modifying the definition of the segment as follows:

> Onshore natural gas processing. Natural gas processing means the separation of natural gas liquid (NGLs) or ***non-methane*** gases from produced natural gas…

Section 95152(c) Onshore petroleum and natural gas production facility. WSPA is aware that ARB amended this section to require reporters to monitor and report emissions associated with "Equipment and blow-downs" within the oilfield. Currently, reporters are not required to record blow-down events and associated parameters. Therefore, reporters would not have any information available to report for the last 9-10 months of 2012 for the 2012 MRR reporting year. In addition, pertinent operational information to assess blow-down events is unavailable, even if an BAMM was utilized. Finally, the implementation of data collection processes throughout a basin will require at least a few months before any quality assured data is obtained. Because this is a new requirement, WSPA recommends that ARB defer blow-down event reporting until 2013 and allow emissions associated with equipment blow-downs to be calculated using either (1) specific quantification methods for emissions associated with blow-downs or (2) an alternative method as specified in our comment below in Section 95154(f).

95153(c) - Acid gas removal (AGR) vents. The existing regulation allows two calculation methods for Method 3. Currently, reporters may use existing inlet or outlet meters to measure throughput and calculate emissions. The proposed regulation allows only inlet meter method that uses proposed Equation 4. With the proposed change, reporters will have to install and calibrate inlet meters on all AGR units and obtain additional monthly H2S samples. The proposed requirement adds unnecessary burden on reporters to report emissions from this source category given the fact that the magnitude of emissions is very small (< 1%) or de minimis compared to total facility emissions and the percent accuracy achieved is minimal compared to the effort and costs involved.

In addition, some AGR units serve emergency flares only in compliance with local air district requirements for H2S control. Therefore, these units are operated only during emergency situations. To comply with monthly analyses requirement, reporters will have to intentionally send gas to the flare every month for the sole purpose of taking a sample. This would violate conditions of our local air permit as well as add unnecessary criteria pollutant emissions and greenhouse gas emissions to the atmosphere.

WSPA requests ARB retain existing requirements for AGR units and require sampling only when the AGR units are in operation.

Section 95153(h) Onshore production storage tanks. The applicability of this section is unclear. It does not appear to apply to any storage tanks at California onshore production facilities. WSPA suggests that either (1) this section be deleted from the regulation or (2) language be added to the regulations that clearly states how this section applies to onshore production storage tanks.

Section 95153(k) – Associated Gas Venting and Flaring. The existing regulation allows reporters to calculate emissions from a cluster of wells within the same EIA field in lieu of a single well calculation. ARB has proposed requiring measurement of Gas to Oil Ratio (GOR) and emissions calculations at each single well. The GOR of producing wells is dependent on the characteristics of a production zone and reservoir properties. Therefore, the GOR remains similar from well to well within the same field or lease. Measuring GOR from each well in the same field or lease with hundreds to thousands of wells is unnecessarily burdensome on the operators due to the level of effort involved and cost of each test. Any accuracy achieved for the GOR is minimal compared to the total facility emissions. Most reporters have determined that these emissions are less than 1% of the total and can designate emissions from this entire source category as de minimis.

WSPA recommends ARB retain the existing monitoring and calculation method requirements for this source category.

Section 95153(m) Centrifugal Compressor Venting and Section 95153(n) Reciprocating Compressor Venting. ARB requires that annual measurement tests be conducted on compressors in both categories rated 250 hp or greater and that operate for more than 200 hours in a calendar year. Emissions required to be measured and reported include those associated with rod packing vents, unit isolation valve vents and blow-down valve vents. WSPA member companies have raised safety concerns regarding conducting required measurements on compressors that handle gases with high concentrations of hydrogen sulfide (H_2S). In some cases, concentrations of H_2S as high as 20,000 ppm have been noted, and while the operation of compressors is controlled and maintained, there is a safety concern regarding the potential for persons to be exposed while conducting required measurement and monitoring pursuant to this section. In addition to safety concerns associated with H_2S, WSPA is also concerned that the requirement to install temporary meters on gas lines that are tied to flares, raises the potential of introducing oxygen into the system resulting in a flammable mixture of vent gas and oxygen.

WSPA recommends ARB revise this section to allow operators the ability to petition the Executive Officer to utilize an alternative method to quantify emissions, in situations where the method is either incorrect or there exist potential safety hazards and risks. Additionally, WSPA recommends ARB clarify in this section, that because reciprocating compressor emissions associated with potential gas leaks are captured either by a vapor recovery system or piped to a combustion device (i.e., flare), the emission measurement and monitoring requirements in this section would not be required.

Section 95153(o) Leak Detection and leaker emission factors. This section has been revised to reflect the new 40 CFR 98 subpart W requirements. From 2011 data, fugitive emissions conservatively estimated using Subpart W population counts and emission factors are less than 1 or 2% of the total facility emissions (de minimis). With proposed leak detection, we expect a

fewer number of leaks (from current LDAR programs even with a lower leak detection threshold of 2,000 PPM). Requiring leak detection for an entire hydrocarbon basin is unnecessary burden on Onshore Production reporters whose conservative fugitive emissions contribute to less than 1-2% of facility emissions.

WSPA recommends that ARB require an Onshore Production reporter to conduct leak detection only if the estimated fugitive emissions using the existing calculation method are greater than or equal to 3% of facility emissions or 20,000 MT CO2e. Otherwise, a reporter may use existing calculation method for fugitive equipment leaks source category that uses population counts and emission factors.

Section 95153(s)(2)(A). This section requires Onshore Petroleum and Natural Gas Production facilities to determine mole fraction of produced natural gas using annual weighted average method described in 95115(c)(4). Currently, reporters are required to do an arithmetic average of the all samples at an EIA field or lease level depending on the configuration. The number of samples varies depending on the equipment at that field/lease. To calculate annual weighted average mole fraction, reporters will have to install meters to measure gas production at all fields/leases and obtain monthly gas samples. The sum of emissions from source categories that use this calculation method range between 0.1 to 0.5% of total facility emissions (2011). The quantity is not expected to change with change in calculation method and additional monitoring burden. WSPA recommends ARB retain existing monitoring and calculation method for determining mole fraction of produced natural gas.

Section 95153(v) Crude and Condensate Dissolved CO2 and CH4. WSPA suggests that this section include produced water tanks which are part of the crude oil and natural gas production system. Thus the section title would read:

> (v) Crude oil, Condensate, and Produced Water Dissolved CO_2 and CH_4

WSPA recommends correcting Spw to Scc in Section (v)(1)(a).

Further, WSPA recommends for clarity the following revision of the+ Vapor Recovery System Method in Subsection (v)2:

> (2) Vapor recovery system method. For storage tank systems connected to a vapor recovery system, calculate the mass of CO_2 and CH_4 liberated from crude oil, condensate, and produced water (CO_2 and CH_4 total from produced fluids) by direct measurement (volume) and sampling (composition) and analysis of the vapor recovery unit (VRU) gas stream to determine the mass of CO_2 and CH_4 captured by the vapor recovery system per barrel of crude oil or condensate produced. Vapor recovery system measurements may include gases from crude oil and condensate and produced water, this can be reported as total vapor from produced fluids.
>
> Calculate CO_2 and CH_4 emissions from the total vapor recovery system using Equation 33B:
>
> $E_{CO2/CH4} = (S_t * V_t)(1-(VR*CE))$ (Eq. 33B)

Where:

$E_{CO2/CH4}$= Annual CO_2 or CH_4 emissions in metric tons.
S_t = mass of CO_2 or CH_4 recovered in a VRU per barrel of produced water.
V_t = Annual throughput of the tank in barrels (including oil, water and condensate).
VR = percentage of time vapor recovery unit was operational (expressed as decimal)
CE= Collection efficiency of the vapor recovery system (expressed as decimal).

S_t is calculated in the following steps:

1. Measure the vapor volume captured by the vapor recovery system (total scf per year)
2. Determine the mass of CO_2 and CH_4 in the gas by using the mole fraction % of each gas from an annual lab sample analysis.
3. Calculate the total yearly masses of CO_2 and CH_4 from the recovered gas using Steps 1 and 2.
4. Calculate S_t total mass of CO_2 or CH_4 per barrel of total produced fluid by dividing by the total produced fluid throughput of the tank system (oil, condensate and water)

(B) Emissions resulting from the destruction of the VRU gas stream are not exempt from reporting and the destruction device should be identified here.

Section 95153(w) Produced Water Dissolved CO2 and CH4. WSPA suggests that produced water tanks be added to the definition of Section 95153(v) and that this section be deleted from the regulation.

Section 95157(c)(19) and 95153(y) Onshore Production Combustion Emissions. ARB has revised Section 95157(c)(19) and 95153(y), which would require reporters to calculate and report stationary and portable combustion emissions, including fuel type, unit type and combustion type. As a result, reporters would no longer be able to utilize common pipe metering as allowed under Section 95115. The proposed revisions would essentially eliminate the ability for operators to utilize current metering systems that involve common pipe metering, and instead they would have to install additional meters to report emissions by fuel type, unit type and combustion type. WSPA believes it was not ARB's intent to eliminate the ability of operators to utilize "common pipe" metering; rather, this revision appears to have been an oversight that occurred in the process of incorporating EPA Subpart W requirements into the MRR regulation.

WSPA recommends ARB revise Section 95153(y) and Section 95157(c)(19), to allow operators the ability to retain existing calculation and reporting methodologies, including common pipe metering, for Stationary Combustion equipment and to meet aggregate reporting requirements for portable equipment.

Section 95154(f) Special reporting provisions: Best Available Monitoring Methods. ARB has proposed best available monitoring methods for only certain sources categories for 2012. However, ARB has proposed several changes that are not currently included as covered by

BAMM. Petroleum and Natural Gas Systems facilities are subject to numerous new monitoring and reporting requirements for entire basin that are being applied retroactively for 2012 and with very little time (couple months at the most) to implement the changes before January 1, 2013. From our 2011 experience, we have learned that having BAMM availability for only certain specific parameters is not enough. WSPA requests BAMM for all new proposed requirements for Petroleum and Natural Gas Systems for 2012 and 2013.

It is understood that BAMM will no longer be available after January 1, 2013. WSPA is concerned that situation may arise in the future where an alternative to the reporting methods would be needed in order to meet the requirements of the regulation. As noted in Section 95152(n) above, WSPA believes ARB should provide the ability for operators to propose alternative methods of quantifying emissions, in the event the method required poses potential safety issues.

WSPA suggests that the following language (in bold italics) be added to the first paragraph of Section 95153 (Calculating GHG emissions) to provide the ability for operators to propose alternative methods to quantifying emissions:

> The operator of a facility must calculate and report the annual GHG emissions as prescribed in this section. The facility operator who is a local distribution company reporting under section 95122 of this article must comply with section 95153 for reporting emissions from the applicable source types in section 95152(i) of this article. ***If the facility operator determines that there is the absence of an error in the calculation methodologies in this section or there are other factors involving safety or there are outside the control of the operator, that result in the inability to obtain the required emission data and would results in reporting errors, the operator can petition the ARB to use an alternative calculation methodology, and use of such methodology is subject to approval by the Executive Officer.***

Section 95156 – Additional Data Reporting Requirements. ARB has proposed several requirements (Section 95156(a)) to report additional data for Onshore Petroleum and Natural Gas Production operators. Most of the reporting requirements for cogeneration facilities are redundant because these facilities are already subject to 95112 reporting requirements. In addition, ARB has not proposed a method for data collection, monitoring, and calculating the additional data. The allocations of facility CO2e to electricity, steam, thermal EOR, non-thermal EOR have not been proposed. In the absence of a regulatory calculation method, it is impossible to have uniform methods of interpretation across the industry and verifiers resulting in some facilities being subject to more stringent requirements than others.

WSPA recommends that ARB include calculation methods for these parameters specified for reporting. In addition, WSPA recommends that any redundancy in reporting information is minimized.

Section 95156 – Additional Data Reporting Requirements. ARB has proposed several requirements (Section 95156(d)) to report additional product data for Onshore Natural Gas Processing operators. Natural Gas fractionators are already required to report these parameters under Section 95122.

WSPA recommends ARB minimize any redundancy in reporting information.