Petroleum Refinery Sector Risk and Technology Review and NSPS
Meeting with OMB - November 29, 2012

Small Business Advocacy Review for the Petroleum Refinery Sector Risk and Technology Review and NSPS was inadequate and incomplete.

Last year, EPA convened a Small Business Advocacy Review (SBAR) Panel pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA) to consider a number of potential rulemakings including Petroleum Refinery Sector Risk and Technology Review and NSPS that would impact small petroleum refiners. The Small Entity Representatives (SERs) representing small petroleum refiners included Gary Williams Energy Corporation, Wyoming Refining Company, American Refining Group, Countrymark Cooperative Holding Corporation, CVR Energy, Inc., Montana Refining, Petro Star Inc. and Placid Refining.

On June 1, 2012, EPA Administrator, Lisa Jackson, signed the notice for the final rule, "40 CFR Parts 9 and 60: Standards of Performance for Petroleum Refineries; Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007", and the EPA submitted it for publication in the *Federal Register*. This rulemaking effectively lifted the stay of effective date after the EPA's reconsideration of the rule commonly referred to as NSPS Subpart Ja.

Though the EPA included discussion of reconsideration issues on NSPS Subpart Ja as part of the SER outreach meetings on both June 28, 2011 and August 18, 2011, the Agency did not address or provide any response to our issues in the final NSPS Subpart Ja rulemaking. In addition to Subpart Ja, numerous other topics were discussed with the SERs at last year's outreach meetings. These included, but were not limited to, Greenhouse Gas (GHG) controls, fence line monitoring, tank controls, dioxin limits, wastewater control of benzene and other HAPs, risk review, equipment leaks, fuel gas system LDAR and startup, shutdown, and malfunction exemptions.

The SBA General Counsel protested EPA's action as premature; asserting that the meeting was scheduled to occur prior to EPA's providing the SBAR Panel with sufficient information pertaining to the rulemaking to allow a meaningful SBREFA process. SBA's letter is provided as Attachment 1.

These rule amendments, if proposed, will have significant adverse material economic impacts on small business refiners just as Subpart Ja does. The SERs believe that if provided with proposed rulemaking language and potential regulatory alternatives, we will be able to thoroughly analyze the economic impacts on our small businesses and provide valuable input to the EPA.

Refining industry risk already is subject to intensive management and regulation and SERs specifically present very low risk to the public.

- Small refineries spent considerable time and expense to fulfill the requirements of the ICR to revise emission inventories and conduct direct measurements on numerous sources. Even with enhanced residual risk models and updated information, the result remains that the calculated risk is acceptable.
- Furthermore, SERs who participated the SBAR panel are below or barely exceed the 1-in-1 million threshold that allows EPA to set standards. This threshold standard already provides an ample margin of safety. Any new standard would therefore disproportionately burden SERs compared to entities that exceed the threshold.

The EPA underestimates compliance costs especially for small refiners.

The EPA typically generates economic impact studies that analyze the refining industry as a whole. These types of analysis do not factor in the uniqueness of individual refineries. The following examples, show where actual costs for small refiners are greater than average costs developed by the EPA.

In the proposed Greenhouse Gas Mandatory Reporting rule, the EPA estimated that the first year capital costs would be $1.6 million and the first year total annualized costs would be $3.7 million for ALL Petroleum Refineries. This breaks down to $10,700 and $24,700 respectively for each of the 150 refineries operating at the time. In comparison, one small refiner needed to upgrade an existing Continuous Emissions Monitoring System (CEMS) and install flow meters at a cost of $450,000. In addition, first year set up and compliance costs including capital exceeded $750,000.

The final rule for NSPS subpart Ja provided an analysis for flare compliance for the entire refining industry. The analysis provided capital costs of $72 million for the 360 small flares that were assumed to be affected, for an average cost of approximately $200,000 per flare. One small refiner with a refinery capacity of approximately 14,000 BPD has budgeted $250,000 for flare flow meters and CEMS for subpart Ja compliance. However, another small refiner with a capacity of 28,000 BPD has spent $535,000 for installation of flow meters and CEMS gas chromatographs including tying them into existing control and data historian systems for subpart Ja flare compliance.

An EPA technical bulletin provided cost data for the installation of low-NOx burners. The range of costs scaled to 2010 dollars was $970 - $2230 per million BTU. One refiner recently installed a low-NOx burner in a 92 mmbtu/hr service for approximately $110,000 which at $1,200 per million BTU is within the EPA's range. However, another small refiner, recently installed a low-NOx burner in a 87 mmbtu/hr boiler including recirculation for approximately $400,000 which is $4,600 per million BTU or more than double the upper side of the EPA range.

With Subpart Ja being finalized and the OMB reviewing the current regulation, it appears that the EPA's breaking up the various rulemakings discussed in the SBAR panel outreach meetings which obscures the fact that compliance with all rules in aggregate will result in disproportionate economic hardship for small business refiners.

The EPA provided Attachment 2 in the SBAR panel outreach meetings. NSPS Subpart Ja was discussed in the outreach meetings. In addition, all of the items listed on slides 16 and 17 were also discussed. As discussed previously, the information provided did not contained adequate detail for the SERs to develop extensive cost estimates or suggest flexibility options for SERs to the EPA. Regardless, where possible, SERs have developed preliminary estimates provided in the following table.

Potential Amendment	**Estimated Cost Per Small Refinery (2011 dollars unless noted)**	**Comments**
Subpart Ja	$0.535 million	Flow meters and CEMS
Fenceline Monitoring	$250,000 per year.	$125K per EPA. Due to rural locations of SER refineries, costs escalated x 2.
Tank Controls	$0.25 – 0.75 million.	Tank drain modifications.
FCCU NOx/PM Limits	$5.7 million (2010 dollars)	Flue gas scrubber w/o NOx. Actual installation costs from SER.
	$13.6 million	Budgetary cost for flue gas scrubber w/ LoTOx technology.
Startup, shutdown, and malfunction exemptions	$10 million	Flare gas recovery system.
Flaring Limits	$10 million	Flare gas recovery system.
Fuel Gas system LDAR	$500,000 per year.	Additional costs for manpower to provide fuel gas system coverage in current LDAR program.
Wastewater control of <10 Mg TAB	$0.54 - 1.16 million	API separator covers.
	$0.50 – 1.0 million	Carbon canisters for API and sewer vents.
Total Capital Cost	$17.5 – 27 million	Flare gas recovery included once.

Even though the table does not provide estimates for all of the possible amendments that were discussed in the outreach meetings, the preliminary review shows the potential to exceed the threshold that would result in a determination of adverse economic impact especially for SERs. It appears that the EPA has been able to avoid this determination only by breaking up the separate rulemakings.

API risk model uses BER data

Understatement of costs

Flexibilities for small businesses

Fenceline Monitoring: Small refiners need to contract with outside companies for monitoring implementation