



Western States Petroleum Association  
Credible Solutions • Responsive Service • Since 1907

**Thomas A. Umenhofer, CCM, REPA**  
Vice President

September 28, 2017

Mr. Sam Wade  
Branch Chief  
California Air Resources Board  
1001 I Street  
Sacramento, California 95814

sent via email: [LCFSworkshop@arb.ca.gov](mailto:LCFSworkshop@arb.ca.gov)

Re: WSPA Comments on ARB September 14, 2017 RICPP Workshop

Dear Sam,

The Western States Petroleum Association (WSPA) appreciates this opportunity to provide feedback on the California Air Resources Board (ARB) staff presentation at the Refinery Investment Credit Pilot Program Workshop (Workshop), held on September 14, 2017 in Sacramento, CA. WSPA is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California and four other western states.

**General Comments**

The Refinery Investment Credit Pilot Program (RICPP) has the potential to make a positive, material impact to GHG reduction in the fuels supply chain. However, in order to underpin what is potentially a major investment decision for refineries, there are a number of issues that need to be addressed:

- The proposed pilot program does not inherently provide a level of regulatory certainty that would help to support refinery investments. If the pilot program is withdrawn at some point in the future, there would need to be assurance that investments are not stranded (i.e., through grandfathering of projects that have already commenced).
- The level of complexity to generate credits from this proposal (i.e., GHG reductions converted into CI and then back into GHG in the form of credits) needs to be simplified, perhaps by taking a more direct approach based on GHG reduction to credit generation.

Since, as ARB staff noted during the Workshop, the current program has not resulted in proposed projects, WSPA believes that ARB staff should simplify the process and lower the requirements for a project to qualify for this program. The comments below provide WSPA thoughts on specific program elements which focus on achieving a goal of a more effective RICPP.

**Comments on the September 14<sup>th</sup> Workshop Staff Presentation**

**Overview of The existing RICPP (slide 5)**

WSPA requests that ARB eliminate the 20% limit on credit generation and also allow the Refinery Improvement Credits to be traded within the LCFS program.

### **Project System Boundary versus Refinery-wide System Boundary (slide 10)**

WSPA strongly believes that the system/project boundary should be as limited as possible to avoid needless complexity. This can be accomplished by minimizing the size of the system boundary to the minimum that is required to calculate the CO<sub>2</sub>e emission reductions. For example, an acceptable project boundary could be around a process unit, a heater, an exchanger train, electricity production/import, steam production/import, etc. The further outside the actual project boundaries one goes, the less likely effective verification of the project impacts will occur on an on-going basis because there will be other operating factors and dynamics in the refinery that will mask or conflate the impacts to be assessed. That being said, the project boundary definition cannot be written in a way that is based on geography as projects that reduce energy use in one unit might yield the GHG reduction in another unit. For example, the direct emission benefit may be at a centralized utility plant even though the efficiency project actually took place in another location.

Further, reductions should be limited to direct effects and first order indirect effects with all second order effects ignored. For example, if a project increases a furnace efficiency, then the energy savings at the furnace (direct effects), and a system boundary around the furnace should be used. If a heat exchanger is replaced with a larger heat exchanger to recover more heat, then the exchanger and the furnace impacted, and its efficiency should be the limit of the system boundary. The exchanger increased heat recovery is the direct effect and the furnace impacted would be a first order indirect effect. Any second order indirect effects such as ability to increase unit throughput or electricity savings at the cooling tower should not be included in the system boundary as they will most likely be an order of magnitude lower in CO<sub>2</sub>e reduction.

Finally, disclosure limitations related to protection of confidential information must be incorporated into any project-related protocol.

### **Emission Calculation Method (slide 11)**

WSPA reiterates our desire that the calculation method be the simplest possible and that the quantification of emissions for the purposes of eligibility thresholds or crediting be based on the tons reduced and not a metric that incorporates volume or energy in MJ's of the CARBOB and CARB Diesel. There are too many other factors that can impact the volumes produced both before and after the project that can adversely impact both the threshold calculation and the crediting.

For example, a facility could have a project that reduced emissions that might not be eligible or get credits merely because of reduced rates associated with turnaround activity following project operation. Conversely, that same project with pre-project rate reduction associated with turnaround activity might be eligible and receive additional credits for the post-project rate increases even though the project itself did not facilitate these rate changes.

### **GHG Emission Allocation Process (slide 13)**

At this point in time, where projects and associated reductions have been impeded by the complexity of the provisions in the current regulation, it is not advisable for ARB to complicate or burden projects by requiring additional meters. Requiring meters for small value streams (relative to meter cost) could adversely affect the viability of projects. If additional meters are required, some reasonable criteria for meter cost-benefit (based on relative versus absolute cost basis) should be established. These criteria should include the costs not only of the meter itself but collecting data, recording data, and verifying data.

Project proponents should be able to propose methods using engineering judgment and reasonable calculations to establish the total project emissions reductions. In addition, WSPA does not see a need for an allocation process

(which adds further complexity to the program) as all credits should be eligible for the program (as discussed in the “Eligible Projects” section below).

### **Crediting Threshold (slide 14)**

The minimum threshold for refinery investment credit projects should be lowered to 10,000 metric tons (MT) CO<sub>2</sub>e per year which is twice the threshold in section 95489 (d)(1)(E), credits for producing crudes using innovative methods. There should be no differential carbon intensity threshold based on the concerns expressed above regarding volumetric or energy impacts not attributed to the reduction project. If there is concern that this threshold is still too high for a smaller refiner, then an alternate option could be included based on a % reduction threshold of total emissions. Regardless, all eligibility thresholds should be based on emissions and not carbon intensity.

### **Eligible Projects (slide 16)**

ARB should eliminate any limitations on the types of projects that can be credited and allow that any technology/type of agnostic investments that can be independently verified and sustained to reduce GHG emissions be included. Examples provided at the workshop showed how a valid reduction project could be inadvertently viewed as a “maintenance” project. Also, valid projects may result in shutdowns of GHG emitting equipment or even entire processing units that emit but could be excluded based on shutdown criteria. These projects are hard to judge on their face and cannot be properly covered by definitions without being interpreted as limiting. WSPA would like to further discuss with ARB in more detail with regard to project eligibility.

WSPA further suggests that ARB consider allowing LCFS credits to be generated through the inclusion of refinery power derived from off-site electricity generated from renewable sources. Such an approach would encourage the reduction of GHGs through the growth of renewables through the purchase of green attributes associated with electricity purchases. Taking such an approach would be consistent with ARBs position for off-site sourcing when applied to renewable hydrogen.

Consistent with ARB staff's request on Slide 16, to better define the types of projects that would be eligible under the program, we believe that such a list should include (but not be limited to) such projects as: waste heat recovery, more efficient heat exchanger trains, reduced fired heater duty, natural gas usage reduction, co-generation upgrade, replacement or new installation, solar panels or wind turbine installation or upgrades, and more efficient hydrogen production. If ARB opts to compile such a list, WSPA would caution that it should be used for illustrative purposes and urge staff to retain the flexibility to consider/approve energy efficiency projects that are not explicitly listed, as appropriate.

Current regulation language under (f)(1)(A) seems to imply that only projects with air district permits qualify. Not all CO<sub>2</sub>e reduction projects will require an authority-to-construct permit. ARB should eliminate the statement “A project is eligible if the authority-to-construct permit was approved after January 1, 2016” in the regulation section (f)(1)(A). WSPA believes that project startup date is a more appropriate eligibility criterion, and that any project that starts up post LCFS re-adoption should be eligible under the program.

### **Other discussion points (slide 17)**

The use of the term ‘Pilot’ to describe both refinery investment credit projects and renewable hydrogen projects should be eliminated as it creates uncertainty around the economics of the projects that the provisions are hoping to create an incentive.

WSPA believes that there must be an approval process that allows for confidence of credit generation *prior to*

construction and implementation of a project. This credit maybe what gets many projects “over the goal line,” and without the certainty of this extra incentive they may continue to languish. In the case where a project under-delivers (versus its calculated benefits), the best concept for “truing up” would be that the entity that received the credits must go into the market and procure the shortfall.

WSPA appreciates this opportunity to provide our feedback. If you have any questions, please contact me at (805) 701-9142 or via e-mail at [tom@wspa.org](mailto:tom@wspa.org).

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas A. Young". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

cc: Catherine Reheis-Boyd, WSPA