Western States Petroleum Association
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Catherine H. Reheis-Boyd
President

August 26, 2013

Ms. Elizabeth Scheehle
Air Resources Board
1001 I Street
Sacramento, CA95814

RE: Comments on August 13, 2013 Workshop Regarding Amendment Options to Cap and Trade and MRR Regulation for Refineries

Dear Ms. Scheehle:

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 States. Many of our members operate extensively in California and have facilities that are impacted directly by the Air Resources Board's (ARB) Cap and Trade Program.

WSPA strongly supports changing the current Carbon Dioxide Weighted Tonne (CWT) regulatory provisions for MRR reporting and Cap and Trade allowance allocation to a Complexity Weighted Barrel (CWB) methodology, as described by Solomon Associates in the May 17, 2013 report previously submitted to ARB by WSPA and by the Solomon presentation at the August 13, 2013 workshop.

Carbon Dioxide Weighted Tonne (CWT) to Complexity Weighted Barrel (CWB)
WSPA appreciates that ARB is now inclined to support the CWB methodology over the CWT methodology. Under the CWB methodology, total CWB would be considered the product output of a petroleum refinery for the purpose of allocation of allowances. As we have discussed before, the CWB has many important attributes that make it preferable to CWT, including:

- Improves Data Quality and Reliability
- Avoids Introduction of Safety Issues
- Allows Use of Data More Readily Available to Refineries
- Avoids Potential Operational Interruptions and Added Costs
- Uses Barrels to Facilitate Baseline Development

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At the Workshop, ARB discussed three possible options that could be made to the MRR and Cap and Trade regulations. WSPA opposes the first two options ARB discussed because they include concepts that are not consistent with use of the CWB. The third option proposed by ARB is more consistent with WSPA's recommendations and we support its use with the understanding that adoption of this approach would require clarifications and changes as to how onsite energy and generated electricity would be treated.

We provide a brief description of the options and our concerns below:

Option 1 is simply a continuation of CWT. WSPA strongly opposes this option and supports moving to CWB because its use is more consistent with refinery operations in California.

Option 2 would adopt a modified CWB but with various changes including further consolidation ("grouping") of process units. WSPA opposes this option because it introduces concepts that are not consistent with refinery operations.

As the Solomon representatives described in the August 13, 2013 workshop, construction of the CWB methodology required thoughtful consolidation ("grouping") of process units where there are similar or identical operational purpose and products. The May 17, 2013 Solomon/WSPA report provided these recommended consolidations after careful consideration of all of the units at hundreds of refineries. Further grouping of major process units would ignore major differences in units that were built years before AB32.

Perhaps of greater concern, should this option (Option 2) be chosen, is that facilities would be penalized for investment options made, often in response to ARB regulations, to allow refiners to produce the most clean burning fuels in the world.

ARB has indicated that they have been motivated to further group (similar) process units as an incentive to refineries to choose more efficient processes. However, the proposed additional groupings of units ignores the fact that facility configuration and operation were based on many factors unique to each refinery and are inconsistent with the underlying Solomon methodologies. The declining cap, the CWB methodology itself, and the growing requirement to purchase allowances provides fully adequate incentives for refineries to improve energy efficiency.

Another caution with further grouping of units is that what may appear to be similar units, based on their names, are not similar in their construction or operation. For example, a Delayed Coker and a Flexicoker are different in physical design, fuel balance, and product. It is these differences that a refinery evaluates in order to select a technology consistent with its particular facility design.[1]

[1]The CWB methodology recognizes the differences among units as they exist and are utilized in refineries, rewarding refineries that incorporate more efficient designs and adopt more efficient operating practices associated with these units. The CWB factors for the three types of cokers represent the standard emissions

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Furthermore, the proposed grouping does not consider each process unit in the context of the entire refinery. For example, a refinery without a coker may run their Fluid Catalytic Cracker more severely, and thus with higher carbon on coke, and higher emissions per input barrel to the FCC. However, the overall emissions from a refinery running in this mode may be lower than for a refinery that has a coker and runs the FCC less severely. The unit factors in the CWB method as proposed by WSPA are representative of the unit configurations in California refineries and recognize the important differences in configuration without unnecessarily complicating the methodology or giving preference to any particular unit or refinery configuration.

We note that WSPA and ARB reached consensus on use of a Solomon EII based approach for the first compliance period and based on other Solomon factors (CWT or CWB) for the later compliance periods. That understanding for the later compliance periods, at least for the refineries, was based in part on the broader distinctions of units that is now incorporated in the May 17, 2013 Solomon report. This grouping is consistent with the Solomon data base and the underlying methodologies. Changing the groupings of units could disrupt the difficult to achieve refinery consensus to use these Solomon factors at all. We request that ARB not change the differentiation of units that was a key factor in refinery consensus and original ARB support.

For all the above reasons, WSPA opposes Option 2

Option 3 includes concepts that WSPA has supported (and as noted by ARB, does not include the grouping of units as in Option 2). Use of this option requires additional adjustments that deserve comment.

Offsites and Non-Crude Sensible Heat: WSPA supports inclusion of CWB "adjustment(s) for off-sites." ARB should adopt the Solomon/WSPA methodology as recommended including CWB definitions for "Offsites and Non-Energy Utilities" and "Non-Crude Sensible Heat." As described in Solomon's report of May 17, 2013, page 2-8 and 2-10, these are real energy demands at refineries and are therefore critical in determining appropriate allocation.

Any modifications to the benchmarking methodology developed by Solomon and proposed by WSPA would make the benchmarking less technically sound, less equitable and would set an unfortunate precedent if the methodology were to be adopted outside of California. To the extent that the California refinery benchmarking methodology adheres to sound technical principles as developed by Solomon, it has the potential to be used as a model in other cap and trade jurisdictions.

Steam and Electricity: For equitable distribution of allowances in the refining sector, steam and electricity must be handled in a manner consistent with the CWB methodology. Because

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associated with operation of flexicokers, fluid cokers and delayed cokers without preference for one configuration or another.

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the CWB factors include all energy needed to run a refinery (fuel gas, steam and power, whether imported or generated onsite), the boundaries for allocation must be adjusted to avoid over-allocation to facilities that import energy and to avoid under-allocation to facilities with onsite generation.

The CPUC now directs utilities to distribute auction revenues to EITE entities that purchase power from utilities and/or third parties to support operations. It is important the ARB and CPUC methodologies be constructed to ensure that power to support operations, whether generated on-site or purchased, receive equivalent consideration.

One way to provide neutral treatment of steam and electricity is the "ratio" approach, a consensus WSPA proposal that was discussed with ARB in March 2013. The concept of a ratio approach has been suggested by Solomon and is similar to how electricity was treated in the EU facility allocations. Attachment 1 is suggested WSPA regulatory language to incorporate the ratio approach for the equitable treatment of electricity and steam imports and exports to and from a refinery.

CWB accurately reflects facility GHG emissions: ARB reported that the correlation of the WSPA CWB method with predicted emissions was 0.99 and suggested that perhaps the method was over-compensating for differences between facilities. This issue can be clarified by noting that differences in actual emissions per unit of CWT, and as a result actual emissions relative to a CWB allocation method, vary by about 30% (see Solomon presentation Slide 12). Hence, the WSPA CWB method accurately reflects facility operation relative to GHG emissions.

WSPA has in the past and continues to support allowance equity for emission reduction projects. ARB may need to evaluate specific projects to ensure equitable treatment of units and operations.

Refinery True-Up Proposal

At the Workshop, ARB proposed to amend the true-up methodology for the first compliance period to "make the EII facility true-up to be consistent with other sectors." WSPA strongly opposed this change in our August 2, 2013 written comments and continues to oppose this change.

We oppose a modification to the "true up" for EII facilities because the formula for refinery industrial assistance for the First Compliance Period was adopted as a set of complementary policies (allocation and true-up) in October 2011 after months of technical work and public process. Undoing that effort **in the middle** of the compliance period would be a **retroactive change** in regulatory policy with potentially significant or catastrophic differential impacts for some companies.

The EII methodology for refineries is a unique emissions based approach that the EII refineries agreed was best for the first compliance period.[2]

[2]The EII methodology recognizes historic efficiency improvements to improve energy efficiency as measured by EII as well as emission reductions relative to a representative facility baseline that may not have resulted in a reduced EII. It limits the potential for disparities within the sector by insuring that initial allocations are not greater than baseline. It limits

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Moreover, we note that ARB, in the Final Statement of Reasons (FSOR) for the Cap and Trade Regulation states that the refinery allocation methodology for the refining sector in the first compliance period "…is appropriate and will encourage greenhouse gas efficiency in production of the primary refinery products that we (ARB) identified," and that the EII approach for complex refineries for the first compliance period "…allocates allowances based on the following factors: (1) historical emissions from each refinery, (2) the Solomon Energy Intensity Index (EII) for each refinery, (3) an adjustment factor to reduce competitiveness impacts of allowance allocation between in-state refineries, and (4) future emissions for each refinery." The currently existing true up mechanisms are integral to achieving the objectives of the EII approach.

Hence, changing the true-up to "product-based" methodology changes the whole concept of the EII approach and will lead to adverse equity and inconsistency issues. WSPA opposes the true-up proposal discussed by ARB at the August 13, 2013 workshop.

Sulfur
A possible discrepancy in the CWB and CWT factors for sulfur was mentioned during the presentation. As discussed with staff, because the CWB factor is the ratio of sulfur plant emission to emissions per barrel of crude unit throughput and the CWT factor is the ratio of sulfur plant emissions to emissions per tonne of crude unit throughput, the factors provide for essentially equivalent treatment of sulfur.

Small Refineries
WSPA supports an equitable treatment that is appropriate for small refineries.

Thank you for considering our comments. Should you have any questions, please don't hesitate to contact me. WSPA stands ready to discuss further at your earliest convenience,

Regards,

Attachment: Correction for import and export of electricity

Cc: Steve Cliff, ARB
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Richard Corey, ARB
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the potential for excess credits to facilities that reduce emissions to levels below their initial allocation through the 80% true up debit calculation. It allows credits to facilities increasing emissions relative to baseline (most likely associated with production increases) but only in proportion to a facility's EII based distribution factor. For the short, two year, first compliance period we believe this methodology recognizes the overall objectives of AB-32, establishes incentives for improved efficiency, and limits the potential for excessive allocation.

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Attachment 1
Suggested Language to Correct for
Energy Imports and Exports at Refineries
8/26/210

Following the last line of page 136 of the C&T Discussion Draft add the following text:

(b)(1) Energy Correction at Refineries
The Executive Office shall adjust the facility allowance allocation by ratio of direct emissions to indirect emissions using the following formula:

$A_{tadj} = A_t * R$, where:
$R = D_{ARB}/D_N$
$D_{ARB} = E_{Rep} + (Steam_{purchased} – Steam_{sold})*.06244 + (Electricity_{3rdParty} - Electricity_{sold})*0.431$,
$D_N = E_{Rep} + (Steam_{purchased} – Steam_{sold})*.06244 + (Electricity_{3rdParty} + Electricity_{Utility} - Electricity_{sold})*0.431$

Where:
A_{tadj} is the ARB allocation for Refineries to adjust for energy purchases and sales;

R is the ratio used to adjust the facility allowance allocation for each Refinery;

E_{Rep} is the quantity of facility GHG emissions as reported per MRR Section 95104;

$Steam_{purchased}$; $Steam_{sold}$; $Electricity_{3rdParty}$; $Electricity_{Utility}$ and $Electricity_{sold}$is the quantity of those energies as report per MRR Section 95104

The Executive Officer will advise the CPUC of the equivalent allocation not provided by ARB using the following formula:

$CPUC_{adj} = A_t * (1-R)$

where: A_t is A_t described in (b) above, R is R described in this section and $CPUC_{adj}$ is the equivalent allocation not provided by ARB.

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