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Catherine H. Reheis-Boyd President

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Via web: http://www.arb.ca.gov/lispub/comm/bclist.php

Clerk of the Board California Air Resources Board 1001 I Street Sacramento, California 95814

RE: Mandatory Reporting of Greenhouse Gas Emissions – Comments on 2nd Proposed 15-Day Modifications

Dear Clerk of Board:

The Western States Petroleum Association (WSPA) is a trade association representing twenty-seven companies that explore for, produce, refine, transport and market, petroleum and petroleum products and natural gas in California, Arizona, Nevada, Hawaii, Oregon and Washington. Most of our companies have operations within California and are significantly affected by regulations proposed by the California Air Resources Board (ARB).

Because WSPA members are subject to the ARB Mandatory Reporting of Greenhouse Gas (GHG) Emission requirements ("MRR"), the most recent set of proposed 15-day revisions will have an impact upon WSPA member reporting requirements and subsequently could have an impact on future energy supplies and the economy. In that regard, WSPA and its members have been active participants in the public policy discussions and implementation requirements of all program facets of AB 32.

We have previously commented on issues affecting MRR regulations to ARB (December 15, 2010) and EPA (June, 2009) and most recently, on the ARB's first 15-day regulations (August 21, 2011). In addition, WSPA has submitted comments on a key element of AB 32's implementation, the Cap & Trade (C/T) Regulation (also August 21, 2011).

While WSPA appreciates many of the positive changes to the proposed regulations and staff's willingness over the past several months to meet with WSPA and work with us on our concerns, we have identified several issues within the 2nd 15-day package that remain unresolved or need clarification.

Definitions

<u>Material Misstatement (P.43)</u>: was changed to include "single" product data component containing greater than 5%. This requirement, in combination with the prohibition in use of missing data substitution for products, is overly restrictive when the impact of single product data errors can be minimal compared with the overall reported products data.

<u>Recommendation</u>: We recommend that the word "single" be deleted. We also request missing data substitution provisions be incorporated into this section, to allow operators the ability to substitute missing data in the event a product meter goes down, through no fault of their own. This change will not affect the overall accuracy of the GHG or product data and still allow verification of information through data substitution if needed.

Section 95103(k)(1)

Section 95103(k), subpart (1), requires all monitoring and sampling devices used to provide data for GHG emissions calculations or product data, must be "calibrated prior to the year data collection is required to begin using the procedures specified in this section". For emission data collected for 2011, facility operators will have conducted calibration checks based on a 2 point criteria, as required by EPA; however, going forward into 2012, facilities will be required to comply with the new 3 point calibration check requirements (if OEM documentation is not available), as specified in Section 95103(k)(6)(A). WSPA assumes that facilities would not be required to retroactively go back and recalibrate meters to comply with the new 3 point calibration check requirement in Section 95103(k)(6)(A) for 2011, but going forward starting in 2012, the calibration check requirements would go into effect.

<u>Recommendation</u>: WSPA recommends ARB clarify in the MRR regulation as well as the FSOR that monitoring and sampling requirements including calibration checks and meter inspections done prior to this MRR regulation are compliant, provided these were completed by a method that meets 40 CFR 98 applicable provisions. Further, proposed calibration and inspection requirements for meters will be required as per the revised MRR regulation going forward in 1/1/2012, except for meters with new requirements which must meet the revised MRR regulation beginning 6/1/2012.

Section 95103(k)4: Recalibration Frequency

WSPA recommends ARB consider extending the timeframes described in Subsection 4(C), from 30 months to 66 months, as it will allow facilities additional time in which to conduct required calibration and inspections of pressure differential meters, and thereby reduce the need for operators to unnecessarily petition the Executive Officer (EO) for postponement approvals as described in Subsections (k)(7-9). We make this comment because facilities may not be able to precisely match operating requirements with inspections that may require units to be out of service.

<u>Recommendation:</u> WSPA recommends that Section (c) be modified as follows: "With the time between successive calibrations not to be less than 30 months or greater than 66 months."

This change will address instances where devices can only be calibrated during turnarounds or other periods when equipment is available for calibration. Amending the regulation in this

manner will remove an unnecessary burden on Executive Officer and Staff while still accomplishing the goal of ensuring accurate measurement of GHG emissions.

Section 95103 (k)(6)(A)(1)(b) – Meter Photo Documentation Requirements & Clean-up Prohibitions

Section 95103(k)(6)(A)(1)(b), specifically require facilities, in addition to conducting an inspection of the primary element, to document by photograph the element on both sides, prior to any treatment or cleanup of the element to clearly show the condition of the element as it existed in the pipe.

WSPA understands ARB's concerns to ensure meter elements are not tampered with prior to documentation. However, ARB should consider the following in regards to the above requirements:

<u>Meter Element Cleaning Prohibition:</u> Facilities generally follow a standard safety procedure to purge lines with nitrogen, as well as steam lines prior to removing from service. This is typically done as a safety precaution to protect against potential exposure to workers when handling and working on such equipment, which would also include pressure differential meters. Thus, because of safety concerns, ARB should understand that such purging of lines may have the result of "cleaning" equipment including meter elements, and therefore should not be considered a violation of Section 95103(k)(6)(A)(1)(b).

<u>Recommendation</u>: ARB should incorporate language in the Final Statement of Reasons (FSOR) that clarifies that the requirements of Section 95103(k)(6)(A)(1)(b), as well as the MRR regulation itself, must consider safety practices, requirements and procedures that are implemented to ensure safety of personnel and workers, to avoid any conflicts that could arise in either interpretation or implementation of the requirements of the revised MRR regulation.

Further, we recommend ARB ensure verifiers also understand that these safety issues are essential to ensuring personnel/worker safety when interpreting the MRR regulation requirements during the verification process.

<u>Photographing of Meter Elements:</u> WSPA understands ARB's reasons to ensure the condition of meter elements is documented during calibration and inspection procedures. However, WSPA requests ARB include an alternative consideration in the MRR that would eliminate the photography requirement, if the operator chooses to replace the element with a <u>new one</u>. If facilities choose to simply swap out the old meter with a new one, WSPA believes requiring photo documentation is not necessary. Additionally, WSPA members believe other ways could be developed that could provide methods of documenting and tracking of pressure differential meters, such as possibly encoding tracking identifying numbers and other information on element collars, in lieu of photo requirements.

Section 95103 (k)(7) – Recommend ARB Check Referenced Citation 95103(h)(1):

WSPA recommends ARB check the referenced citation "Section 95103(h)(1)" in 95103(k)(7). We believe the reference is in error, as we could not find a <u>"(1)"</u> in Section 95103(h).

Section 95103 (k)(9)(B): Request for Postponement

WSPA supports the revisions made to Section 95103(k)(7-9), that will allow facilities the ability to request EO approval to postpone meter calibration and inspection requirements for equipment that is in continuous operation and cannot be shut down within the timeframes specified in Section 95103(k)(4). In addition, in previous discussions with staff, WSPA members also expressed concerns regarding meters for which the only way to obtain access would be to literally cut through metal to conduct the PEI inspection, let alone the required calibration.

While WSPA members support the need to ensure accurate emissions reporting, it is critically important that ARB recognize the difficult conditions under which access is obtained to conduct required calibration and inspections (i.e., cutting through metal to gain access to meters that are welded internally within critical facility component operations and equipment, etc.). ARB should provide the support and approval to allow operators the ability to postpone calibration and PEI inspections within the framework of Subsections (k)(7-9). Without such approval, operators will be faced with conducting calibration and PEI inspections within timeframes that will leave no option but to shut down equipment and adversely impact facility operations.

Thus, WSPA cannot emphasize enough the importance that the EO must recognize how critically important obtaining postponement request approvals are to ensuring the ability for the petroleum refining and production industry to continue to operate in California, and that the EO recognizes the extensive technical and engineering challenges presented by ARB's MRR revisions.

<u>Recommendation</u>: WSPA recommends ARB incorporate a process to allow facilities who are denied postponement requests to appeal such decisions. If such requests are denied by the EO and subsequent appeal process, facilities will be forced to conduct meter calibrations within Section 95103(k)(4), which could result in significant impact to the facility.

In addition, because it is critical that the EO act on such postponement requests within a specified period to ensure facilities the ability to schedule and maintain compliance with MRR provisions, WSPA recommends ARB should include in Section 95103(k)(9), the EO must act on postponement requests within 30 days of submittal.

Further, ARB should clarify in the revised MRR regulation and the FSOR, that all monitoring and sampling devices that are used to quantify GHG emissions for the facility can use the calibration procedures and requirements conducted in 2011, including EPA 40 CFR 98 procedures, which would satisfactorily address the calibration requirements starting 1/1/2012. This clarification would help ensure that facilities can utilize the previous year's calibration procedures which is described in Section 95103(k)(1), whereby all monitoring and sampling devices used for GHG emission calculations or product data must "be calibrated prior to the year data collection is required to begin using the procedures specified in this section".

Given the timing of the expected finalization of the regulation in 2011 and the required calibration in 2012, many requests for postponement can be expected. Staff should provide a streamlined process for approval of requests. ARB should clarify in the FSOR and make requested clarifications in the final MRR the following:

• Facilities can use the calibration procedures and requirements conducted in 2011, including EPA 40 CFR 98 procedures, and that it satisfactorily addresses the calibration

requirements starting 1/1/2012; For meters with new requirements not required in 2011, should be required to meet the revised MRR regulation beginning 6/1/2012.

- The EO shall respond to a postponement request within 30 days, if no such response is noted, the request will be considered approved;
- Include in Section 95103(k)(9) that if the EO denies a postponement request or if the EO disagrees that the alternative demonstration of accuracy meets the accuracy requirement, a procedure to appeal such a decision be put in place. If such an appeal process results in the facility still receiving a denial in their postponement request, then facilities will be subject to complying with the timeline calibration and inspection procedures specified in Section 95103(k)(4).

Section 95103(k)(10) - Non-Conformance

Section 95103(k)(10) specifies that if the results of an initial calibration or recalibration fail to meet the required accuracy specification, at a minimum, a non-conformance shall be noted as part of the emissions data verification statement. As noted previously, WSPA understands ARB's need to ensure that accurate data collection and emissions reporting is done within the requirements of the MRR regulation. However, given the numerous amount of meters the oil and gas industry are required to maintain, both within the refining and oil & gas production industry, requiring a non-conformance determination where a single failed calibration check occurs, is simply not a realistic view of what is technically possible. While we understand a non-conformance determination does not automatically mean a negative verification, it nonetheless is a standard that is overly stringent. If such findings are noted, the requirements for data substitution for missing data and other criteria would ensure the accuracy and quality of the data.

<u>Recommendation</u>: WSPA requests ARB remove a single data calibration check automatically triggers a non-conformance determination.

Section 95105(c)(7) - Calibration Standards for Orifice Plates

Section 95105(c)(7) specifically require records of the most recent orifice plate inspections performed according to the requirements of IO 56-2(2003) section. WSPA requests ARB clarify in the final MRR and FSOR that these requirements for orifice plate inspections are prospective going forward into 2012, and are not retroactive to the 2011 data collection and reporting year requirements.

Sections 95107(b), (c) and (d) - Enforcement

While WSPA appreciates some of the proposed revisions ARB made relative to the enforcement penalty provisions in Section 95107, unfortunately the changes do not recognize important aspects of the AB32 verification program including the cost impact implications if ARB continues to maintain a per ton penalty provision. Our specific concerns are described as follows:

Per Ton Penalty Metric Is Excessive and Inappropriate for AB32 Program Requirements

Over the past several months, WSPA and other industry groups have discussed with ARB concerns with proposed AB32 penalty provisions. WSPA believes it is inappropriate for ARB to structure a penalty structure based on a per ton basis, simply because the AB32 GHG emission reporting program

requirements result in inventory amounts that are exponentially greater compared to other historical (criteria pollutant inventory) programs. Therefore, a "per ton" criteria as a penalty provision is not only inappropriate, but could result in penalties in the tens or hundreds of millions of dollars. Recognizing these differences between the AB32 GHG program and traditional criteria pollutant program requirements, WSPA believes it is more appropriate to set the penalty on a more appropriate metric, such as a "**Per 1,000 Ton**" metric, instead of per ton penalty.

Sub-sections (b) & (c) Fail to Recognize a Facility Obtaining a Positive or Qualified Positive Verification Determination:

In our August 11, 2011 comment letter, WSPA expressed continued concern with proposed Subsections (b) & (c), which as written, allows ARB authority to assess a penalty on any facility for each metric ton of CO2e emitted and not reported, and for each failure to measure, collect, record or preserve information required by this article, *regardless* of the fact the facility had obtained a positive or qualified positive verification from their verifier.

While the most recent revisions to Sections 95107 provide some level of understanding in terms of when enforcement would initiate, and some clarification that as long as the facility complies with the provisions of the article (MRR regulation), they are not in violation, WSPA still remains concerned with these sections and provides the following comments:

• <u>Section (c)</u>: WSPA remains concerned with the proposed revisions to Section (b), while the new language added clarifies no "enforcement action" will be taken until after the verification deadline date – as written it implies that a violation has occurred, and that no "enforcement action" will be taken during the verification period. WSPA assumes it is not ARB's intent to pre-suppose that violations are occurring; however, as written it can be interpreted in that manner.

WSPA recommends ARB revise Section (b) to clarify that, after a facility has obtained a positive or qualified positive verification, no violation or enforcement action will be taken, unless ARB determines through an audit review or other information that demonstrates a pattern in past MRR reports of under reporting of GHG emissions by the facility.

Recommendation: WSPA recommends ARB revise Section (b) as follows:

"Each metric ton of CO2e emitted but not reported as required by this article is a separate violation. ARB <u>will not may</u> initiate enforcement action under this subparagraph <u>until alleging that emissions were under-reported in an emissions</u> <u>data report only</u> after any applicable verification deadline for the pertinent report and if ARB determines that there is a recurring pattern of under-reporting. No violation or enforcement action will be taken if a facility obtains a positive or a gualified positive verification.

• <u>Section (d)</u>: WSPA requests ARB state in the Final Statement of Reason (FSOR) that for enforcement purposes, the MRR rule must be read as a whole, and a violation does not occur when an operator complies with an alternative provision applicable under the circumstances. For example, information will be considered to be measured, collected, recorded and preserved "in the manner required by this article" and no violation will occur when an operator complies

with the pertinent missing data substitution or interim data collection procedures specified in Section 95129.

Section 95113(l)(2): Energy Intensity Index (EII)

This section adds language relating to facilities that participate in the Solomon Energy Reviews program. Specifically, it adds requirement to report EII for 2008, 2009, 2010, and 2011. This section also added a requirement to continue to report EII beyond 2011. We recognize and appreciate that this change is required to provide data that supports an improved and equitable allocation process for allowances. However, the standard reporting years for EII are every other (generally even-numbered) year.

<u>Recommendation</u>: ARB should clarify that use of 2008 or 2010 data or use of any other Solomon EII data that is proffered by the facility as being representative for the specified years is sufficient. There also is a question of whether EII needs to be reported after 2014 if there is expectation that the index would be moved to some as yet unidentified, complexity weighted index starting in 2015.

Section 95122 Table 1 Transportation Fuel CH₄ and N₂O Emission Factors

WSPA believes that the transportation emission fuel factors shown in the table for transportation fuel emission for N2O & CH4 should be further evaluated before transportation fuel emissions are subject to compliance obligations. The current emission factors are inconsistent with the GREET model and inconsistent with how N2O and CH4 emissions are treated under EPA GHG reporting for transportation fuel emissions. Additionally, carbon emissions will be double counted by reporting CH4 since transportation fuel CO2 emissions are based on complete combustion of the fuel.

<u>Recommendation</u>: Re-evaluate the transportation fuel emission factors for N2O and CH4 for potential revision in 2012, to ensure consistency with GREET and to prevent double counting of carbon reported in CH4 emissions.

Section 95131 (b)(10): Requirements for Verification Findings

This section specifies that a material misstatement on a <u>single</u> product data component will lead to an adverse product data verification statement. This could lead to a finding of a material misstatement when the impact of that single product data component to the overall report could be minimal. For example, a refinery could sell a minimal amount of kerosene in a year compared with vast quantities of Distillate Fuel Oil No. 2 or other products in Table C-1 of 40 CFR Part 98. It is conceivable that it could be determined that the meter for the kerosene had a discrepancy causing an error percentage greater than 5% during a reporting year. Although a minor product, this would cause a finding of a material misstatement resulting in an adverse verification opinion for all products.

<u>Recommendation</u>: Similar to total reported emission sources, we recommend that a material misstatement be based on the total product data, rather than on a single product data component.

95131(b)(12)(A)

This section describes the methodology to determine if a facility has a "material misstatement" and includes an equation to determine the percent error of reported emissions and product data. Included in that equation are "omissions" of data. "Omissions" should not include missing data that has been replaced following appropriate missing data provisions in the rule, otherwise a facility may be found to have a material misstatement when that was not the intent. If applied correctly, missing data provisions should not contribute significantly to error.

<u>Recommendation</u>: To clarify this in the rule, we recommend that the following revision to the definition of "omissions" be made in this section (see sentence in bold):

"Omissions" means any covered emissions or product data the verifier concludes must be part of the emissions data report, but were not included by the reporting entity in the emissions data report. "Omissions" does not include missing data that has been replaced using appropriate missing data provisions in this rule.

Inadvertent Omissions

WSPA believes, given the voluminous number of comments that ARB received on the first 15-day comment period, some useful and appropriate changes were inadvertently omitted from the 2nd 15-day package. We highlight the few remaining issues below.

Section 95153 (v): Produced Water Dissolved CO2 & CH4:

Section 95153(v), requires operators to calculate dissolved CO2 and CH4 in produced water that is sent to storage tanks or ponds and holding facilities. ARB proposed two specific methods for determining CO2 and CH4 emissions: (v)(1), A flash liberation test or; (v)(2), A vapor recovery system method. Although WSPA appreciates ARB's efforts to provide alternative methods for quantifying GHG emissions, and recognizes the vapor recovery system method is one way to obtain applicable data for produced water, WSPA believes further technical guidance must be developed to ensure CO2 and CH4 concentrations are accurately quantified and applied appropriately through the oil and water process chain.

This would include considering the concentrations of CO2 and CH4 associated with initial produced fluids (oil and water), the oil and water separation process itself, and in the final produced water storage tanks and/or other holding facilities; i.e., ponds. In other words, Sections (v) (1) and (2) as written, fail to take into account the variation of CO2 and CH4 concentrations in produced water, and would incorrectly apply conservative concentration values to produced water tanks or other devices, resulting in over estimations of CO2 and/or CH4 emissions.

WSPA is currently working closely with ARB's Stationary Source Division (SSD) on development of a technically accurate and defensible method for quantifying CO2 and CH4 emissions associated with produced water. In advance of this work with SSD, it seems appropriate for ARB to delete this requirement at this time and revisit the issue in early 2012, at which time an agreed upon method for quantifying GHG emissions associated with produced water is expected to be available.

<u>Recommendation</u>: ARB should delete the produced water sampling and emission quantification requirement at this time, and revisit in early 2012, at which time it is expected a technically accurate method will be available for emission reporting use.

Second Notice of Public Availability of Modified Text regarding the Mandatory Reporting Regulation (MRR) for GHG Emissions

Section E (page 14) of the Second Notice document correctly notes that there are extensive proposed changes to Subpart W of U.S. EPA's greenhouse gas reporting rule, which forms the basis for and is incorporated into the California MRR. In California, upstream oil and gas production reporting entities must comply with both the California and U.S. EPA regulatory programs. The provisions of the Subpart W rule and the MRR cover nearly every aspect of upstream oil & gas extraction and significant resources are required to implement measurement and accounting systems designed to assure compliance.

WSPA believes that, due to the nature and scope of the changes already proposed to Subpart W and those still subject to ongoing litigation, further changes to the MRR will be required to adopt and incorporate changes to the Subpart W rule. Harmonization of the federal U.S. EPA Subpart W rule and the California MRR is important to minimize potential for significant additional administrative burden on such reporting entities.

<u>Recommendation</u>: WSPA requests ARB staff provide a publicly noticed communication of their determination of the impact on the MRR whenever U.S. EPA adopts a change in the Subpart W rule, even if ARB staff determines that no change to the MRR is necessary.

Thank you for the opportunity to provide comments on these proposed regulations. Should you have questions, I would be happy to assist you or you may contact Mike Wang directly at (626) 590-4905 or via e-mail (mike@wspa.org).

Sincerely,

This Boyd

Cc: CARB Board Members CARB Executive Officer CEC Commissioners CalEPA Secretary Jim Nyarady Joe Fischer