## **Final Report**

## of the

# **Small Business Advocacy Review Panel**

## on EPA's Planned Proposed Rule

Mobile Source Air Toxics: Control of Hazardous Air Pollutants from Mobile Sources

*November 8, 2005* 

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## Final Report for the Small Business Advocacy Panel on EPA's Planned Proposal of "Control of Hazardous Air Pollutants from Mobile Sources"

#### 1. Introduction

This report is presented by the Small Business Advocacy Review Panel (SBAR Panel or Panel) convened for the proposed rulemaking on the Control of Hazardous Air Pollutants from Mobile Sources, currently being developed by the U.S. Environmental Protection Agency (EPA). Under Section 609(b) of the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), a Panel is required to be convened prior to publication of the initial regulatory flexibility analysis (IRFA) that an agency may be required to prepare under the RFA. In addition to EPA's Small Business Advocacy Chairperson, this Panel will consist of the Director of EPA's Assessment and Standards Division within the Office of Transportation and Air Quality (OTAQ), the Administrator of the Office of Information and Regulatory Affairs within the Office of Management and Budget, and the Chief Counsel for Advocacy of the Small Business Administration.

This report includes the following:

- background information on the proposed rule under development;
- information on the types of small entities that would be subject to the proposed rule;
- a summary of the Panel's outreach activities; and,
- the comments and recommendations of the Small Entity Representatives (SERs).

Section 609(b) of the RFA directs the Panel to report on the comments of small entity representatives and its findings on issues related to identified elements of an IRFA under section 603 of the RFA. Those elements of an IRFA are:

- a description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;
- a description of the projected reporting, record keeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirements and the type of professional skills necessary for preparation of the report or record;
- an identification to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule; and,
- a description of any significant alternatives to the proposed rule which accomplish the

stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities.

The purpose of the Panel is to gather information to identify potential impacts on small entities and to develop options to mitigate these concerns where possible. Once completed, the Panel report will be provided to the agency issuing the proposed rule and included in the rulemaking record. In light of the Panel report, and where appropriate, the agency issuing the proposed rule is to make changes to the draft proposed rule, the IRFA for the proposed rule, or the decision on whether an IRFA is required.

It is important to note that the Panel's findings and discussion will be based on the information available at the time the final Panel report is drafted. EPA will continue to conduct analyses relevant to the proposed rule, and additional information may be developed or obtained during the remainder of the rule development process. The Panel makes its report at a preliminary stage of rule development and its report should be considered in that light. At the same time, the report provides the Panel and EPA with an opportunity to identify and explore potential ways of shaping the proposed rule to minimize the burden of the rule on small entities while achieving the rule's purposes.

Any options identified by the Panel for reducing the rule's regulatory impact on small entities may require further analysis and/or data collection to ensure that the options are practicable, enforceable, environmentally sound, and, of course, consistent with the Clean Air Act.

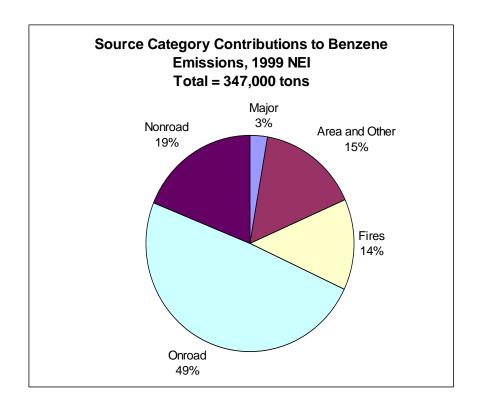
#### 2. BACKGROUND

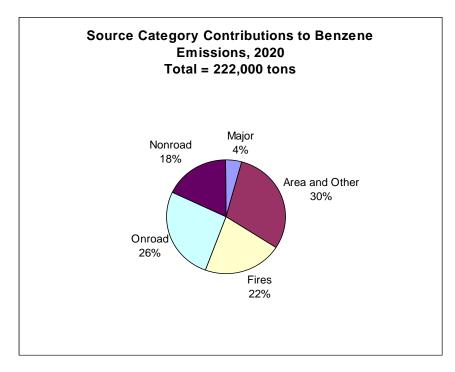
## 2.1 Background and Regulatory History

Air toxics can cause a variety of serious health effects, including cancer. Mobile sources are projected to continue to be a significant contributor to emissions of air toxics (which are also known as hazardous air pollutants) across the country into the future, notwithstanding EPA rules finalized over the past two decades that have been, and will keep on, providing reductions in mobile source air toxics (MSAT) emissions. In particular, benzene is one of the most important drivers of national cancer risk from air toxics both now and in the future. According to EPA's 1996 National Air Toxics Assessment, the entire country experiences an elevated cancer risk from benzene. Although benzene emissions will be decreasing, EPA's projections indicate that cancer risk from benzene will continue to be of potential concern. Based on EPA's recent work supporting the development of the upcoming MSAT rulemaking (which examines benzene emission trends for 1999, 2007, and other future years), current estimates indicate that mobile sources are currently responsible for about 60 percent of benzene emissions (see Figure 1 below for 1999 and 2020 estimates). Controlling emissions from light-duty highway vehicles, gasoline, and portable gasoline containers has important public health and welfare benefits. The following sections describe in more detail the effects and regulatory history of light-duty highway vehicles, gasoline, and portable gasoline containers.

<sup>&</sup>lt;sup>1</sup> These mobile source benzene estimates account for final rulemakings that have already been issued. For example, the 2004 nonroad diesel rulemaking has been included, but this second MSAT rulemaking has not. Also, emissions from gas cans are not included in these estimates.

Figure 1
Benzene Contribution of All Source Sectors





#### 2.1.1 Highway Light-Duty Vehicles

Mobile sources will remain a key contributor to overall benzene inventories and other volatile organic compounds (VOC) based toxics in the future, even with the expected significant reductions in mobile source emissions resulting from other programs. Highway light-duty vehicle emissions are still expected to dominate the mobile source VOC and benzene inventories in 2020. Highway light-duty vehicles are subject to emissions standards in 40 CFR Part 86. This includes passenger cars, light trucks, mini-vans, sport utility vehicles, vans, etc.

In 2000, EPA issued the Tier 2 Vehicle/Gasoline Sulfur rulemaking, which set new emission control requirements for highway light-duty vehicles beginning in 2004. EPA's most recent regulation specifically targeting MSATs was published March 29, 2001 (66 FR 17230; see http://www.epa.gov/otaq/toxics.htm).<sup>2</sup> The first MSAT rule was issued soon after the Tier 2 rule. EPA determined that it needed to evaluate the effects of Tier 2 rules before embarking on another major regulatory effort involving the same class of regulated entities. Thus, additional controls were not proposed for vehicles in the first MSAT rule. However, in the first MSAT rulemaking, the need to further evaluate potential vehicle controls for MSATs in a future rule was discussed. Tier 2 remains a very stringent set of requirements which will substantially reduce vehicle emissions, including MSATs, into the future.

#### 2.1.2 Gasoline

Current toxics standards for gasoline were established through the Reformulated Gasoline (RFG) program, Conventional Gasoline (CG) anti-dumping standards, and the 2001 MSAT program. The RFG program established a 21.5% reduction in total toxics emissions relative to each refinery's 1990 baseline, and a 0.95 volume percent annual average standard for benzene (with a per gallon cap of 1.3%). The CG anti-dumping standard maintained the 1990 refinery-specific exhaust toxics performance baselines. The CG standard does not have a specific benzene requirement. The 2001 first MSAT rule is similar to the RFG and CG/anti-dumping standards in that it is a toxics emissions performance standard, and was set up to lock in over-compliance with RFG and anti-dumping standards at the time of the rule. The first MSAT rule standard does not have a specific benzene requirement. The standard applies separately to RFG and CG, and it established refinery-specific anti-backsliding toxics standards for all gasoline. These standards are generally more stringent than those in the previous programs, and thus supersede them. With the upcoming proposed second MSAT rule, EPA aims to not just maintain current toxics performance, but rather set the most stringent standards feasible considering cost and other factors. In doing so EPA expects to supersede not only anti-dumping refinery-specific standards but also the first MSAT rule refinery baselines, and as a result the RFG toxics performance and benzene content standards are also likely to be effectively superseded.

<sup>&</sup>lt;sup>2</sup> This rule established refinery-by-refinery anti-backsliding standards for toxics in gasoline (using a 1998-2000 baseline), but it did not require additional reductions.

For the second MSAT rule standards, EPA intends to focus on reducing benzene emissions from gasoline vehicles and engines. Benzene is the largest contributor to the mobile source cancer risk. EPA has also considered targeting other toxics, such as formaldehyde and acetaldehyde, through fuel controls, however those options do not appear to be desirable for a number of reasons. Formaldehyde emissions are primarily related to MTBE content, which is being phased out by most states independent of this rulemaking. Acetaldehyde emissions are primarily related to ethanol content, whose use is likely to increase in coming years as a result of recent energy legislation. Focusing on other fuel controls, such as sulfur (for overall exhaust hydrocarbon emissions), olefins (for 1,3-butadiene emissions) or aromatics (for exhaust benzene emissions) either provide small and uncertain benefits or are generally much more costly due to their impacts on octane. Importantly, steps taken to reduce these other toxics would also tend to increase the need for aromatics in gasoline, increasing benzene emissions. Therefore, the proposed rule is likely to focus on controlling benzene emissions.

#### 2.1.3 Portable Gasoline Containers

Gasoline is highly volatile and evaporates easily from containers that are not sealed or closed properly. Portable fuel containers (gas cans), which are typically used to fuel lawn and garden and other gasoline-fueled equipment, represent a significant unregulated source of VOC emissions, and they also contribute to elevated MSAT concentrations in homes because they are often stored in attached garages. EPA's preliminary estimates are that in 2005, containers emit about 360,000 tons of VOC annually nationwide, or about 5 percent of the nationwide mobile source inventory. About 4,300 tons of the VOC emitted by gas cans annually is estimated to be benzene. Left uncontrolled, a gas can's daily VOC evaporative emissions would be up to 60 times the VOC evaporative emissions of a new Tier 2 passenger vehicle. Gas can emissions come primarily from three sources: gasoline that evaporates from unsealed or open containers, permeation emissions from gasoline passing through the walls of the plastic containers, and gasoline spillage during use.

Currently, there are not federal emission control requirements for gas cans. California has a program for controlling fuel container emissions. EPA is considering performance-based requirements, which are similar to those of California, that lead to the sale of redesigned fuel containers nationwide. Were EPA to propose rules, it would be pursuant to the authority of the Clean Air Act (CAA) section 183(e).

#### 2.2 Description of the Rule and its Scope

#### 2.2.1 Vehicles and Fuels

Section 202 (1)(2) of the Clean Air Act (CAA) directs EPA to establish requirements to control emissions of mobile source air toxics (MSATs) from new motor vehicles and fuels. Specifically, this section states that EPA must

...promulgate (and from time to time revise) regulations under subsection (a)(1) or section 211(c)(1)

containing reasonable requirements to control hazardous air pollutants from motor vehicles and motor vehicle fuels. The regulations shall contain standards for such fuels or vehicles, or both, which the Administrator determines reflect the greatest degree of emission reduction achievable through the application of technology which will be available, taking into consideration the standards established under subsection (a), the availability and costs of the technology, and noise, energy, and safety factors, and lead time....The regulations shall, at a minimum, apply to emissions of benzene and formaldehyde.

In other words, EPA must determine the maximum amount of emission reduction possible through application of technology, and further assess the reasonableness of these reductions after considering cost, lead time, and the other enumerated factors. EPA is presently developing a proposed rule requiring reduction of MSAT emissions from light-duty highway vehicles and gasoline, based upon consideration of all of these factors.

For VOC and toxics control from light-duty vehicles (beyond the Tier 2 requirements), EPA is exploring the alignment of EPA evaporative emission standards with California low-emission vehicle (LEV) II standards and new cold temperature exhaust (VOC) emission standards. Despite numerical differences in evaporative emission standards, EPA and California programs essentially result in a comparable level of stringency today, due to differences in test requirements. Thus, harmonizing with California's LEV-II evaporative emission standards would streamline certification requirements and would be an anti-backsliding measure, which would add certainty that manufacturers would retain their current approach for producing the same level of evaporative system hardware nationwide. At this point, EPA would not intend to change the Federal evaporative emission test procedures.

In addition, data suggests that VOC emissions (which include toxic organics) from vehicles are significantly higher under cold temperatures (20° F) than under normal testing temperatures (75° F). Traditionally, VOC emissions have been controlled for purposes of reducing ozone, and cold temperature VOC emissions have not been a focus of emissions control efforts. High VOC emissions from vehicles at cold temperatures lead to elevated benzene and other toxics levels, and thus, in the context of MSATs it appears appropriate to establish cold temperature controls.

From a fuel standpoint EPA is focused on controlling benzene emissions. Benzene emissions can be addressed through both the fuel benzene content and the fuel aromatics content. Exhaust benzene emissions are linked more strongly to fuel benzene content than any other fuel parameter. Fuel aromatics are also a significant precursor to benzene emissions, however, the reduction of aromatics to achieve the same effect as a fuel benzene reduction is much more costly because of the deep impact on octane and volume. Therefore, EPA believes that fuel benzene control is the most effective approach.

EPA is in the early stages of developing a proposed program. A detailed approach for timing and stringency of the vehicle and fuel requirements has not yet been decided. EPA is currently evaluating a program for highway light-duty vehicles that could become effective in the 2008-2010 timeframe. For fuels, EPA is considering implementation dates in the 2010 to

#### 2.2.2 Portable Gasoline Containers

EPA is also planning to propose portable gasoline container (gas can) emissions standards in the MSAT proposal. Such standards would control VOCs as an ozone precursor and would minimize personal exposure to VOC-based toxics such as benzene. EPA would pursue controls for gas cans under CAA section 183(e) provisions applying to consumer and commercial products. EPA has published a list of several consumer and commercial products to be regulated and is in the process of establishing controls for them through rulemaking. Gas cans were not considered in the original listing process, but EPA has since identified them as a significant contributor to VOC emissions. The first step in controlling emissions from gas cans is to add them to the section 183(e) list of consumer and commercial products to be regulated, which requires a Federal Register notice but not a rulemaking. EPA intends to issue such a notice. Once gas cans are listed, EPA can propose control measures if appropriate. Regulations under section 183(e) must require the "best available control," considering technological and economic feasibility and health, environmental, and energy impacts.

EPA is planning to propose performance-based emissions standards for fuel containers in order to control evaporative and permeation emissions. EPA is considering implementing the program in the 2008-2009 timeframe. The standards would also provide users with fuel savings through reduced fuel loss and improved fuel quality by preventing the most volatile components in the gasoline from escaping the container. The new containers may also improve safety by staying closed and therefore reducing the potential for spills.

#### 2.3 Related Federal Rules

The primary federal rules that are related to the proposed MSAT rule under consideration are the first MSAT rule (*Federal Register Vol. 66*, p. 17230, March 29, 2001), the Tier 2 Vehicle/Gasoline Sulfur rulemaking (*Federal Register Vol. 65*, p. 6698, *February 10*, 2000), the fuel sulfur rules for highway diesel (*Federal Register Vol. 66*, p. 5002, January 18, 2001) and nonroad diesel (*Federal Register Vol. 69*, p. 38958, June 29, 2004), and the Cold Temperature Carbon Monoxide Rulemaking (*Federal Register Vol. 57*, p. 31888, July 17, 1992).<sup>3</sup>

In addition, the Evaporative Emissions Streamlining Direct Final Rulemaking is expected to be published by the end of this year. For gas cans, OSHA has safety regulations for gasoline containers used in workplace settings. Cans meeting OSHA requirements, commonly called safety cans, are exempt from the California program, and EPA is planning to exempt them from the EPA program.

 $<sup>^3</sup>$  The Cold Temperature Carbon Monoxide rulemaking is the basis for the  $20^\circ$  F test procedure which EPA would use.

Section 1501 of the Energy Policy Act of 2005 (EPACT) requires that EPA implement a Renewable Fuels Standard (RFS) program. Beginning in 2006, this program will require increasing volumes of renewable fuel to be used in gasoline, until a total of 7.5 billion gallons is required in 2012. The most prevalent renewable fuel to be used in gasoline is expected to be ethanol.

There are a wide variety of potential impacts of ethanol blending on MSAT emissions that will be evaluated as part of the RFS rulemaking process. In general, as ethanol use increases, other sources of octane in gasoline can decrease. Depending on these changes, the impact on benzene emissions will vary. The specific effects of ethanol on benzene will be addressed in the Regulatory Impact Analysis (RIA) to this rule and in future rulemakings, such as the RFS rule.

## 3. APPLICABLE SMALL ENTITY DEFINITIONS

For purposes of assessing the impacts of the proposed rule on small entities, a small entity is defined as: (1) a small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

Small businesses (as well as large businesses) would be regulated by this rulemaking, but not small governmental jurisdictions or small organizations as described above. As set by SBA, the categories of small entities that will potentially be affected by this rulemaking are defined in the following table:

Industry	Defined as small entity by SBA if less than or equal to:	NAICS Codes
Light-duty vehicles: - vehicle manufacturers (including small volume manufacturers)	1,000 employees	336111
- independent commercial importers	\$6 million annual sales	811111, 811112, 811198
- alternative fuel vehicle converters	100 employees 1,000 employees \$6 million annual sales	424720 335312 811198
Gasoline fuel refiners	1500 employees*	324110
Portable Fuel Container Manufacturers: - plastic container manufacturers - metal gas can manufacturers	500 employees 1,000 employees	326199 332431

<sup>\*</sup> EPA has included in past fuels rulemakings a provision that, in order to qualify for the small refiner flexibilities, a refiner must also produce no greater than 155,000 bpcd crude capacity.

#### 3.1 Highway Light-Duty Vehicles Small Entity Definitions

To assess how many companies potentially affected by the proposed rule may meet these small-entity criteria, EPA first created a database comprised of firms specified in its Certification and Fuel Economy Information System (CFEIS) and EPA's independent commercial importers (ICIs) and converters lists. Sales and employment data for the parent companies of these firms was then found using the Dunn and Bradstreet (and Hoover's) and ReferenceUSA databases. Due to the range of manufacturers and ICIs, there are several NAICS codes in which these businesses report their sales, but the majority of the manufacturers and ICIs are listed under the following major groups, respectively: 33611x - *Automobile and Light Duty Motor Vehicle* 

Manufacturing and 8111xx - Automotive Repair and Maintenance. For alternative fuel converters, there does not appear to be a prominent NAICS code, and the codes range from 335312 - Motor and Generator Manufacturing (and/or 336312 - Gasoline Engine and Engine Parts Manufacturing) to 811198 - All Other Automotive Repair and Maintenance.

#### 3.2 Gasoline Refiner Small Entity Definitions

Information about the characteristics of gasoline refiners comes from sources including the Energy Information Administration within the U.S. Department of Energy, oil industry literature, and industry searches using Hoover's and Dun and Bradstreet. These refiners fall under the *Petroleum Refineries* category, NAICS code 324110.

## 3.3 Portable Gasoline Container Manufacturer Small Entity Definitions

For manufacturers of portable fuel containers, the SBA size thresholds are 500 employees for manufacturers of plastic containers and 1,000 employees for metal gas cans. The NAICS codes are 326199 - *All Other Plastics Product Manufacturing* and 332431 - *Metal Can Manufacturing*. Discussions with industry and searches in databases such as LexisNexis Academic and ReferenceUSA (electronic resources) enabled EPA to determine how many businesses would be impacted by the proposed rule and may meet the small-entity criteria. The latter two sources provided sales and employment data for the parent companies of these businesses.

## 4. OVERVIEW OF PROPOSAL UNDER CONSIDERATION

## 4.1 Potential Requirements and Guidelines of the Proposal

As described below, various approaches for vehicle, fuel, and gas can standards have been suggested during conversations with the SERs. A complete discussion regarding these suggested regulatory flexibility options can be found in Section 9 of this Report. EPA is seeking input on potential regulatory flexibilities that would be appropriate for small entities in the vehicle, gasoline refining, and gas can industries. EPA is also seeking input on what impact the suggested approaches would have on small entities, such as cost, lead time needed, and other relevant impacts on small entities. This information will help EPA in developing regulatory flexibilities for small entities for the upcoming rule.

## 4.1.1 Highway Light-Duty Vehicles

As discussed earlier, EPA is contemplating the proposal of evaporative emission standards that are equivalent to California low-emission vehicle (LEV) II standards - see Figure 4 in Appendix A - and new cold temperature exhaust (VOC) emission standards. Even though there are numerical differences in evaporative emission standards, EPA and California programs result in a similar level of stringency today due to differences in test requirements (see Figure 5 in Appendix A). Some manufacturers have indicated that they will produce 50-state evaporative systems that meet both sets of standards (essentially all certify 50-state evaporative systems). This is the path manufacturers have taken thus far in Tier 2. Based on these commitments, EPA has already made the assumption in its MOBILE6 model that manufacturers meet the LEV II standards, so EPA does not project additional VOC reductions from this approach. Also, EPA does not expect additional costs since EPA expects that manufacturers will continue to produce 50-state evaporative systems. Therefore, harmonizing with California's LEV-II evaporative emission standards would streamline regulatory requirements and be an "anti-backsliding" measure, which would codify what some manufacturers have committed to (50-state evaporative systems). EPA is currently considering the implementation of these evaporative standards in model year 2009 for light-duty vehicles (LDVs) and light light-duty trucks (LLDTs) and model year 2010 for heavy light-duty trucks (HLDTs) and medium-duty passenger vehicles (MDPVs). EPA intended to for the start dates to coincide with the year after complete phase-in of the Tier 2 standards for the different classes of vehicles (occurs for HLDTs/MDPvs), but the 2009 start date is as soon as practical for the LDVs/LLDTs since the final rulemaking (for this program) is expected to be issued during model year 2008.

In addition, as described earlier, data indicates there is a significant increase in VOC emissions from vehicles at cold temperatures (20° F) compared to normal testing temperatures (75° F) - see Figures 6 and 7 of *Appendix A*. On average, VOC test results are 12 times higher at 20° F than at 75° F for Tier 2 vehicles. At this time, EPA only has a carbon monoxide (CO) standard at cold temperatures, and the lack of a cold VOC standard results in a delayed use of VOC emission controls until the engine warms up. At cold temperatures, manufacturers

currently do not calibrate for VOC emissions control or turn on emission control devices.

EPA is currently contemplating a cold temperature VOC standard in the range of 2 to 3 times the 75° F VOC "bin 5" exhaust standard (or a potential proposed standard of 0.2 to 0.3 grams/mile). EPA is evaluating the need for a slightly higher standard for heavier test weight vehicles (HLDTs and MDPVs), due to the fact that they typically have higher engine-out emissions. EPA expects that this emission level generally can be achieved through calibration alone, and it would not force new emissions control hardware beyond that which manufacturers would be installing normally to reach full Tier 2 compliance. Such a standard would only require up-front research and development costs, and thus, it would add minimal additional cost to vehicles. EPA believes certification burden is likely to be small due to existing cold carbon monoxide testing requirements. Most manufacturers are currently measuring hydrocarbon emissions during this test (even though they are not currently required to report hydrocarbon), and thus, there will be minimal added test burden for cold temperature VOC.<sup>4</sup> At this time, EPA is evaluating appropriate forms of a standard: "bin" standards, average standard, and vehicle weight-based standards. In addition, EPA is considering a program that would become effective in model year 2010 with a possible 4-year phase-in (25%, 50%, 75%, 100% phase-in over 4 year period), and for heavier test weight vehicles EPA is contemplating a possible later start date (e.g., 2012) to begin the phase-in of a standard.

#### 4.1.2 Gasoline

As stated above, EPA is focusing on fuel benzene control for the upcoming rule. EPA is considering proposing an average fuel benzene content standard in the range of 0.60 to 0.65 percent volume for all gasoline. To maximize flexibility and reduce the costs of compliance for refiners, including small refiners, EPA is considering including a nationwide averaging, banking, and trading (ABT) program with no upper limit standard. EPA anticipates generation of early credits to begin as early as 2007, depending on the start date of the standard. The current in-use benzene content of RFG is 0.62 volume percent on average, so a nationwide standard at this level would avoid backsliding in the RFG pool. At the levels EPA is considering, the new standard is also likely to supersede the first MSAT rule and eliminate refinery-specific baselines established in that program (although the statutory 1.3 volume percent benzene cap in the RFG program will continue to apply).

In the proposal, EPA would request comment on the level of the standard. A lower average standard of 0.60 percent would increase the likelihood that California may participate in the program. EPA would also seek comment on the need for a maximum average or a per-gallon cap in conjunction with this average standard. Finally, EPA would seek comment on whether a toxics performance standard should be set (analogous to but more stringent than the current and first MSAT rule standard) in lieu of a benzene content standard, and whether sulfur and/or Reid vapor pressure (RVP) should also be controlled.

 $<sup>^4\,</sup>$  For the new cold temp VOC exhaust requirements, we plan to propose non-methane hydrocarbon standards (NMHC).

#### **4.1.3** Portable Gasoline Containers

There are about 21 million gas cans sold every year, with about 80 million currently in use. Without additional controls, EPA has estimated that gas cans would emit about 10 percent of mobile source VOCs by 2020. The bulk of evaporative emissions come from consumers not properly closing containers. Also, fuel will permeate through the walls of the container, contributing to overall evaporative emissions losses. Manufacturers have designed gas cans that will close automatically when not in use, which substantially reduces evaporative losses (automatically closing spouts include spring-loaded spouts or push button mechanisms to control fuel flow). Automatic closing cans also reduce spillage emissions by providing the consumer with greater control (the cans stay closed until the consumer has positioned the can for refueling the equipment) and also by ensuring there is no spillage if the can is tipped over. For permeation control (permeation barrier in the container walls that prevents fuel from passing through), there are several technological approaches which have been developed for automotive fuel tanks which are now available for other plastic containers such as gas cans. Gas can manufacturers have gained experience with these permeation controls through the California program and the technologies are well understood (methods include multi-layered cans, fluorination, sulfonation, and material additives).

Based on the use of automatically closing cans and permeation control, EPA is considering proposing a diurnal evaporative emissions standard of 0.3 grams/gallon/day. This represents about an 85 percent reduction in emissions from uncontrolled levels. EPA estimates VOC emissions reductions of roughly 200,000 tons (including about 2,500 tons of benzene) when the standards are fully implemented. Testing would be conducted with test fuel containing 10 percent ethanol to ensure that materials are selected that do not have higher permeation emissions when ethanol is present in the in-use fuel. Permeation emissions with some materials, especially nylons, can increase significantly with ethanol in the fuel. EPA expects that the manufacturers will need a few years of lead time after the standards are finalized in order to finalize their designs, certify products, and ramp up production to a national scale, and therefore EPA is considering a start date of 2009. EPA estimates that the program would have a small cost per ton of VOC reductions, and that fuel savings from reduced emissions would offset much of the cost of the overall program.

California also requires spout designs that automatically shut off when the receiving tank is full, much the way a gas pump turns off when a vehicle fuel tank is full. However, this feature has not worked well because there is a great deal of variability in receiving equipment fuel tank configurations. This has lead to fuel tank overfills (spillage) and consumer complaints. California has proposed removing this requirement from their program. EPA plans to discuss the option of automatic shut-off requirements in the proposal, but is not planning to propose such requirements due to these issues.

#### 4.2 Options Likely to be Proposed

#### 4.2.1 Potential Burden Reduction Measures for Highway Light-Duty

#### **Vehicles**

In addition to the major vehicle manufacturers, three distinct categories of businesses relating to highway light-duty vehicles would be covered by the new vehicle standards in this proposed rule: small volume manufacturers (SVMs), independent commercial importers (ICIs), and alternative fuel vehicle converters. For small business relief pertaining to such entities, EPA is evaluating EPA's Tier 2 rule to assess whether the types of small business relief provisions adopted in that rule would be appropriate in this context. In the Tier 2 rule, small volume manufacturers, ICIs, and alternative fuel vehicle converters benefited from the flexibility provisions provided to small entities. One of these provisions allows these entities to opt-out of the interim standards during the phase-in years and to then comply with the Tier 2 standards with 100 percent of their vehicles during the last year of the phase-in period. Another aspect of the Tier 2 rule is a one-year hardship provision that will allow these businesses to apply for an additional year to meet any of the 100 percent phase-in requirements. Finally, these entities, as with all affected entities, are allowed to participate in the Tier 2 averaging, banking, and trading (ABT) program.

EPA is considering the appropriateness of similar provisions in the proposed MSAT rulemaking, and EPA encourages feedback from the small entity representatives on the usefulness and feasibility of the Tier 2 flexibilities.

#### **4.2.2** Potential Burden Reduction Measures for Gasoline Refiners

For the recently finalized or promulgated fuel programs (Tier 2 gasoline, highway diesel, and nonroad diesel), EPA included special small refiner provisions. Recognizing that different small refiners have different needs, it may be possible and appropriate to have several different options in the proposed MSAT rulemaking to address different legitimate needs. In discussions with small refiners, several flexibility options were suggested for consideration in the rule, and are described below. A full discussion on each of these options, and why they should or should not be proposed in the upcoming rule, can be found below in Section 9 of this Report.

#### Delay in Standards

Previous fuel programs have included a delay in the start date of the effective standard for small refiners; historically, this delay has been between two to four years. While a delay would be dependent on the start date of the program, a delay for small refiners was suggested for the upcoming MSAT rule. Such a delay could again be for two, three, or four years (and EPA would likely request comment on the time period of the delay).

#### Small Refiner "Free" Credits

A flexible variation on the delay option would be to provide small refiners with free credits for benzene sufficient to delay compliance for some time. This would be similar to the delay described above in that it would allow a small refiner to remain at its current benzene level for an extended period of time (and EPA would again likely propose two to four years); however, the small refiner free credits would be defined in terms of quantity

of benzene produced rather than time. Under this provision a small refiner could begin use of these credits on the effective date of the standard and remain at its current benzene level for the free credit period, which would be similar to a delay. Or, the refiner could make some reductions to its fuel benzene content, which would enable it to use the free credits at a slower rate lasting for a longer period.

#### Early ABT Credits

Prior fuels rules included provisions to allow all refiners to generate credits for early compliance with the applicable standards. The proposed MSAT rule is likely to contain provisions allowing refiners to earn credits if they reduce their gasoline benzene levels prior to the start of the program. If the proposed rulemaking does in fact include a delay for small refiners, those that comply with the standards on time could generate credits for compliance earlier than otherwise required to do so. The period for generating early credits would be dependent on the effective date of the standard and the date of the small refiner standard (if a delay is given).

#### Extended Credit Life

The design of the ABT program has not be determined, however if the ABT program were to include a limit on the life of the credits, a potential flexibility option that was suggested for long-term relief to small refiners is to extend the life of general program credits if they are sold to small refiners. Such an option would allow small refiners to purchase credits for up to a year beyond when the credits would have otherwise expired to encourage trading with small refiners.

#### "De Minimis" Exclusion(s)

Small refiners have suggested a few different versions of a "de minimis exclusion" option. The idea behind a de minimis exclusion is that small refiners believe that their contribution to the overall national gasoline pool, and therefore their total production of benzene, is at a level that does not warrant compliance with a national benzene standard. They believe that small refiners should either be exempt from the standards, or be allowed to meet a less stringent standard that would be proportional to their contribution to the national gasoline pool and/or benzene emissions.

The two versions of a de minimis exclusion option that were suggested most by the SERs were: 1) a partial or complete exemption from the MSAT standards if the small refiner could show that it only produces a small amount of gasoline; or, 2) a partial or complete exemption from the MSAT standards if the small refiner could show that it only contributes a small amount to the emissions in its area.

#### Small Refiner Alternative Standard Option

The application of an alternate standard for small refiners was suggested as a potential flexibility option. Some small refiners expressed that a low benzene standard will be especially hard for them to meet because of their unique refinery configurations. These refiners suggested the allowance of either a higher benzene content standard or a

toxics-based standard for small refiners only.

#### <u>Alternative Standard-- Toxics Formula Option</u>

A second, related alternative standard option suggested by small refiners was to allow the use of an air toxics formula for small refiners. Such an option would allow a small refiner to meet an equivalent air toxics performance standard, which would be determined from an air toxics formula, in lieu of the benzene standard. The idea behind this suggested option is that a small refiner would be able to enter selected toxics levels, along with their benzene level, into a formula (since air toxics performance as determined by the Complex Model is currently the basis for the first MSAT rule standards with which all refiners must comply). This formula would compute an alternate standard that the small refiner could comply with instead of the benzene standard. The toxics formula could allow small refiners whose gasoline had very low sulfur and olefin contents to comply with an alternate benzene standard that was adjusted to take their sulfur and olefin content into consideration.

## Hardship Options

Previous fuels programs have all included hardship provisions that were available to all refiners and importers. Small refiners have suggested that EPA propose the same two types of hardships that are currently available in other fuels programs: hardship due to extreme unforeseen circumstances and extreme hardship.

A hardship based on extreme unforeseen circumstances is intended to provide short term relief due to unanticipated circumstances beyond the control of the refiner, such as a natural disaster or a refinery fire. An extreme hardship is intended to provide short-term relief based on extreme circumstances (e.g., extreme financial problems, extreme operational or technical problems, etc.) that impose extreme hardship and thus significantly affect a refiner's ability to comply with the program requirements by the applicable dates.

# **4.2.3** Potential Burden Reduction Measures for Portable Gasoline Container Manufacturers

For manufacturers of gas cans, there is not a past program to refer to since the proposed requirements are a new national program. The SBREFA panel sought input from gas can manufacturers (small entity representatives - SERs) on what flexibilities would be most useful in minimizing the burden on small entities. Some examples of flexibilities implemented in past rulemakings for mobile sources include additional lead time to meet standards, modified certification requirements, small volume production flexibility, and hardship provisions that allow businesses to apply for an additional year to meet the new requirements. Manufacturers would be granted hardship relief, subject to some restrictions, if they provided evidence that, despite their best efforts, they cannot meet the implementation dates even with other available flexibilities.

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#### 5. SMALL ENTITIES THAT MAY BE SUBJECT TO THE PROPOSED REGULATION

## 5.1 Highway Light-Duty Vehicles

Based on a preliminary assessment, EPA has identified a total of about 50 businesses that would be covered by the new light-duty vehicle standards. However, due to a lack of sales or employment data, a few of these entities could not be confirmed for consideration in EPA's analysis. Out of these 50 businesses, 21 entities (or 42 percent) fit the SBA criterion of a small business. EPA estimates that these entities comprise about 0.02 percent of the total light-duty vehicle sales in the U.S. for the year 2004.<sup>5</sup>

As described earlier, in addition to major vehicle manufacturers, three distinct categories of businesses characterize the above 50 total entities (and the subset of 21 small businesses): SVMs, ICIs, and alternative fuel vehicle converters. The below discussion gives more detail on these categories.

#### **5.1.1** Vehicle Manufacturers

In most cases, new standards for light-duty vehicles would minimally increase the costs of vehicle manufacturers to produce these vehicles. In addition to major vehicle manufacturers, SVMs are companies that sell less than 15,000 vehicles per year, as defined in past EPA regulations, and this status allows vehicle models to be certified under a slightly simpler certification process.

Using information from a preliminary assessment of the industry, EPA identified a total of 30 businesses that manufacture vehicles (including about 14 SVMs). The top 10 vehicle manufacturers comprise 97 percent of the U.S. total market (there were about 16.9 million total U.S. sales for the year 2004), while the other 20 manufacturers (including SVMs), ICIs, and converters make up the remaining 3 percent. Of the 30 manufacturers (14 SVMs included), 5 SVMs fit the SBA definition of a small entity. These five small businesses comprise about 0.01 percent of the total vehicle sales for the year 2004. Also, these businesses produce vehicles for small niche markets, and nearly all of these entities manufacture limited production, high performance cars. In addition, there are four other SVMs that EPA believes meet the SBA small-entity criterion, but since they are foreign businesses, they cannot be considered in the SBREFA work.

#### **5.1.2** Independent Commercial Importers

ICIs are companies that hold a Certificate (or certificates) of Conformity permitting them to import nonconforming vehicles and to modify these vehicles to meet U.S. emission standards.

<sup>&</sup>lt;sup>5</sup> Sales information used for this analysis was 2004 data.

ICIs are not required meet the emission standards in effect when the vehicle is modified, but instead they must meet the emission standards in effect when the vehicle was originally produced (with an annual production cap of a total of 50 light-duty vehicles and trucks).<sup>6</sup> ICIs would likely have minimal increased cost from the new standards.

Currently 10 ICIs hold EPA certificates, and EPA believes all 10 of these businesses would meet the small-entity criteria as defined by SBA. In 2004, collectively they had a total U.S. sales of about 300 vehicles, and thus, they comprised about 0.002 percent of the total vehicle sales. ICIs modify vehicles for a small niche market, and many of these vehicles are high performance cars.

#### **5.1.3** Alternative Fuel Vehicle Converters

Alternative fuel vehicle converters are businesses that convert gasoline or diesel vehicles to operate on alternative fuel (e.g., compressed natural gas), and converters must seek a certificate for all of their vehicle models. Model year 1993 and newer vehicles that are converted are required to meet the standards applicable at the time the vehicle was originally certified. Converters would likely have minimal increased cost from the new light-duty vehicle standards.

As with SVMs and ICIs, converters serve a small niche market, and these businesses primarily convert vehicles to operate on compressed natural gas (CNG) and liquefied petroleum gas (LPG), on a dedicated or dual fuel basis. Based on information from a preliminary assessment, EPA identified a total of 10 alternative fuel vehicle converters. Together these 10 businesses had about 0.02 percent of the total vehicle sales in the U.S. for the year 2004. Out of these 10 businesses, 6 meet the SBA small-entity criteria. These 6 converters represent about 0.01 percent of the total vehicle sales. In addition, EPA believes three of the other converters fit the SBA small-entity definitions, but since they are foreign businesses, they cannot be considered in the SBREFA work.

#### **5.2** Gasoline Refiners

Based on EPA's current analyses, a fuel program for the purpose of controlling air toxics would apply to the following entities: domestic refineries that produce gasoline, importers of gasoline into the U.S., and foreign refiners of gasoline that export to the U.S.<sup>7</sup> Although some

<sup>&</sup>lt;sup>6</sup> To prevent entities from circumventing Tier 2 light-duty vehicle standards, EPA capped at 50 each ICI's annual production of vehicles meeting the original production (OP) year standards when OP year standards are less stringent than standards that apply during the year of modification. This does not impact the number of vehicles an ICI may produce that are certified to the standards that apply during the year of modification.

<sup>&</sup>lt;sup>7</sup> California gasoline is exempt from many of EPA's regulations, including the gasoline sulfur requirements and the MSAT requirements currently in place. While subject to the reformulated gasoline (RFG) and anti-dumping provisions, California refineries have been exempted from several of the enforcement and compliance mechanisms of those programs. California refineries could be subject to a proposal, in part depending on the form and the level of the

refiners may already have the infrastructure necessary to comply with new fuel controls, others would need to install new equipment. There are several processes or technologies which can reduce gasoline benzene levels: those which prevent the formation of benzene in the refinery, and those which remove or destroy benzene (including both the naturally occurring benzene and that formed by reforming units). Refiners' choices of which technologies to use will be based on their various refinery operating structures and their specific structural and engineering concerns.

Refiners throughout the gasoline industry not only vary in size, but also operationally. Some refiners' gasoline streams are sold locally, while others pipeline or transport their fuel (via trucks, rail cars, and/or ships and barges) to distribute it to various areas of the country. The choice of fuel distribution methods can be based on geographic area, proximity to a pipeline (and where on the pipeline the refinery is located), or proximity to another method of transporting gasoline.

Because the small refiners that will potentially be affected by the upcoming rulemaking vary in their engineering and operating structures, they may have very different concerns based on their different refinery structures. However, EPA does believe that small refiners could have greater difficulty in complying compared to large refiners, due to factors such as limited access to capital, limited operational flexibility, or limited access to benzene markets.

Based on 2003 data, EPA believes that there are about 116 domestic refineries producing gasoline. EPA's current assessment is that 15 refiners meet SBA's criterion of having 1,500 employees or less. Current data further indicates that these refiners produce about 2.5 percent of the total gasoline pool and their contribution to the total mobile source benzene emissions is roughly 5 percent. It should be noted that because of the dynamics in the refining industry (i.e., mergers and acquisitions) and decisions by some refiners to enter or leave the gasoline market, the actual number of refiners that ultimately qualify for small refiner status under an MSAT program could be much different than these initial estimates.

#### **5.3** Portable Gasoline Container Manufacturers

As discussed earlier, annual sales nationwide of gas cans are about 21 million units. 98 percent are plastic containers, and 2 percent are metal gas cans. Blow molding equipment is relatively costly and large production volumes are necessary to operate profitably. These factors seem to limit the number of companies engaged in producing fuel containers, leading to significant industry consolidation over the past decade (25 manufacturers in 1985 to 5 in 2004). EPA has identified 4 domestic manufacturers and 1 foreign manufacturer. Of these 4 U.S. manufacturers, 3 meet the SBA definition of a small entity. One small business accounted for over 50 percent of the U.S. sales in 2002, and the other small entities comprised about 10 percent of U.S. sales.

## 6. SUMMARY OF SMALL ENTITY OUTREACH

#### 6.1 Small Entity Outreach

Before beginning the formal SBREFA process, EPA actively engaged in talking to entities that would potentially be affected by the upcoming rulemaking. As discussed earlier in regard to highway light-duty vehicles, based on information from EPA certification databases and non-governmental sales and employment databases, EPA was able to identify the small entities within the SVM, ICI, and converter sectors. After identifying these entities for the vehicle sector, EPA then began talking to these businesses to locate potential SERs to participate in SBREFA. For portable gasoline container manufacturers, EPA participated in a series of workshops held by the California Air Resources Board and established initial industry contacts. EPA then held several meetings and conference calls with individual manufacturers and with the manufacturers as a group to discuss their products and EPA's upcoming proposal. For gasoline refiners, based on information from past rulemakings EPA began well in advance of the SBREFA process conducting phone conferences and face-to-face meetings with small fuel refiners that produce gasoline. This led to the selection of a set of potential SERs that represent a cross-section of small refiners.

EPA provided each business with EPA's fact sheets on the SBREFA process and background information on the MSAT rulemaking process. Once potential SERs were identified, EPA began having more discussions to better understand the needs of the small entities in more detail and outreach meetings was held with the potential SERs on July 19, 2005, September 27, 2005 (gasoline refiner SERs) and September 29, 2005 (vehicle and gas can manufacturing SERs).

## 6.2 Summary of EPA's Outreach Meetings with Potential Small Entity Representatives on Highway Light-Duty Vehicles, Gasoline, and Portable Gasoline Containers

On July 19, 2005 EPA held three separate 1.5 hour meetings with groups of potential SERs representing the highway light-duty vehicle industry, gasoline refiners, and portable gasoline container manufacturers. Eleven potential SERs participated in the meetings. These outreach meetings were held to solicit feedback from the potential SERs on the upcoming rulemaking.

Each section of the outreach meeting consisted of background on the rulemaking process and an explanation of the SBREFA Panel process and how it fits into the rulemaking schedule from Ken Munis, sitting in for EPA's Small Business Advocacy Chair - Alex Cristofaro. Following this was a presentation by EPA staff giving a background and scope of the proposed requirements for light-duty vehicles, gasoline, and gas cans. EPA then began a discussion on previous alternatives used in past rulemakings and potential ways to modify those alternatives for the upcoming rulemaking, as well as the addition of new alternatives and flexibilities. (See

Appendix A for the materials sent to potential SERs, Appendix B for discussions/comments raised during the Outreach Meeting, and Appendix C for the comments received from potential SERs.) EPA asked that the potential SERs provide feedback on the flexibilities provided in the previous rulemakings, and specifically, which flexibilities worked best for small entities (and which did not), the extent to which they used the flexibilities, and how the flexibilities could be made more useful. EPA asked potential SERs to provide these comments by August 2, 2005.

Following EPA's presentation and a brief question and answer period, a discussion of the issues related to this rulemaking ensued. Issues that were raised by the potential SERs during the discussion included the items listed below.

#### Gas cans

The gas can manufacturers that participated in the outreach generally asked how the national standards will be coordinated with the California program and other requirements. One manufacturer stated that the proposed new standards should have up-front certification similar to California's requirements. Manufacturers discussed the need to have adequate opportunity for sell through at the start of the program. Manufacturers want to avoid retailers having to send back non-complying products because they have not yet sold when EPA's program begins. Another manufacturer asked how EPA's program would relate to OSHA safety requirements for gas cans. In addition, EPA discussed why California's automatic shut off control did not work well. EPA-OTAQ staff expressed that they would continue to work with gas can SERs to develop flexibility options.

#### *Light-duty vehicles*

The small volume manufacturers, ICIs, and converters that participated had questions about the form of the new standards for light-duty vehicles. A converter asked whether EPA plans to propose new non-methane organic gas (NMOG) standards or standards that are specific to toxics. Concerns about currently being required to test for formaldehyde standards were discussed. Also, a converter asked whether testing equipment presently existed to test for cold temperature VOC emissions. In addition, certification of evaporative emissions systems by EPA versus California was discussed.

#### Gasoline refiners

During the first outreach meeting with the small refiners, those that participated generally stated that they believed that small refiners would face challenges in meeting a new standard. More specifically, they believe that the rule would be very costly and dependence on credits would not be a comfortable situation, with credit availability from large refiners being unreliable and possibly expensive. They were also concerned about the timing of the standards for this rule, given other upcoming fuel standards. Various flexibility options were noted by some gasoline small refiners during pre-Panel outreach (these potential options are discussed above in section 3). EPA-OTAQ staff and the small refiner SERs committed to having more discussions to determine appropriate small refiner flexibility options.

During the second outreach meeting with the small refiners, it became evident that the "Small Refiner Free Credit Option" was the equivalent of a small refiner delay option with the ability to generate credits during the delay period. EPA also felt that a delay option would give more flexibility to those small refiners that were planning to increase their gasoline production. Following this discussion, EPA and the small refiner SERs agreed that a delay with the opportunity to earn credits, and also be able to increase production would be the most useful for the small refiners. In addition, EPA discussed the possibility of, after the first year of the general program, performing a review of the small refiner provisions. Specifically, EPA would evaluate the credit trading program to ensure that ample credits are available and trading is occurring. The SERs felt that a four-year delay would be the most beneficial delay period because it would allow sufficient time (three years) for small refiners to make investments towards compliance following the review.

Please Note: Appendices B and C contain a more detailed summary of the Outreach meetings that were held with small refiner SERs.

## 7. LIST OF SMALL ENTITY REPRESENTATIVES

The following is a list of the SERs that were included in the Panel process:

## **Small Volume Auto Manufacturers (Vehicles):**

Panoz Auto Development Company John M. Leverett (Engineering) Hoschton, GA

## **Alternative Fuel Vehicle Converters (Vehicles):**

DRV Energy, Inc. Sheri Vanhooser Oklahoma City, OK

IMPCO Technologies/Quantum Technologies Karen Szabo Hay Cerritos, CA

## **Independent Commercial Importers (Vehicles)**:

Wallace Environmental Testing Les Weaver Houston, TX

#### **Gasoline Refiners:**

U.S. Oil & Refining Company Al Cabodi Tacoma, WA

Countrymark Cooperative John Stern Indianapolis, IN

Gary-Williams Energy Corporation Sally Allen Denver, CO Dave Roderick Wynnewood, OK

American Refining Rick Kucharski Bradford, PA

## **Portable Gasoline Container Manufacturers:**

Blitz USA Larry Chrisco Miami, OK

Midwest Can Company John Trippi, Jr. Melrose Park, IL

No-Spill Research Mark Pierce Kansas City, MO

# 8. SUMMARY OF COMMENTS FROM POTENTIAL SMALL ENTITY REPRESENTATIVES

# 8.1 Number and Types of Entities Affected

#### 8.1.1 Comments from Vehicle Manufacturer and Gas Can SERs

Though EPA did not receive specific comments on the number and types of potential entities that may be affected by the rulemaking, EPA believes that the potential SERs are in agreement with EPA on the number and types of entities that may be affected. As stated previously in Section 5, EPA believes that 5 small SVMs, 10 small ICIs, 6 small alternative fuel vehicle converters, and 3 small gas can manufacturers could be affected by this rule.

#### 8.1.2 Comments from Small Gasoline Refiner SERs

The comments from SERs noted that the small refiners believe that there could be up to 20 small refiners affected by the MSAT rule.

# 8.2 Potential Reporting, Record Keeping, and Compliance

#### 8.2.1 Comments from Vehicle Manufacturer and Gas Can SERs

Specific comments on potential reporting and record keeping have not been received. In regard to compliance, one vehicle SER wanted to confirm that the proposed cold temperature VOC standards for highway light-duty vehicles would be non-methane hydrocarbon standards (NMHC) standards. In response, EPA indicated that they would plan to propose NMHC standards. In addition, this same SER asked if the testing equipment currently existed to record cold temperature NMHC emissions. EPA replied that no equipment upgrade would be needed since the equipment would already be in place from the existing cold temperature CO standards, where most manufacturers are currently measuring hydrocarbon emissions (even though they are not required to report hydrocarbon emissions).

One gas can SER commented that proposed new gas can standards should have up-front certification similar to California's requirements. In response, EPA indicated that they plan to propose up-front certification because they want to mare sure gas cans are able to meet the standards in-use. For certification, EPA would group together gas cans that have the same materials and spout designs. As for flexibility provisions, EPA is considering ways to minimize certification testing by having such broad testing and allowing the carry over of data from California's program. In addition, SERs also expressed the need to have adequate opportunity for sell through at the start of the program. They want to avoid retailers having to send back non-complying products because they have not yet sold when EPA's program begins. EPA replied that they typically allow normal sell through of products as long as manufacturers do not create stockpiles of noncomplying products prior to the start of the program.

#### **8.2.2** Comments from Small Gasoline Refiner SERs

One small refiner SER commented that it is difficult to give a description of projected reporting, record keeping, and other requirements resulting from the proposed rule until the rule is final. He further commented that he believes that all small refiners producing gasoline will be required to have additional record keeping, testing, and other activities which will need to be preformed by individuals with professional skills. He stated that the nature and number of such employees and the type of records and testing will only be known after the rule is adopted but it will undoubtedly add considerable record keeping and expense.

No other small refiner SERs commented on potential reporting and recordkeeping associated with the upcoming rulemaking.

### 8.2.2.1 Recordkeeping and Reporting Comments

One small refiner SER commented that it is difficult to give a description of projected reporting, record keeping, and other requirements resulting from the proposed rule until the rule is final. He further commented that he believes that all small refiners producing gasoline will be required to have additional record keeping, testing, and other activities which will need to be preformed by individuals with professional skills. He stated that the nature and number of such employees and the type of records and testing will only be known after the rule is adopted but it will undoubtedly add considerable record keeping and expense.

The ad-hoc group of small refiners also generally stated that the MSAT rulemaking will eliminate many of the refiners' reporting requirements, as it will supersede anti-dumping refinery-specific standards and the first MSAT refinery baselines.

# **8.2.2.2** Compliance Comments

The small refiners commented that it is not likely that small refiners will be able to cut benzene to the low levels predicted at the costs estimated by EPA's modeling. The small refiners also commented that they believe that the costs of compliance for benzene extraction technologies appear unrealistic on the basis of the preliminary information currently available to small refiners; and that some small refiners are not located in areas where they would be able to participate in markets for extracted benzene. The small refiners also commented that they are "severely overtaxed" to meet recent and projected environmental regulations, and that additional costs associated with the upcoming MSAT rulemaking are a significant concern to them. Specifically, the small refiners stated that, in general, they believe that EPA has underestimated costs by a factor of two to three. The small refiners also expressed concern over the use of a credit trading program for compliance. They noted that "credit trading programs are almost impossible to factor into capital investment decisions of this magnitude because the availability and cost of credits cannot generally be determined when decisions must be made"; they raised concerns that the credits may not be available, or would only be available at a cost that small refiners could not afford. The small refiners further noted that it will be difficult for them to

generate credits for use or sale on the market because of the anticipated difficulty of cutting benzene below the standard.

One small refiner noted that it believes that its refinery would need to make the full capital investment for complete benzene reduction, it would not be able to cut its benzene levels "in stages", but states that it could only do so with a significant capital investment. The small refiner further states that, due to octane losses, it is also concerned that it would not be able to produce saleable gasoline if it was to reduce its benzene levels to the anticipated benzene standard. Also, this small refiner noted concerns about the fact that its refinery plans to expand its refining capacity; it was concerned that any baseline year that is chosen for the MSAT program should include room for expansion. The SER specifically suggested that 130% be chosen to allow for refinery expansion.

Another small refiner raised similar concerns about its ability to meet a proposed benzene standard in the 0.6 to 0.65 range. It noted the costs of compliance of the rule coupled with its costs in relation to other rules, and its potential inability to produce gasoline with a satisfactory octane level. The small refiner also stated that it has concerns about using the credit trading market as a means to comply with the rule, noting the uncertainty of the availability of credits and their costs as its main concern. The refiner further noted that the credits may only be available at a cost that it could not afford, or would not be able to recover in the cost of the product that is sold.

#### **8.3** Related Federal Rules

As discussed later in section 9, there are a few current or proposed Federal rules that are related to the upcoming MSAT proposed rule.

#### 8.3.1 Comments from Vehicle Manufacturer and Gas Can SERs

As described earlier, a gas can manufacturer asked how the new program EPA is considering to propose would relate to OSHA safety requirements for gas cans. For gas cans, OSHA has safety regulations for gasoline containers utilized in workplace settings. Cans meeting OSHA requirements, commonly called safety cans, are exempt from the California program, and EPA is also planning to exempt these cans from the new EPA program.

Vehicle and gas can SERs did not raise any concerns with other rules. In addition, EPA is not aware of any area where the regulations under consideration would directly duplicate or overlap with other Federal rules for these entities.

#### **8.3.2** Comments from Small Gasoline Refiner SERs

As discussed in more detail in Section 2 and below in Section 9, EPA believes that Section 1501 of the Energy Policy Act of 2005 may slightly overlap with the refiner requirements of the upcoming rulemaking in light of the ethanol content requirement in the Act.

One small refiner commented that it has concerns about blending ethanol into fuel that it would be transporting by pipeline.

# **8.4** Regulatory Flexibility Alternatives

All comments received from the potential SERs on potential flexibility alternatives are detailed in section 9 and *Appendices B* through *E*. In response to these comments, specific flexibility provisions are described in section 9.

#### 8.4.1 Comments from Vehicle Manufacturer and Gas Can SERs

As discussed in section 9 and *Appendices B* through *E*, vehicle and gas can SERs were supportive of the flexibility discussed earlier in section 4.2.1 and 4.2.3. In addition, vehicle SERs suggested we consider extending the hardship relief provision beyond one year. Also, gas can SERs requested that the certification process be simplified (e.g., broaden engine families) and that there be additional lead time for the start of the program.

#### **8.4.2** Comments from Small Gasoline Refiner SERs

In general, we were in agreement with the small refiner SERs on potential flexibility options for the rule that have been discussed throughout this SBREFA process. The SERs noted a couple of additional flexibility suggestions (see comments below in *Appendix E*) which we fully discuss, along with those flexibilities that were suggested previously, below in Section 9.

# 9. PANEL FINDINGS AND DISCUSSIONS

# 9.1 Number and Types of Entities Affected

Section 5 of this report, "Small Entities That May Be Subject to the Proposed Regulation," provides a description of an estimate of the number and types of entities that may likely be affected by the proposed rulemaking. These entities include highway light-duty vehicle manufacturers (including independent commercial importers and alternative fuel vehicle converters), gasoline refiners, and portable gasoline container manufacturers.

The comments from small refiners noted that there may be up to 20 small refiners affected by the upcoming rulemaking. We do not dispute that, when the rulemaking is finalized or takes effect, there may be 20 small refiners that will be affected by the rule. However, EPA's assessment of 15 small refiners reflects the fact that there are 15 refineries *currently* producing gasoline that will potentially be affected by the rule. The additional five refiners noted in the small refiner comments is due to the fact that there may be some additional refineries that are not currently in the gasoline market, but may enter the market in the near future and would therefore be affected by the rule.

# 9.2 Potential Reporting, Record Keeping, and Compliance

At this point in the rulemaking process, EPA has not yet fully defined a program of reporting and record keeping requirements or compliance assurance for the entities that may be subject to the proposed rule. As with any emission control program, EPA must have the assurance that the regulated entities will meet the emissions standards and all related provisions.

#### 9.2.1 Highway Light-duty Vehicles and Gas Cans

For highway light-duty vehicles, EPA expects to propose to continue the reporting, recordkeeping, and compliance requirements prescribed for this category in 40 CFR 86. Key among these are certification requirements and provisions related to reporting of production, emissions information, flexibility use, etc.

#### 9.2.2 Gasoline Refiners

For any fuel control program, EPA must have assurance that fuel produced by refiners meets the applicable standard. EPA expects that recordkeeping, reporting and compliance provisions of the proposed rule will be fairly consistent with those in place today for other fuel programs. For example, reporting likely would involve the submission of pre-compliance reports, which are already required under the highway and nonroad diesel rules, to give EPA general information on refiners' plans and the projected credit availability.

#### **9.2.3 Gas Cans**

As indicated earlier, there currently are not federal emission control requirements for gas cans, and thus, EPA is still developing reporting and record keeping requirements for gas can manufacturers that would be subject to the proposed standards. EPA is considering requirements that would be similar to those in California (e.g., emissions testing, data submittal). See section 9.4.3.1 for certification flexibility provisions.

#### 9.3 Related Federal Rules

The Panel is aware of a few other current or proposed Federal rules that are related to the upcoming proposed rule. The Panel is not aware of any area where the regulations under consideration would directly duplicate or overlap with these Federal rules.

# 9.3.1 Highway Light-duty Vehicles

For highway light-duty vehicles, the test procedure in the 1992 Cold Temperature Carbon Monoxide Rulemaking is the basis for test procedure we would use for cold temperature VOC standards EPA is considering. As indicated earlier, most manufacturers are currently measuring hydrocarbon emissions during the cold CO test even though they are not currently required to report hydrocarbon. For the proposed new cold VOC requirements, manufacturers would be required to report their hydrocarbon emissions (we plan to propose non-methane hydrocarbon emission standards).

In addition, the Evaporative Emissions Streamlining Direct Final Rulemaking is expected to be published by the end of this year. This rulemaking will make changes to the evaporative and refueling emission regulations for vehicles. These changes are intended to reduce manufacturer's certification testing burden, clarify requirements, and better harmonize federal and California test procedures. As indicated earlier, the proposed new evaporative emission standards for this second MSAT rulemaking would harmonize with California's LEV-II evaporative emission standards and further streamline certification requirements (in addition to the Evaporative Emissions Streamlining rulemaking). For this MSAT rulemaking, we would not be duplicating or overlapping with any of the test procedure revisions found in the Evaporative Emissions Streamlining rulemaking.

#### 9.3.2 Gasoline Refiners

As noted above in section 2.3 ("Related Federal Rules"), the Renewable Fuels Standard program may have some impact on this rulemaking. Some refiners noted in their comments concerns over the ability to produce a saleable product upon reducing their benzene levels (due to a reduction in octane when benzene is removed). The most prevalent renewable fuel is expected to be ethanol, and since ethanol has a high octane number relative to gasoline, its mandated use may offset some of the octane losses resulting from new controls on gasoline benzene content.

The Panel has also discussed the possibility of allowing small refiners to receive credits of some sort, under the MSAT rule, for blending ethanol into their gasoline. This could help to alleviate problems of reduced octane and will help further the goals of the Renewable Fuels Standard. EPA noted that it may be possible in some circumstances for a refiner to obtain credit for the downstream blending of ethanol (dilution effect). For example, a sub-octane gasoline that could not be sold if ethanol were not blended into it downstream. However, EPA also noted that receiving credits for blending ethanol could be available to all refiners in the MSAT program. EPA noted that it would have to consider this more carefully, before any final decisions were made on this. The Panel recommends that EPA propose a credit for refineries for benzene-content dilution due to the downstream blending of ethanol, but the Panel acknowledges that such a regulatory scheme may be unreasonably difficult to design and implement effectively.

The Panel also notes that some refiners may be required to obtain permits from state and local air pollution control agencies under the Clean Air Act's New Source Review program prior to constructing the desulfurization equipment needed to meet the standards.

#### **9.3.3** Gas Cans

As indicated in section 2.3, for gas cans, OSHA has safety regulations for gasoline containers used in workplace settings. Gas cans meeting OSHA requirements, commonly called safety cans, are exempt from the California program, and EPA is planning to exempt them from the EPA program.

# 9.4 Regulatory Flexibility Alternatives

Due to the potential cost and technology challenges that small businesses may face as a result of the upcoming rulemaking, the Panel recommends a group of complementary flexibility alternatives that would work together to help mitigate any negative impacts on small businesses. The Panel also seeks comment on some flexibility options in the development of the upcoming rule. The alternatives discussed throughout the Panel process include those offered in previous or current EPA rulemakings, as well as alternatives suggested by SERs and Panel members, and the Panel recommends that all are considered in the development of the upcoming rule.

# 9.4.1 Highway Light-Duty Vehicles

As discussed earlier in section 4.2.1 and 5.1, in addition to the major vehicle manufacturers, three distinct categories of businesses relating to highway light-duty vehicles would be covered by the new vehicle standards: small volume manufacturers (SVMs), independent commercial importers (ICIs), and alternative fuel vehicle converters. Small volume manufacturers are entities that sell less than 15,000 vehicles per year, and this status allows vehicle models to be certified under a slightly simpler certification process. Thus, for certification purposes (and for the sake of simplicity for discussions within this section), SVMs include ICIs and alternative fuel vehicle converters since they sell less than 15,000 vehicles per

year.

The Panel identified 21 out of 50 entities covered by the vehicle standards that qualify as small businesses (5 manufacturers, 10 ICIs, and 6 converters) under the SBA definition. Four of these companies participated as SERs. As also described in section 4.2.1 (and similar to provisions in the Tier 2 rule), we sought comment from the SERs on allowing small entities to simply comply with the proposed evaporative emission and cold temperature VOC standards with 100 percent of their vehicles during the last year of the phase-in period. In addition, we asked for comment on a one-year hardship provision that will allow these businesses to apply for an additional year to meet any of the 100 percent phase-in requirements. SERs were supportive of these two types of flexibility provisions. However, SERs requested that we consider providing a hardship provision that would apply for more than one year in order to reduce the burden associated with reapplying for relief every year.

# 9.4.1.1 Regulatory Flexibility Options for Highway Light-Duty Vehicles

In these types of vehicle businesses, predicting sales is difficult and it is often necessary to rely on others for technology. Moreover, percentage phase-in requirements pose a dilemma for an entity such as an SVM that has a limited product line (e.g., makes vehicles in one or two test groups). Thus, similar to the flexibility provisions implemented in the Tier 2 rule, the Panel recommends that we allow SVMs, manufacturers with sales less than 15,000 vehicles per year (includes all vehicle small entities that would be affected by this rule, which are the majority of SVMs) the following flexibility options for meeting cold temperature VOC standards and evaporative emission standards.

For cold VOC standards, the Panel recommends that SVMs simply comply with the standards with 100 percent of their vehicles during the last year of the 4 year phase-in period. For example, if the standard for light-duty vehicles and light light-duty trucks (0 to 6,000 pounds GVWR) begins in 2010 and ends in 2013 (25%, 50%, 75%, 100% phase-in over 4 years), the SVM provision would be 100 percent in 2013. If the standard for heavy light-duty trucks and medium-duty passenger vehicles (greater than 6,000 pounds GVWR) starts in 2012 (25%, 50%, 75%, 100% phase-in over 4 years), the SVM provision would be 100 percent in 2015.

In regard to evaporative emission standards, the Panel recommends that since the evaporative emissions standards will not have phase-in years, we allow SVMs to simply comply with standards during the third year of the program (we have implemented similar provisions in past rulemakings). For a 2009 start date for light-duty vehicles and light light-duty trucks, SVMs would need to meet the evaporative emission standards in 2011. For a 2010 implementation date for heavy light-duty trucks and medium-duty passenger vehicles, SVMs

 $<sup>^8</sup>$  About 34 out of 50 entities are SVMs - sell less than 15,000 vehicles per year, and 21 of these 34 SVMs are small businesses as defined by SBA criteria.

would need to comply in 2012.

EPA believes that these flexibility options offer an opportunity to reduce the burden on vehicle small businesses while at the same time meeting the regulatory goals of EPA. Further, these options will not put small entities at a significant disadvantage as they will be in compliance with the standards in the long run and the options will give them more lead time to comply.

# 9.4.1.2 Hardship Provisions for Highway Light-Duty Vehicles

In addition, the Panel recommends that hardship provisions be extended to SVMs for the cold temperature VOC and evaporative emission standards. SVMs would be allowed to apply (EPA would need to review and approve application) for up to an additional 2 years to meet the 100 percent phase-in requirements for cold VOC and the delayed requirement for evaporative emissions. Appeals for such hardship relief must be made in writing, must be submitted before the earliest date of noncompliance, must include evidence that the noncompliance will occur despite the manufacturer's best efforts to comply, and must include evidence that severe economic hardship will be faced by the company if the relief is not granted. The above provisions should effectively provide more time.

#### 9.4.2 Gasoline Refiners

Discussed below are the options that were suggested above in Section 4.2.2 ("Potential Burden Reduction Measures for Gasoline Refiners"). These options were discussed at length during both the September 27, 2005 Outreach Meeting and the Panel Convening. In some cases, as noted below, discussions regarding some of the previously suggested options led to the development of different potential options.

#### Delay in Standards

As noted above, previous EPA fuel programs have included two to four year delays in the start date of the effective standards for small refiners. The length of time for a delay is dependent on the effective date of the rule, however, the Panel recommends that a four-year delay period should be proposed for small refiners. A four-year delay would be needed in order to allow for a review of the ABT program, as discussed below, to occur one year after implementation but still three years prior to the small refiner compliance deadline. EPA also noted that a delay option would also allow for small refiners to be able to expand their production capacity, which one of the SERs noted that it planned to do in the near future. The SER suggested that small refiners be allowed to expand their production capacity up to 130% beyond the baseline that is chosen for the MSAT rule; however, EPA stated that it is unclear at this time what the amount of such an expansion should be. The Panel is in support of allowing for refinery expansion and recommends that refinery expansion be provided for in the rule.

# Early ABT Credits

The Panel recommends that early credit generation be afforded to small refiners that take some steps to meet the benzene requirement prior to the effective date of the standard. Depending on the start date of the program, and coupled with the four-year delay option, a small refiner could have a total credit generation period of five to seven years. While prior fuels programs have given early credits only to refiners who have met the applicable standard early, the Panel is in support of letting refiners (small, as well as non-small, refiners) generate credits for reductions to their benzene emissions levels.

#### Small Refiner "Free" Credits

During discussions in the SER Outreach Meeting #2, EPA discussed the fact that allowing small refiners to receive "free credits" equal to four years was quite similar to, and actually less flexible than, a four-year delay option; especially when the delay option is combined with the opportunity for small refiners to generate credits during the delay period. Further, as stated above, a delay option would also allow for small refiners to expand their production capacity. Therefore, the Panel recommends that EPA pursue a delay option (with the opportunity to generate early credits).

#### Extended Credit Life

The flexibility option would only be available if the general ABT program included a limit on credit life. During Panel discussions, it was noted that some Panel members were not in support of limited credit life for the general program. EPA has not yet determined the design of the MSAT ABT program; however, EPA is likely to propose a program that does not place limits on credit life. The Panel recommends that EPA propose a program that does not place a limit on credit life.

#### Program Review

EPA has plans to design the MSAT program so that refiners can either make investments in technology to reduce benzene or purchase credits in order to comply with the rule. Due to the wide variation in gasoline refiners' situations, it may be more economically sound for some refiners to purchase and use credits. Small refiners voiced concerns about having to rely on a credit market for compliance. Specifically, these small refiners feared that there could be a shortage of credits or that the cost of credits could be so high that the option to purchase credits for compliance would be cost prohibitive. During the second Outreach Meeting, it was suggested that EPA perform a review of the credit program and small refiner flexibility options one year after the general program starts.

Such a review could take into account the number of early credits generated, as well as the number of credits generated and sold during the first year of the program. Further, if EPA does require the submission of pre-compliance reports from all refiners, this will aid EPA in assessing the ABT program prior to performing the review. If small refiners are given the recommended four-year delay, a review after the first year of the program would still provide small refiners with the three years that it was suggested would be needed for these refiners to obtain financing and perform engineering and construction for benzene reduction equipment. The Panel supports this review. Should the review

conclude that changes to either the program or the small refiner provisions are necessary, the Panel recommends that EPA also consider some of the suggestions provided by the small refiners (their comments are located in *Appendix E*), such as:

- the review should occur within the first year of the program to allow small refiners three additional years before capital investments must be made;
- the general MSAT program should require pre-compliance reporting (similar to EPA's highway and nonroad diesel rules);
- following the review, EPA should revisit the small refiner provisions if it is found that the credit trading market does not exist, or if credits are only available at a cost that would not allow small refiners to purchase credits for compliance; and,
- the review should offer ways either to help the credit market, or help small refiners gain access to credits (*e.g.*, EPA could 'create' credits to introduce to the market, EPA could impose additional requirements to encourage trading with small refiners, etc.).

In addition, the Panel recommends that EPA consider in this rulemaking establishing an additional hardship provision to assist those small refiners that cannot comply with the MSAT with a viable credit market. (This suggested hardship provision was also suggested by the small refiners in their comments, located in Appendix E, below). This hardship provision would address concerns that, for some small refineries, compliance may be technically feasible only through the purchase of credits and it may not be economically feasible to purchase those credits. This flexibility would be provided to a small refiner on a case-by-case basis following the review and based on a summary, by the refiner, of technical or financial infeasibility (or some other type of similar situation that would render its compliance with the standard difficult). This hardship provision might include further delays and/or a slightly relaxed standard on an individual refinery basis for a duration of two years; in addition, provision might allow the refinery to request, and EPA grant, multiple extensions of the flexibility until the refinery's material situation changes. The panel understands that EPA may need to modify or rescind this provision, should it be implemented, based on the results of the program review.

The Panel also notes that, when combined with the four-year delay option, this will afford small refiners with the knowledge of the credit trading market's status before they would need to invest capital. Thus, the Panel supports and recommends a review of the ABT program after the first year of the general program.

# Small Refiner Alternate Standards

The allowance of a higher benzene content standard, or a separate toxics standard, for small refiners was also suggested as a flexibility option. As mentioned above, in all previous EPA fuel programs, small refiners have at some time been required to meet the general program standards. Therefore, this option is not recommended by the Panel for proposal as a flexibility option; however the Panel does recommend that EPA consider this as a possible option if, after the review, EPA determines that more flexibility options are needed.

#### Alternate Standards Option- Air Toxics Formula

Alternate standards options were suggested by SERs in order to assist those with very low sulfur and aromatics content in complying with the MSAT program. Such a standard would, theoretically, allow a small refiner to meet some sort of total toxics-based formula (an "air toxics" formula) instead of a benzene standard. Upon further study, EPA found that, unfortunately, the refiners who are very low in sulfur and olefins tend to also be high in aromatics. Consequently, a toxics performance standard equivalent in stringency to a benzene standard would be unlikely to provide small refiners with any significant relief, and in some cases could provide a more stringent standard. As the Panel's goal is to recommend flexibility options that provide meaningful relief to small entities, the Panel does not recommend this option for inclusion in the rule.

# "De Minimis" Exclusion

The small refiner SERs have suggested that they should receive a de minimis exemption due to the fact that they do not contribute heavily to the total national benzene emissions. While prior EPA fuels rulemakings have offered flexibility options for approved small refiners-- some of which allow small refiners to delay compliance-- EPA notes that none of these programs have allowed a complete exemption from the standards, and that small refiners have had to comply with the overall program standards by a known date. EPA also noted that legally it may be difficult to justify the allowance of such an exclusion; from a policy standpoint, a de minimis option is not preferred. The Panel has discussed this fully, and therefore does not recommend that a de minimis exclusion option be proposed for small refiners for the MSAT program.

#### Hardship Options

EPA has stated that it does intend to propose the extreme unforeseen circumstances hardship and extreme hardship provisions (for all gasoline refiners and importers), similar to those in prior EPA fuels programs. As previously stated, a hardship based on extreme unforeseen circumstances is intended to provide short term relief due to unanticipated circumstances beyond the control of the refiner, such as a natural disaster or a refinery fire; an extreme hardship is intended to provide short-term relief based on extreme circumstances (e.g., extreme financial problems, extreme operational or technical problems, etc.) that impose extreme hardship and thus significantly affect a refiner's ability to comply with the program requirements by the applicable dates. The Panel agrees with the proposal of such provisions and recommends that EPA include them in the MSAT rulemaking.

The Panel recommends that EPA propose a four-year delay, early credit generation, the three various hardship options, and the review of the ABT program in the upcoming MSAT rulemaking.

#### 9.4.3 Portable Gasoline Container Manufacturers

The Panel identified 3 out of 5 gas can manufacturers that meet the SBA definition of a

small entity. All three companies participated as SERs. The concerns raised by SERs are described below in this section.

# 9.4.3.1 Regulatory Flexibility Options for Portable Gasoline Container Manufacturers

EPA believes that the flexibility options discussed below offer an opportunity to reduce the burden on gas can manufacturers while simultaneously meeting EPA's regulatory goals. Since nearly all gas can manufacturers are small entities and they account for about 60 percent of sales, we plan to extend the flexibility options to all gas can manufacturers. Moreover, implementation of the program would be much simpler by doing so. The options will not put small entities at a significant disadvantage.

# **Design Certification**

The process of certification is a business cost and lead time issue, which potentially places a disproportionate burden on small entities. Certification is a fixed cost of doing business which is potentially more burdensome on a unit cost basis for small entities if they have relatively low production volumes. It is potentially an even greater challenge since small entities will likely contract emission testing work to other parties.

Manufacturers could demonstrate the durability of their gas cans based in part on emissions test data from designs using the same permeation barriers and materials. Under a design-based certification program a manufacturer would provide evidence in the application for certification that their container would meet the applicable standards based on its design (e.g., use of a particular permeation barrier). The manufacturer would submit adequate engineering and other information about its individual design such that EPA could determine that the emissions performance of their individual design would not be negatively impacted by slosh, UV exposure, and/or pressure cycling (whichever tests the manufacturer is proposing to not run prior to emissions testing). This approach would allow manufacturers to potentially minimize the amount of durability testing (slosh, UV exposure, and pressure cycling) that must occur prior to running the certification emissions test. The Panel recommends that EPA propose to permit small entities to use design certification in lieu of running any or all of the durability aging cycles noted above.

# **Broaden Certification Families**

This approach would relax the criteria used to determine what constitutes a certification family. It would allow small businesses to limit their certification families (and therefore their certification testing burden), rather than testing all of the various size containers in a manufacturer's product line. Some small entities may be able to put all of their various size containers into a single certification family. Manufacturers would then certify their containers using the "worst case" configuration within the family. To be grouped together, containers would need to be manufactured using the same materials and processes even though they are of

different sizes. The Panel recommends that EPA propose this approach.

#### Additional Lead-time

One SER discussed the possibility that additional lead-time may be needed beyond 2009 to ramp-up production of complying cans. During the outreach meeting, the SER said they would be discussing lead-time with their tooling suppliers and would provide additional input on the need for additional lead-time to the panel during the comment period. The panel, however, did not receive additional input from the SER. Since it may take additional time for the SERs to gather information to fully evaluate whether or not additional lead-time is needed beyond the 2009 start date, the Panel recommends that EPA discuss lead-time in the proposal and request comments on the need for additional lead-time to allow manufacturers to ramp up to a nationwide program.

# Product Sell-through

SERs raised concerns that during the transition period after the start of the program, that retailers not be required to pull noncomplying products from store shelves. SERs believed this would cause significant hardship for manufacturers and retailers and could lead to the old product being scrapped. The SERs recommended that EPA require newly manufactured products to meet the new standards after the start date of the program, but allow normal sell through of old products. SERs noted that all cans are currently marked with a production date stamp. EPA explained that we typically allow normal sell through of products as long as manufacturers do not create stockpiles of noncomplying products prior to the start of the program. The panel recommends that EPA propose this same approach for gas cans.

# 9.4.3.2 Hardship Provisions for Portable Gasoline Container Manufacturers

The Panel recommends that EPA propose two types of hardship programs for small gas can manufacturers. The first type of hardship program would allow small manufacturers to petition EPA for limited additional lead-time to comply with the standards. A manufacturer would have to make the case that it has taken all possible business, technical, and economic steps to comply but the burden of compliance costs or would have a significant adverse effect on the company's solvency. Hardship relief could include requirements for interim emission reductions. The length of the hardship relief would be established during the initial review and would likely need to be reviewed annually thereafter. EPA anticipates that one to two years would normally be sufficient. The second hardship program would allow small manufacturers to apply for hardship relief if circumstances outside their control cause the failure to comply (i.e. supply contract broken by parts supplier) and if failure to sell the subject containers would have a major impact on the company's solvency. The terms and timeframe of the relief would depend on the specific circumstances of the company and the situation involved. As part of its application, a company would be required to provide a compliance plan detailing when and how it would achieve compliance with the standards under both types of hardship relief.

# 10. APPENDICES

Appendix A: List of Materials SBAR Panel Shared With SERs During Panel Outreach

Appendix B: Summary of SBAR Panel's First Small Entity Outreach Meeting

Appendix C: Summary of SBAR Panel's Second Small Entity Outreach Meeting

Appendix D: Written Comments Received from Potential SERs on Outreach Meeting #1

Appendix E: Written Comments Received from Potential SERs on Outreach Meeting #2

# Appendix A: List of Materials SBAR Panel Shared With SERs During Panel Outreach

# Appendix B: Summary of SBAR Panel's First Small Entity Outreach Meeting

# Discussion and Summary of Comments During July 19, 2005 Outreach Meeting

# **Background**

On July 19, 2005, EPA held three 1.5 hour meetings with Small Entity Representatives (SERs) representing the light-duty vehicles, gas can, and gasoline refining industry. EPA plans to propose a Mobile Source Air Toxics (MSAT) rulemaking in early 2006.

The outreach meeting was held to describe EPA's plans to date, and to solicit feedback from the SERs on the upcoming rulemaking. EPA is working closely with the SERs to develop regulations for these industries to protect public health and the environment, while avoiding (as much as possible) disproportionate burdens on small businesses. Once the federal Small Business Advocacy Review (SBAR) Panel convenes, the SERs, most of whom attended the Outreach Meeting, will aid this process by providing comments to the Panel. Ultimately, the Panel will draft a report providing recommendations on the proposed rulemaking. The report will then be sent to EPA for consideration in the proposed rule while it is being developed.

#### Introduction

Each Outreach Meeting consisted of background on the rulemaking process and an explanation of the SBREFA Panel process from Ken Munis, on behalf of EPA's Small Business Advocacy Chair, Alex Cristofaro. Following this were presentations by EPA- OTAQ staff on the rulemaking and prior rulemaking flexibilities. Discussions then began on the challenges small businesses may face in complying with the rule, and potential ways to modify the rule provisions/offer regulatory flexibility.

# **Light-Duty Vehicles**

#### IMPCO Technologies/Quantum Technologies

Karen Szabo Hay of IMPCO Technologies/Quantum Technologies participated by phone in the outreach meeting. She asked whether we plan to propose more stringent non-methane organic gas (NMOG) standards for highway light-duty vehicles that are not specific to toxics.

Response from EPA staff: We plan to propose VOC standards. You will see reductions in VOC based toxics with more stringent VOC standards. For new cold temp VOC exhaust requirements, we plan to have non-methane hydrocarbon standards (NMHC), which are easier to test. For the new evaporative emission standards, the standards

would be hydrocarbon (HC) standards.

In addition, Karen asked if the testing equipment currently existed to record cold temperature VOC emissions.

Response from EPA staff: No equipment upgrade would be needed (equipment for existing cold temperature carbon monoxide standards, etc. is already in place).

Also, Karen indicated that the existing flexibilities (for Tier 2 program, etc.) provided for small volume manufacturers are helpful and good.

# Wallace Environmental Testing

Les Weaver of Wallace Environmental Testing participated by phone in the outreach meeting. In regard to independent commercial importers, Les commented that for the Tier 2 requirements if you import a model year 2000 vehicle (as an example), you need to meet the standards in effect on the date that the vehicle was originally manufactured - not the standards in effect on the date of import.

Also, he commented that for formaldehyde standards the OEM typically receives a waiver from testing for these standards. This may apply to alternative fuel converters as well.

Response from EPA staff: EPA is getting clarification of these issues from EPA certification staff, and we will communicate back with the SERs.

#### DRV Energy, Inc.

Sheri Vanhooser of DRV Energy, Inc. participated by phone in the outreach meeting. In regard to certification for alternative fuel vehicles (and conversions), she asked whether California would accept federal certification. Sheri indicated that the California certification process was much slower and difficult to work through than the EPA process

Response from EPA staff: EPA is getting clarification of these issues from EPA certification staff, and we will communicate back with the SERs.

In addition, she suggested that they were being required to test formaldehyde as a separate entity for their conversion of conventional vehicles to operate on alternative fuel. They would be required to run an additional test since the OEM was not required to run the formaldehyde test.

Response from EPA staff: There are formaldehyde testing requirements in place. However, EPA is getting clarification of these issues from EPA certification staff, and we will communicate back with the SERs.

#### **Gas Cans**

#### Blitz USA

Chuck Craig of Blitz USA was in attendance at the outreach meeting. He commented that the proposed new standards for portable gasoline containers should have up-front certification similar to California's gas can requirements.

Response from EPA staff: Yes, we will have up-front certification because we want to make sure gas cans meet the standards in-use. For certification, we plan to group together gas cans that have the same materials and spout designs. As flexibility provisions, EPA is considering ways to minimize certification testing by having such broad testing and allowing the carry over of data from California's program.

For purposes of durability, Chuck indicated that they build gas cans to compensate for sloshing that may occur during the life of the can. Yet, he suggested that sloshing is much more of an issue for gas tanks (tanks installed on motor vehicles and nonroad equipment) since gas cans tend to sit for most of their lives.

Response from EPA staff: Sloshing from gas cans placed in the back of trucks is fairly common, and it is something that we plan to account for in the certification testing requirements.

In addition, Chuck also mentioned that Ohio may adopt the requirements equivalent to the California gas can program, but it is possible they may wait for the EPA program.

In regard to automatic shut-off control for gas cans, he explained that such a design has not worked well because some equipment with small tanks (e.g., weed eaters) needs time to reach equilibrium during refueling, and the test equipment that California used to develop the requirements for such controls is based on a larger tank than is typically found in the field.

Response from EPA staff: We do not plan to propose such requirements due to such issues.

In closing, Chuck welcomed EPA's efforts to discuss the proposed requirements earlier rather than later. He indicated that it is helpful to be discussing the program before the "ball starts rolling." This approach is better than that taken by California.

# No-Spill Research

Mark Pierce of No-Spill Research participated by phone in the outreach meeting. He asked how we were coordinating with OSHA, United Nations, or other gas can

#### requirements.

Response from EPA staff: EPA is setting emissions performance requirements rather than design requirements and believes that manufacturers will be able to meet the emissions standards without impacting their ability to meet other standards. We asked the manufacturers to let EPA know of any potential conflicts between the standards we plan to propose and other design considerations.

# Midwest Can Company

John Trippi of Midwest Can Company participated by phone in the outreach meeting. He asked how this national program will be coordinated with the California and other state programs.

Response from EPA staff: California will have their own program, and EPA's program will be separate from California's program. The programs are likely to be very similar and we expect manufacturers to develop a single product that can be sold nationwide. Other states will need to decide if they want to retain a separate program or defer to the EPA program, but because there will be little difference between the two, we would expect most states to defer to the national program.

#### **Gasoline Refiners**

# Meeting Attendees

SERs (via teleconference):

Sally Allen Gary-Williams Energy Corporation Al Cabodi U.S. Oil and Refining Company John Stern Countrymark Cooperative, Inc.

**American Refining** Rick Kucharski, et al

EPA:

Julie Boledovich EPA, Office of Transportation and Air Quality Chris Brunner EPA, Office of Transportation and Air Quality EPA, Office of Transportation and Air Quality Aron Butler Jeff Herzog EPA, Office of Transportation and Air Quality EPA, Office of Transportation and Air Quality Chris Lieske

EPA, Office of Transportation and Air Quality Paul Machiele

EPA, Office of Transportation and Air Quality **Bryan Manning** Robin Moran EPA, Office of Transportation and Air Quality EPA, Small Business Advocacy Chair (SBAC) Staff Ken Munis Kathryn Sargeant EPA, Office of Transportation and Air Quality

Steven Silverman EPA, Office of General Counsel Tia Sutton EPA, Office of Transportation and Air Quality

Jennifer Vernon EPA, SBAC Staff Mark Wilson EPA, SBAC Staff

Lester Wyborny EPA, Office of Transportation and Air Quality

OMB:

David Rostker

SBA, Office of Advocacy: Keith Holman Charlie Maresca

# Overview of the Meeting

As stated above, OTAQ staff gave short presentations to ensure that the SERs and Panel members were informed about the MSAT rule. First, a brief presentation was given about the MSAT rule in general. This presentation discussed the first MSAT rule and why EPA is promulgating another MSAT rule, including the environmental benefits of a new MSAT rule. Following this, a presentation was given on the role that gasoline fuel plays in mobile source air toxics and the fuel controls that OTAQ is considering for the rulemaking. Lastly, a presentation was given discussing previous flexibilities given to small entities, mainly small refiners, in recent OTAQ rulemakings.

Following the presentation and a brief question and answer period, a discussion of the issues related to this rulemaking and potential small refiner flexibilities then ensued.

#### Discussion of Issues

The small refiners that participated all generally stated that they believed that small refiners would face a challenge in meeting a new standard. Namely, it was mentioned that the rule would be costly and that they believe a couple of the compliance flexibilities would be expensive, and may not be reliable. Small refiners were also concerned about the timing of the standards for the MSAT rule, given other recent and upcoming fuel standards. Small refiners expressed concern about the fact that reliance on an ABT program. The SERs believe that credits may not be available, or that they may be available but not at a cost that small refiners would be able to afford. The SERs also noted that for some refiners, further reductions in benzene would result in reductions in octane-- these refiners were concerned that they may not be able to produce saleable gasoline.

Various flexibility options were noted by some gasoline small refiners during pre-Panel outreach, and these potential options (listed below) were discussed at the Outreach Meeting. OTAQ staff and the small refiner SERs committed to having more discussions to determine appropriate small refiner flexibility options.

# Potential MSAT flexibility options:

- Give small refiners more time to comply.
  - Discussion and response from EPA staff: Such a flexibility has been offered in previous fsuel rulemakings, and small refiners feel that this flexibility is quite beneficial to them. EPA indicated that a two to three year delay would be a choice that should be clearly available.
- A credit program is also a clear option, according to EPA, though it has yet to be designed.
  - Discussion and response from EPA staff: SERs asked if it would be possible to set up a credit banking and trading program so that there is a credit market that can be counted on. A per gallon or maximum average limit that would not apply to small refiners was mentioned as a way to increase the likelihood of the availability of credits for small refiners. SERs also suggested that perhaps small refiners could earn credits through NESHAP that could be applied to gasoline benzene. Other suggestions that came out of the ABT program discussion were to insure that credits were being sold to small refiners by either reserving a small portion of the credits on the market for small refiners only or requiring that credits be offered to small refiners before they can be sold to other non-small refiners. EPA stated that it would look into various options of how to encourage credit trading with small refiners.
- A de minimis exclusion option, perhaps designed like NESHAP, if the small refiner can show low numbers for other toxics; perhaps there should be caps set for sulfur and olefins.
  - Discussion and response from EPA staff: The SERs suggested that the fact that their contribution to the total gasoline produced should be taken into account, and therefore small refiners should be given some type of exclusion, a de minimis exclusion, due to the small amount of gasoline they produce (which, they stated, would likely be directly proportional to their contribution to the total benzene emissions). EPA stated that since MSAT is a technology-based rule (and NESHAP was risk-based) a de minimis exclusion may not be a feasible flexibility option, EPA stated that it would look into this more and provide more information for the SERs on de minimis rulings. EPA also noted that in all of its previous rulemakings, small refiners have had to comply with the applicable standard at some point; small refiners have never been completely exempted from the standards.
- An air toxics formula for small refiners on an interim or permanent basis.
  - Discussion and response from EPA staff: The discussion surrounding this potential flexibility option was similar to that surrounding a de minimis option. Some SERs noted that their sulfur and olefins levels were quite low and suggested that there be an alternate standard for small refiners that would take these into account. The idea behind this option was that, instead of a benzene standard, small refiners would comply with an

alternate standard that was based on their sulfur and/or other air toxics levels.

- Allow higher benzene content for small refiners.
  - Discussion and response from EPA staff: Small refiners suggested this option, which is similar to a de minimis exemption. With this flexibility option, small refiners would be given a separate benzene standard that would be higher than the general MSAT program benzene standard. EPA again mentioned that small refiners have never been give complete exemptions from the standards that have been set in prior fuels rulemakings.
- Hardship provisions
  - Discussion and response from EPA staff: Small refiners noted that all previous fuels rulemakings have included some type of hardship provisions for refiners that cannot comply with the standards. EPA stated that it plans to include similar hardship provisions that are in past and current fuels rulemakings (extreme unforeseen circumstances hardship and extreme hardship provisions).

# **Next Steps**

Following the discussions, SERs were asked to provide as much information as they could by close of business (COB) August 2, 2005 in order for the Panel to have useful feedback prior to the Panel Convening. (The written comments received from the SERs are located in *Appendix D* of this report.)

# Appendix C: Summary of SBAR Panel's Second Small Entity Outreach Meeting

#### Summary from EPA's 9/27/05 Outreach Meeting with Fuel Refiner SERs

# **Background**

On September 27th, 2005 from 10:00am to 12:00 p.m. (EST), EPA held a two hour meeting with Small Entity Representatives (SERs) representing the gasoline refining industry on the Mobile Source Air Toxics (MSAT) rulemaking that is to be proposed in early 2006.

This outreach meeting, which was the second meeting held with the small refiner SERs during this MSAT SBREFA process, was held to discuss in more detail potential small refiner flexibility options and update the SERs on EPA's current plans for the MSAT rulemaking. EPA continues to work closely with gasoline refiners to develop regulations for these industries to protect public health and the environment, while avoiding (as much as possible) disproportionate burdens on small businesses. The Outreach Packet that was provided to SERs prior to this meeting contained very detailed questions that we asked of the SERs to provide as much feedback as possible to aid EPA, and the Panel as a whole, in developing flexibility provisions that will help mitigate the effects of the rule on small businesses.

# Meeting Attendees

SERs-

In person:

Sally Allen Gary-Williams Energy Corporation Al Cabodi U.S. Oil and Refining Company

Rick Kucharski American Refining Steve Sherk American Refining

John Stern Countrymark Cooperative, Inc.

By phone:

Don Keck American Refining

Dave Roderick Gary-Williams Energy Corporation

EPA Staff:

Julie Boledovich EPA, Office of Transportation and Air Quality Chris Brunner EPA, Office of Transportation and Air Quality Aron Butler EPA, Office of Transportation and Air Quality Jeff Herzog EPA, Office of Transportation and Air Quality Chris Lieske EPA, Office of Transportation and Air Quality

Paul Machiele EPA, Office of Transportation and Air Quality

Bryan Manning EPA, Office of Transportation and Air Quality

Ken Munis EPA, Small Business Advocacy Chair (SBAC) Staff

Kathryn Sargeant EPA, Office of Transportation and Air Quality

Steven Silverman EPA, Office of General Counsel

Tia Sutton EPA, Office of Transportation and Air Quality

Jennifer Vernon EPA, SBAC Staff Mark Wilson EPA, SBAC Staff

Lester Wyborny EPA, Office of Transportation and Air Quality

OMB:

David Rostker

SBA, Office of Advocacy: Keith Holman Joe Johnson Shawn McGibbon

# Overview of the Meeting

As the SERs had participated in a previous Outreach Meeting (and most of the small refiner SERs are well-versed in SBREFA processes), the Panel did not spend much time on background and introductory material at the start of this meeting; rather, an in-depth discussion of the flexibilities and other items detailed in the Packet began. In the Outreach Packet that SERs received, EPA provided a discussion on the flexibility options that had been suggested up to this point.

Following the discussion, SERs were reminded of the importance of their comments and asked that they provide as detailed comments as possible.

#### Discussion of Issues

The small refiner SERs reiterated that they believed that small refiners would face significant challenges in meeting the benzene standard. Namely, it was mentioned that the rule would be costly, small refiners were not sure that reliance on a credit market would be feasible for them, and that meeting the benzene standard could result in the production of gasoline that is not saleable (due to a loss in octane). As previously stated, the Outreach Packet listed various flexibility options that were to be discussed during the meeting, these options were:

- Small refiner delay- to allow small refiners with two to four years of delay prior to meeting the MSAT standard (similar to previous fuels programs)
- Providing small refiners with "free" credits equal to a certain period of time (2 to 4 years) which could be extended if the refiner made any reductions in its benzene emissions level, the credits could be traded and sold like any other ABT credits
- Generation of early credits, prior to the start of the general program standards, if the refiner made any reductions in its benzene emissions level
- If the rule were to include a limit on credit life, a potential flexibility option would be to allow for an extended life on ABT credits for small refiners only
- A de minimis exclusion option

- An air toxics formula, or alternate air toxics standard, for small refiners on an interim or permanent basis
- Allowance of a separate benzene standard for small refiners
- Hardship provisions

Upon further discussion of these potential options, it was discovered that the free credit option and the delay option were very similar, and that the delay option actually offered more flexibility to the small refiners. Within this option, the potential of a review of the ABT program one year after the program begins was also discussed. The small refiners were generally in agreement with this option. The SERs stated that they have concerns that EPA is anticipating that some refiners would purchase credits to comply with the benzene standard; the SERs were concerned about reliance on the credit market for compliance because of the fact that credits may not be available or would only be available at a high price (that they could not afford).

Also discussed were the legal issues that come with the proposal of a de minimis option, and how such an option may not be feasible in a technology-based rule like the MSAT rule; the alternative air toxics standards options; and the small refiner benzene standard (these are all discussed fully in Section 9.4.2, above). EPA also discussed the fact that it would in fact be including hardship provisions similar to those offered in other fuels programs.

Lastly, the Panel discussed with the small refiner SERs their estimates on costs and their individual refinery set-ups and how the rule would affect them. In general, the SERs commented that they believed that the rule was going to be costly. EPA responded by noting that it took those concerns into account and believed that some refiners, namely small refiners, would most likely purchase credits to comply with the benzene standard as this would be more economical for them. The SERs also stated that the rule would be more costly for them than EPA's model predicted- one SER noted that, on average, EPA's cost estimates underestimated costs for the small refiners by a factor of two or three. SERs were also encouraged to provide information on costs in their written comments.

#### Next Steps

SERs were again asked to provide as much information as they could by close of business (COB) October 14, 2005 in order to have useful feedback prior to the Panel convening.

# Discussion and Summary of Comments During September 29, 2005 Outreach Meeting (Vehicle and Gas Can SERs)

# **Light-Duty Vehicles**

# IMPCO Technologies/Quantum Technologies

Karen Szabo Hay of IMPCO Technologies/Quantum Technologies participated by phone in the outreach meeting. She wanted to confirm that the proposed new cold temperature VOC standards for highway light-duty vehicles would be NMHC standards.

Response from EPA staff: Yes, we plan to propose non-methane hydrocarbon standards (NMHC) for the cold temperature VOC requirements.

Similar to the first outreach meeting, Karen asked if the testing equipment currently existed to record cold temperature NMHC emissions.

Response from EPA staff (same as response from 1st outreach meeting): No equipment upgrade would be needed (equipment for existing cold temperature carbon monoxide standards, etc. is already in place).

Karen questioned whether the evaporative hydrocarbon emissions test procedure is capable of measuring NMHC.

Response from EPA staff: At the meeting, we indicated that we will get clarification of this issue from EPA certification staff, and we will communicate back with the SERs. Below is EPA's follow-up response.

The evaporative emission test procedure is capable of measuring the methane concentration separately, which would lead to the calculation of NMHC. According to EPA's SPECIATE database, the methane fraction in evaporative emissions from light-duty gasoline vehicles is 0.4%. (The methane evaporative emissions from gasoline are likely less than 0.4% since windshield washer fluid emits methane.) Compressed natural gas (CNG) vehicles should have sealed fuel systems, and any methane found in their evaporative emissions would likely be due to leaks from this system and not from fuel evaporation, which would indicate a malfunctioning fuel system. (Methane evaporative emissions from CNG vehicles could also be from non-fuel emissions - e.g., from interior trim, tires, windshield washer fluid, but based on the methane fraction found for gasoline vehicles, such emissions would be small.) Since there is a minimal amount of methane emissions from evaporation, there is not a compelling reason to have a separate measurement and calculation to determine NMHC (nearly all evaporative hydrocarbons are NMHC). Moreover, the evaporative emission standard is expressed in

terms of total hydrocarbons today, and if we were to require a separate NMHC measurement, it would likely be somewhat more costly for the industry, without an added environmental or compliance benefit.

In addition, Karen asked whether any other SERs had performed cold temperature CO test and collected VOC data.

Response from Les Weaver of Wallace Environmental Testing: At a minimum, we have collected total hydrocarbon data during the cold CO test, and we may have also captured the breakdown of hydrocarbons. It will not be difficult to meet the cold temperature NMHC standard that EPA is considering to propose.

Response from EPA staff: The current cold CO standards do not apply to compressed natural gas (CNG) vehicles, and thus, NMHC data has likely not been collected for these vehicles. In addition, the new cold NMHC standards will not apply to CNG vehicles.

Karen expressed that with the current high gas prices, there is a now lot more interest in natural gas vehicles.

#### Wallace Environmental Testing

Les Weaver of Wallace Environmental Testing participated by phone in the outreach meeting. For the new evaporative emission standards EPA is considering (align with California's LEV II standards), Les indicated he was concerned that the increased stringency of these standards would be an issue for some small volume manufacturers of gasoline vehicles. In particular, he suggested it would be difficult to meet LEV II standards for vehicles tested on Federal gasoline (indolene is the test fuel), which has a higher fuel volatility compared to California gasoline. He realized that the larger manufacturers have 50-state evaporative systems that currently meet both Tier 2 and LEV II standards, but he was still concerned that the more stringent LEV II standards may be a problem for some SVMs.

Response from EPA staff: The California LEV II evaporative emission standards are numerically more stringent than EPA's Tier 2 standards, but due to differences in California and EPA evaporative test requirements some manufacturers view the programs as similar in stringency. The main driver of this viewpoint is that the Tier 2 evaporative program requires manufacturers to certify the durability of their evaporative emission systems using a fuel containing the maximum allowable concentration of alcohols (highest alcohol level allowed by EPA in the fuel on which the vehicle is intended to operate, i.e., a "worst case" test fuel). Under current requirements, this fuel would be about 10 percent ethanol by volume. California does not require this provision. To compensate for the increased vulnerability of system components to alcohol fuel, manufacturers have indicated that they will produce a more durable evaporative emission system than the Tier 2 numerical standards would imply, using the same low

permeability hoses and low loss connections and seals planned for California LEV II vehicles.

Combined with the maximum alcohol fuel content for durability testing, the other key differences between the federal and California test requirements that lead to the viewpoint that the Tier 2 and LEV II standards have a similar level of stringency are as follows: fuel volatilities, diurnal temperature cycles, and running loss test temperatures. The EPA fuel volatility requirement is 2 Reid Vapor Pressure (RVP) greater than that of California. For the high end of the diurnal temperature range, EPA has a 9 degrees F lower temperature compared to California. Also, EPA's running loss temperature is 10 degrees F less.

In addition, the current certification database indicates that essentially all manufacturers certify 50-state systems that meet both sets of standards. For those few systems (which are 50-state systems) that do not meet both sets of standards, manufacturers have indicated this is due to the phase-in allowed for the evaporative emission programs (100 percent phase-in not required until 2007 for Tier 2 and 2006 for LEV II).

EPA staff asked Les if the new evaporative standards would change the current evaporative system modification process for ICIs. Les indicated that modification process for ICIs in complying with the new standards would not be much different than today's process. Similar to today, he expressed that ICIs would buy evaporative emission system canisters and hoses so imported vehicles would meet U.S. emission standards. For the new standards, it would likely be different canisters and hoses.

### Panoz Auto Development Company

Mac Yousry, who is assisting Panoz's John Leverett in this process, participated by phone in the outreach meeting. Mac asked whether or not we would consider providing a hardship provision that would apply for more than one year (Tier 2 rule established a one-year hardship provision for small volume manufacturers). All SERs indicated that they supported this request.

Response from EPA Staff: We will consider the need and basis for a hardship provision greater than one year in the context of appropriate relief for vehicle SERs during the Panel process.

### DRV Energy, Inc.

Sheri Vanhooser of DRV Energy, Inc. participated by phone in the outreach meeting. She asked that no more test burden be placed on the alternative fuel vehicle industry since these vehicles achieve better emission levels. In addition, Sheri indicated that there is much more interest in natural gas vehicles due to the increased gas prices.

#### **Gas Cans**

#### Blitz USA

Chuck Craig of Blitz USA was in attendance at the outreach meeting. He commented that nothing in the proposed new standards for portable gasoline containers is more stringent than California's gas can requirements.

In addition, Chuck raised concerns that during the transition period after the start of the program, that retailers not be required to pull noncomplying products from store shelves. He believed this would cause significant hardship for manufacturers and retailers and could lead to the old product being scrapped. Chuck recommended that EPA require newly manufactured products to meet the new standards after the start date of the program, but allow normal sell through of old products. He noted that all cans are currently marked with a production date stamp.

Response from EPA staff: We typically allow normal sell through of products as long as manufacturers do not create stockpiles of noncomplying products prior to the start of the program.

In addition, Chuck indicated that Ohio plans to adopt the California gas can requirements. However, Ohio plans to modify its program to match EPA's requirements if EPA promulgates these new standards.

Response from EPA staff: States with the old California program (with automatic shut-off control requirements) will have to modify their program since California is proposing to revise their program.

Chuck Craig also discussed the possibility that additional lead-time may be needed beyond 2009 to ramp-up production of complying cans. He expressed that they would be discussing lead-time with their tooling suppliers and would provide additional input on the need for additional lead-time to the panel during the comment period.

Response from EPA staff: We would welcome such input for the Panel process.

### Midwest Can Company

John Trippi of Midwest Can Company participated by phone in the outreach meeting. He also indicated that additional lead-time may be needed beyond 2009 to ramp-up production of complying cans.

		ements.	

Appendix D: Written Comments Received from Potential SERs on Outreach Meeting #1

# Highway Light-Duty Vehicles Potential SER Written Comments #1: DRV Energy, Inc. E-mail Sent to EPA on 8/8/2005

Bryan,

It may be too late for comments, but I was out of town last week and did not realize the deadline had passed. The only point that I wanted to reiterate was for EPA to talk to CARB about allowing the acceptance of EPA Certification as a reciprocating process for the Small Volume Manufacturers if the EPA standards were made more uniform to CARB, since EPA allows it for CARB. After all, we are struggling to help the clean air initiatives that EPA and CARB are in the business of requiring. We are not the enemy, but are attempting to comply with more stringent emissions while offering some relief from foreign oil through domestic fuels.

I believe that I had already made these points in our conference call discussion, but in the event that written comments can still be supplied, I hope they are helpful. Thanks so much for your coordination efforts.

Best regards, Sheri Vanhooser

### Gasoline Refiners Potential SER Written Comments #2: Small Refiners

Comments Submitted to EPA RE SBREFA panel on MSAT 2 Rulemaking On behalf of U.S. Small Refiners

August 2, 2005

EPA has indicated that a second Mobil Source Air Toxics (MSAT 2) rulemaking will be issued within the next year with at least the following goals:

- To replace the current refinery specific and anti-dumping standards with one standard applicable to all;
- To eliminate reliance on individual refinery baselines;
- To establish a flexible but equitable program with one standard for reformulated (RFG) and conventional (CG) gasoline;
- To meet stringent standards set by the Clean Air Act.

During our discussions, EPA has also said that the rulemaking will focus on benzene control; other parameters (e.g., sulfur, RVP) will not be addressed at this time, but may in a future rulemaking. Fuel benzene content will probably be cut to an average of .6 to .65 volume percent. A credit trading program, which EPA is trying to craft, will probably be nationwide. The effective date will be 2010 at the earliest and 2012 at the latest.

There are approximately 20 U.S. small refiners falling within the EPA definition of small business refiner (with a capacity of not more than 155,000 BPD and fewer than 1500 total employees). Although not all currently make gasoline, some are considering entrance into the gasoline market. We have worked together for many years in an ad hoc coalition which has enabled us to share views, exchange relevant information, and work cooperatively on issues of importance, even survival. This rulemaking is expected to have significant, if not devastating impact on the majority of the small refiner group.

As background to specific small refiner suggestions for MSAT 2 flexibilities, we submit the following important general observations.

- 1. Small refining companies are located across the country, from Pennsylvania to the West Coast. They vary greatly in operational configuration, capacity, product slate, marketing area and capacity. There is generally no single regulatory approach which assists all small refiners equally.
- 2. In terms of operating configuration, they can be loosely grouped into two different types:
  - a. Conversion refineries which have crude units, fluid catalytic cracking

- (FCC) units, alkylation units, reformers and perhaps isomerization units; and
- b. Non-conversion or hydroskimming refineries which have crude units, reformers and possibly isomerization units.
- 3. EPA's assessment of what benzene reduction may be operationally and/or economically feasible for small refiners is apparently based on a MathPro model which has not generated accurate small refiner data.
  - a. At least four small refiners have compared their specific company data on estimated summertime gasoline blendstock volumes with the EPA/Math Pro data and discovered significant discrepancies. Although EPA estimated average benzene levels, for example, may be close to the actual, the actual percentages of benzene in different blendstocks are different. Therefore a refinery's ability to route, process and treat blendstocks to further cut benzene (and retain octane) has been significantly misrepresented.
  - b. One result is that EPA/MathPro imply small refiners can meet reduced benzene targets with current equipment and relatively modest capital investments. That conclusion is not correct.
  - c. EPA says it is unlikely that the model can be changed before this rulemaking. The agency may be able to use corrected individual company data separately. EPA has acknowledged, however, that small refiners will probably not be able to cut benzene to the low levels predicted at the costs estimated in the MathPro model.
  - d. EPA's estimates of the costs, availability and applicability of new benzene extraction technologies appear unrealistic on the basis of the preliminary information available to small refiners. Gary-Williams Energy Corporation (55,000 BPD) estimates, for example, that capital costs could be as high as \$20 million; Countrymark (25,000 BPD) estimates \$10 million.
- 4. The market for extracted benzene is very different from that projected by EPA. EPA suggests that small refiners' benzene reduction costs can be offset to some extent by benzene sales. Small refiners dispute this assertion because:
  - a. The major benzene markets are chemical plants in the Gulf Coast area; few small refiners are situated to take advantage of those markets.
  - b. Transporting benzene out of the small refiners' local market areas would be costly and counterproductive.

- c. Large refiners, particularly those with chemical facilities, stand to profit by generating more benzene for their own operations. This further disadvantages small refiners.
- d. Handling of extracted benzene is difficult and expensive. This means additional operating costs over and above the capital costs for benzene extraction.
- 5. Small refiners produce a very small proportion of the national, regional and/or PADD gasoline pools; in most if not all areas of small refiner operations, their gasoline and therefore benzene production is on average probably less than 1% of the pool.
- 6. Small refiners are already severely "overtaxed" to meet recent and projected environmental regulations, including Tier 2 gasoline desulfurization and highway and off-road diesel desulfurization. EPA's "Refinery Initiative"/ NSR activities have in some cases and may in others impose additional major capital costs. Future lower standards for locomotive and marine diesel may be anticipated. MSAT 2 may be the straw that breaks the camel's back.
- 7. Credit trading programs are almost impossible to factor into capital investment decisions of this magnitude because the availability and cost of credits cannot generally be determined when decisions must be made. Small refiners will not be able to generate credits for their own use or sale because of the difficulty, if not impossibility, of cutting benzene below the anticipated standard.

### **Possible Flexibilities**

As noted, there is no single approach which will assist all small refiners other than <u>a complete</u> <u>exemption from a proposed low benzene standard</u>. We ask that such an exemption be considered.

There are several flexibilities that we hope will be reviewed during the SBREFA panel. These include (not in any order of priority):

- 1. Small refiners should be allowed to meet a higher benzene cap and/or average.
- 2. Small refiners should have additional time to comply. Although more time would not, of course, free small refiners from the capital costs and operating challenges (eg: making a marketable grade of gasoline), it might provide helpful information about which technologies work, their costs and the stability of an ABT program.
- 3. A small refiner that produces less than x% of the total gasoline pool in a region

- (state, region or PADD) should be exempt from the new MSAT 2 benzene cap/average.
- 4. A small refiner meeting the NESHAP de minimus level (<10 mg/yr) without utilizing benzene extraction equipment for waste water should either be exempt from the new MSAT 2 benzene cap/average or subject to a higher cap/average. The small refiners in this category would continue to control toxics under the existing program.
- 5. A small refiner with an annual average toxics value (per Gasoline Toxics Performance Requirements (40 CFR, Part 80 Regulation of Fuels and Fuel Additives) that is X % less than the compliance baseline could earn a de minumus exclusion and either be exempt from the new MSAT 2 benzene cap or subject to a higher cap.
- 6. A small refiner that produces ultra clean fuels with the exception of benzene -- as measured in terms of sulfur and olefin content -- should be subject to a higher benzene cap/average. A small refiner with less than 10 ppm sulfur (pool average) and 1.0% olefins (pool average) would have to average not more than X% benzene in their average gasoline pool. The benzene percentage could be based on a formula that takes into account lower sulfur and olefins, so that the lower the sulfur or olefin content, the higher the allowable benzene content.
- 7. A small refiner with an annual average toxics value that is X % less than the compliance baseline could earn toxics credits that could be applied against a benzene cap/average. This concept is consistent with the current gasoline toxics regulation, under which a refinery generates toxics credits when its annual average toxics value is less than the compliance baseline; those credits may be used to offset a toxics deficit in the following calendar year. This approach offers the advantage that, unlike the benzene ABT program under consideration, the small refiner can earn credits for its own use (or sale) rather than having to purchase them in a volatile credit market.
- 8. A small refiner should be eligible for an exemption or a higher benzene cap/average on the basis of an economic analysis of the incremental costs of compliance. This flexibility might operate like the Pennsylvania NOx and VOC control programs for which EPA provided guidance for incremental cost limits. The basis of such an approach is that the cost per ton for benzene removal will be less for larger refiners than small companies.
- 9. Small refiners should be eligible for hardship provisions like those included in the Clean Fuels regulations.

We look forward to the opportunity to review these assumptions and suggestions with the

SBREFA panel.

(See attached for list of endorsing companies.)

### **Endorsing Companies**

Several small refiners have asked to be listed as endorsing these comments. Please note, however, that some of the above-mentioned flexibilities would not help and might actually disadvantage some refiners if they were offered as the only options. One company has said, for example, that if only #s 5 and 7 were available, they could be harmed.

Age Refining, Inc. San Antonio, TX

American Refining Company Bradford, PA.

Calumet Shreveport Refinery Shreveport, LA

Countrymark Cooperative, Inc. Mt. Vernon, IN

Frontier Refining Company

- " Cheyenne, WY
- " El Dorado, KS

Gary-Williams Energy Corp.

Denver, Co

" Wynnewood Refining Company, Wynnewood, OK

### Holly Corporation

- " Montana Refining Co., Great Falls, MT
- " Navajo Refining Co., Artesia, NM
- " Holly Refining & Marketing Co Woods Cross Refinery, West Bountiful, UT

### Petro Star Inc.

- " North Pole, AK
- " Valdez, AK

Placid Refining Company Dallas, TX

Silver Eagle Refining Co. Woods Cross, UT

U.S. Oil and Refining Co. Tacoma, WA

Western Refining Co El Paso, TX

Wyoming Refining Co. Newcastle, WY.

## Gasoline Refiners Potential SER Written Comments #3: Gary-Williams Energy Corporation

Gary-Williams Energy Corporation

Comments Submitted to EPA RE SBREFA panel on MSAT 2 Rulemaking

August 2, 2005

As a Small Entity Representative for the Second Mobile Source Air Toxics SBREFA panel, Gary-Williams Energy Corporation would like to submit the following comments as requested in the July 19, 2005 conference call with EPA, OMB and SBA.

We endorse the comments submitted on behalf of small refiners as a group and will not duplicate them in any detail here. We intend instead to point out which of the suggested flexibilities might assist us to operate economically.

### This Company

Gary-Williams Energy Corporation is an independent oil and gas company headquartered in Denver, Colorado. Refining and marketing are our key businesses. Our primary asset is a wholly-owned subsidiary, Wynnewood Refining Company, which operates a 55,000 bpd petroleum refinery in Wynnewood, OK, about 60 miles south of Okalahoma City. The refinery makes gasoline, diesel fuel, military jet fuel, asphalt, and solvents. These products are marketed wholesale primarily to jobbers. We have no retail sales. There is a small marketing office in Oklahoma City. We employ about 250 people in Colorado and Oklahoma.

### EPA Assumptions Questioned

As noted in the small refiner group comments, we are concerned that EPA's assessment, via the MathPro model, of the amount of benzene reduction feasible for this company is based on inaccurate data. Because the percentages of benzene in our blendstocks are different from those used by MathPro, our ability to route, process and treat blendstocks to further cut benzene (and retain octane) has been significantly misrepresented. We have provided EPA with the correct information on a confidential basis. We believe that our costs to meet the suggested stringent EPA benzene standards may be as high as \$20 million, significantly higher than EPA's estimate.

We also want to clarify, because of our rural, mid-continent location, that we do not believe that we have any markets for extracted benzene.

### Possible Flexibilities

Given the high costs of further benzene extraction, the extensive cost burdens already imposed on us by other EPA regulations and the relatively insignificant emissions contamination resulting from vehicle-burn of our gasoline, we request that the SBREFA panel consider a complete

exemption from a proposed low benzene standard

If a general exemption is not possible, we fully support a regulatory approach that offers a variety of flexibilities for small refiners. Of the several flexibilities outlined in the small refiner group comments, however, only a few might help us. These include:

- 1. A higher benzene cap and/or average. We understand that EPA may now be considering a standard that addresses only an annual average without a specific cap. We greatly prefer an averaging approach. In our case, unless the average is at least 1.2 volume percent, we will still be required to make the full investment for benzene reduction. We are not aware of any technology that would allow us to cut benzene proportionately for less cost
- 2. Additional time to comply at least five years. EPA has mentioned two years. That lead time, we believe, will not be sufficient to compile helpful information about which technologies work, their costs and the stability of an ABT program.
- 3. Exemption from the new MSAT 2 benzene cap/average if we produce less than X% of the total U.S. gasoline pool (or perhaps region or PADD).
- 4. Exemption from the new MSAT 2 benzene cap/average if we meet the NESHAP <u>de minimus</u> level (<10 mg/yr) without utilizing benzene extraction equipment for waste water. Or, as an alternative, compliance with a higher (1.2 %) average. We would expect to continue to control toxics under the existing program.
- 5. Exemption (or compliance with a higher average) if our annual average toxics value is at or less than the compliance baseline. Please note that with our current configuration our annual average toxics value is generally close to the toxics equations standard, so that a significant reduction below that would not benefit us. We would still have to make the full benzene reduction capital investment. Refer to comments in #1 above.
- 6. Opportunity to earn toxics credits that could be applied against a benzene average if our annual average toxics value is at or less than the compliance. Once again, however, we fear this option will not benefit us because of the comments above in #1 and #5.
- 7. Eligibility for an exemption or a higher benzene average on the basis of an economic analysis of the incremental costs of compliance. The basis for such an approach is that the cost per ton for benzene removal will be less for larger refiners than small companies. It would be essential, however, that we and other small refiners confer with EPA about the components of such an analysis in order to come to an understanding of small refiner economics and relative disadvantage.

Thank you for your consideration of these comments.	
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## Gas Cans Potential SER Written Comments #4: Blitz USA Attached to E-mail Sent to EPA on 8/2/2005

Chris Lieske 200 Traverwood Drive Ann Arbor, MI 48105

Dear Chris.

Listed below are some of the comments Blitz has on the new proposed PFC regulation.

With the evaporative emission level EPA is considering and the durability tests involved, we feel that co-extrusion will be the best solution for the foreseeable future. Capital investment in new machines and retrofit of machines that are capable of being retrofitted will be approximately 7-10 times as costly as when we prepared for California based on the number of cans that will be needed nationwide. The lead time for delivery of a new co-ex capable machine is 6-8 months with a setup time of 2-3 months and a cost of 2-2.5 million. These lead times would probably be longer if the number of machines needed are as great as would be expected. Since the rules will be nationwide, some of our current machines and all of our assets (tools and molds) dedicated to producing our current nozzles will be rendered obsolete for our purposes. The good news is that with our experience in building California cans, the training time should be reduced.

Although our current nozzles meet the requirements of the proposed regulation as we understand it, we are working on our next generation of nozzles. We are looking at creating a nozzle that is more intuitive in its use and thus more user friendly. If we developed this nozzle within the next two years, we may not have the time to get it certified by the 2009 date.

The biggest concern we have is the transition period. When we started in California, the old style cans in our inventory could be sold in other states. Only the stores in California needed a sell through period to clear their shelves and warehouses. If, as was the case, some of the stores could not get rid of their cans, they expected us to take them back and give credit. With the rule going nationwide, Blitz and the industry will have no outlet for the old non-certified cans. If we are forced by our customers to take cans back, we will have no alternative but to scrap the cans at the great expense this will entail. One possible solution is to have no set time table for sell through. If the can has a manufactured date stamp that is before the implementation date, the store would be allowed to sell that can. The manufacturers would not be allowed to manufacture any cans after the implementation date that are not certified. As reorders come in, the new cans would eventually replace all of the old cans on the shelves.

Blitz currently produces a metal can that is DOT approved. When the new regulation takes place, we are not certain yet as to whether we would still be able to produce a can that would meet the requirements plus still pass the requirements of the DOT regulations.

This could take this can off the market.

One of the biggest roadblocks we ran into in California and some of the other states that have adopted the regulation was consumer education and knowledge. The average user as well as some of the retail outlets did not see the benefits or the necessity for the newer nozzles. A nationwide education program sponsored by EPA or one of the other government entities would help alleviate this problem.

We are not sure how the compliance and enforcement level of the new regulation will be conducted. We believe that this must be clear before the regulation is completed.

Appendix E:
Written Comments Received from SERs on Outreach Mtg.
#2

## **SER Written Comments # 1: Small Refiner Group Comments**

Mr. Alexander Cristofaro Small Business Advocacy Chair c/o Mr. Mark Wilson 1200 Pennsylvania Avenue NW MC1803A Washington, DC 20460

Wilson.mark@epa.gov

RE: Mobile Source Air Toxics: Control of Hazardous Air pollutants from Mobile Sources SMALL REFINER COMMENTS

October 14, 2005

Dear Mr. Cristofaro:

In your letter of September 19, 2005, you asked Small Entity Representatives to comment on the above noted planned proposed regulation (MSAT 2) and specifically referred us to questions in Section D of the enclosure as well as issues specified in your covering letter.

As we noted in comments submitted to you on August 2, 2005, there are approximately 20 U.S. small refiners falling within the EPA definition of small business refiner (with a capacity of not more than 155,000 BPD and fewer than 1,500 total employees). Although not all currently make gasoline, some are considering entrance into the gasoline market. We have worked together for many years in an ad hoc coalition which has enabled us to share views, exchange relevant information, and work cooperatively on issues of importance, even survival. This rulemaking is expected to have significant, if not devastating impact on the majority of the small refiner group

Small refining companies are located across the country, from Pennsylvania to the West Coast. They vary greatly in operational configuration, product slate, marketing area and capacity. Some do not now make gasoline or are subject to California regulations. There is generally no single regulatory approach which assists all small refiners equally. Therefore the small refiner flexibilities included in EPA rulemakings are particularly important to the continuing operation of the small refiner segment of the industry.

### **Basic Provisions of Proposed Rule**

It is our understanding, from the September 19 materials noted above and from the SBREFA Panel discussions on September 27, 2005, the MSAT 2 proposals now under consideration for small refiners include the following highlights:

- The rule will establish a single annual average benzene standard applicable at the refinery gate -- not higher than .62 volume percent. There will be no downstream standards.
- This rulemaking will supersede anti-dumping refinery-specific standards and the first MSAT refinery baselines, thus eliminating many of the refiners' reporting requirements.
- The proposed rule will be issued by EPA not later than February 28, 2006. The rule will be finalized within a year. The purpose of the baseline is only for calculating and generating credits. The effective date will probably be 2011. The proposed benzene baseline period will be 2004-2005. The proposed volume baseline year will be 2010.
- There will be a nationwide averaging, banking and trading credit program (ABT) for refiners of all sizes with provisions for earning early credits.
- The effective date of the rule for small refiners will be at least four years after the effective date for non-small refiners.

### **Small Refiners Endorse Proposed Flexibilities**

During the September 27 Panel discussions, small refiner flexibility options were clarified and revised somewhat from those outlined in Section B of the September 19 document. Small refiners endorse those revisions, with some additional comments as noted below. The flexibilities should include:

- 1. An effective credit generation and trading program which is essential to small refiners. The ABT program for all refiners should start in 2007 to enhance the probability that sufficient credits will be available at a reasonable price for those refiners who find it economically and/or technically unfeasible to meet the new benzene standard and still produce market-grade gasoline. Therefore, there should be no specified credit life; instead they should be continuously available.
- 2. Provisions for small refiners to generate credits if at any time before the small refiner compliance date --they make operational or equipment changes that reduce benzene levels at least 10% below their benzene baseline.
- 3. A guaranteed review of the ABT program, particularly as it impacts small refiners, within one year of the rule's effective date for small refiners, with a specified and limited review period. If the small refiner compliance date is 2015 (four years after an anticipated general compliance date of 2011), the ABT program review should include early compliance reporting to obtain on-going

information about the availability of credits and be completed not later than 12.31.2011. Small refiners should be consulted during the review period and the expectation should be that the design of the small refiner credit program can be substantively revised if necessary.

- Small refiners need at least three years lead time to obtain financing, engineer and construct the equipment needed to cut benzene to the proposed standard and to design and construct systems which will then be required to maintain octane levels. The small refiner compliance date should be no sooner than three years after completion of the ABT review.
- The proposed rule will specify the types of issues that will be covered in the review, such as the availability of credits to small refiners, their costs and possible approaches if it is determined that the credit market is dysfunctional.
- EPA should consider establishing and perhaps administering a small refiner credit bank if warranted by the review. These credits could be purchased from EPA at a cost which should be established up front and should not exceed the operating cost to saturate benzene (Bensat operating cost). It is critically important that the cost of credits be known in advance to allow small refiners to plan appropriately. Small refiners must be included in the cost determination discussions.
- EPA should develop a mechanism through which a small refiner can hold in escrow funds expended to purchase credits. This would allow a small refiner which has paid for credits but which subsequently decides that it is technically, financially and operationally possible to cut its benzene to the compliance standard to recoup its credit expenditure and to apply that instead to the capital investment necessary for benzene reduction.

  Needless-to-say, since the goal is to reduce benzene in gasoline, such a program would be to the national benefit.
- There should be a de minimis exemption option (or a higher benzene standard) at least on a case-by-case basis and also a hardship exemption which is not temporary in nature on a case by case basis. It is our understanding that EPA's legal counsel believes that general exemptions to the rule could be challenged in court and that they could not successfully defend such a challenge. The small refiner entity representatives have requested a copy of that opinion and may elect to seek their own independent legal opinion on the issue.

In any case, however, EPA should offer small refiner flexibility options by including in the regulation a de minimis exemption where it is determined

that a refiner would have extreme difficulty complying with the .62 benzene level and still be able to produce marketable gasoline and that the amount of gasoline produced by the small refiner would have a de minimis effect in the marketing area and on the program.

The small refiners also feel that a hardship exemption provision on a case by case basis which is not limited in time but subject to EPA review should also be included. Such an exemption would be available where a small refiner could show that even after installing state of the art equipment and making every other reasonable effort that it cannot comply with the .62 benzene level and produce marketable gasoline. EPA could set a higher benzene level for that small refiner and periodically review whether or not the small refiner could comply with the regulation. EPA would also include a backsliding provision and limit refinery expansion under such circumstances. We again emphasize that the total gasoline production of all small refiners is actually de minimis as to the overall benzene removal program.

In any case, the rule should offer -- as small refiner flexibility -- the option for a small refiner to seek an individual facility exemption or higher facility benzene standard on the grounds that the facility's gasoline benzene levels are a very small percentage of the benzene produced in a given area.

- 4. The rule should recognize the importance of encouraging and enabling the expansion of refinery capacity by allowing the benzene baseline volume percent to apply to at least 130% of the volume baseline and/or including in the volume baseline all expansion for which plans and construction contracts are in place during the volume baseline year even if the expansion has not yet been completed.
- 5. Small refiners should be eligible for short term hardship options based on extreme unforeseen circumstances (eg: natural disaster, refinery fire) and/or extreme hardship (eg: financial or operational problems).

If you have questions or need additional information, please do not hesitate to contact any of the companies listed below or Sally V. Allen, Vice President of Administration and Governmental Affairs, Gary-Williams Energy Corporation at 303.628.3800 X460 (sallen@gwec.com).

Thank you very much for your consideration of these comments.

### The following companies endorse this statement:

ALON USA, San Antonio, TX

American Refining Group, Bradford, PA

Calumet Lubricants, Shreveport, LA

Countrymark Cooperative, Mt. Vernon, IN

Frontier Refining and Marketing, Inc., Denver, CO, Cheyenne WY and El Dorado, KS

Gary-Williams Energy Corp, Denver, CO

Wynnewood Refining Co OK

Holly Corporation, Dallas, TX

- Woods Cross Refining, UT
- Navajo Refining, NM
- Montana Refining, MT

Placid Refining Company, Dallas, TX and Port Allen, LA

Silver Eagle Refining, Woods Cross UT and Evanston, WY

Somerset Refining, Somerset, KY

Western Refining Company, El Paso, TX

Wyoming Refining Company, Denver CO and New Castle, WY

## **SER Written Comments # 2: Gary-Williams Energy Corporation**

Mr. Alexander Cristofaro Small Business Advocacy Chair c/o Mr. Mark Wilson 1200 Pennsylvania Avenue NW MC1803A Washington, DC 20460

Wilson.mark@epa.gov

RE: Mobile Source Air Toxics: Control of Hazardous Air pollutants from Mobile Sources

October 14, 2005

Dear Mr. Cristofaro:

In your letter of September 19, 2005, you asked Small Entity Representatives to comment on the above noted planned proposed regulation (MSAT 2) and specifically referred us to questions in Section D of the enclosure as well as issues outlined in your covering letter.

As a Small Entity Representative, Gary-Williams Energy Corporation would like to submit the following comments. (Please see also our earlier comments dated August 2, 2005.)

### **This Company**

Gary-Williams Energy Corporation is an independent oil and gas company headquartered in Denver, Colorado. Refining and marketing are our key businesses. Our primary asset is a wholly-owned subsidiary, Wynnewood Refining Company, which operates a 55,000 bpd petroleum refinery in Wynnewood, OK, about 60 miles south of Okalahoma City. The refinery makes gasoline, diesel fuel, military jet fuel, asphalt, and solvents. These products are marketed wholesale primarily to jobbers. We have no retail sales. There is a small marketing office in Oklahoma City. We employ about 250 people in Colorado and Oklahoma.

### **Endorsement of General Small Refiner Statement**

For several years we have worked with an ad hoc coalition of small refiners on other rulemakings. We strongly endorse the MSAT 2 statement submitted by the group of small refiners -- also dated October 14, 2005 - and support the need for small refiner flexibilities with this rulemaking. We will not duplicate the group statement in any detail here, but incorporate it by reference in this submission.

### **GWEC** company-specific comments

You asked for specific comments about the impact of the proposed flexibilities on our operations. In summary:

- 1. Our gasoline benzene content is on average 1.4 volume percent. On the basis of information we have been able to accumulate to date, we believe we can cut benzene to .62 volume percent only with significant capital investment. We are not completely convinced that even then we will be able to generate sufficient octane to make market-grade gasoline. Our first preference would be to allow small refiners a higher benzene standard of at least 1.4 volume percent. We thus endorse the concept of a case-by-case *de minimis* exclusion or higher benzene standard option or long-term hardship exemption particularly if at some later date it is determined to be operationally unfeasible for us to make market grade gasoline.
- 2. We strongly endorse an ABT program with special consideration for small refiner needs, including a complete review after one year of the small refiner compliance date and the possibility of holding small refiner credit payments in escrow for possible future capital investments. The usefulness of such a program for us will depend directly on the availability and cost of credits. We do not at this time believe we can generate sufficient credits internally to allow us to delay capital investment much if at all beyond the small refiner compliance date. We do not believe that we can cut benzene in stages. Therefore we will be required to make the full capital investment early in the compliance period. There may be some operating cost savings until the full compliance deadline.
- 3. We believe that we will require at least three years lead time from the time it becomes clear that we must make benzene reduction capital investments (rather than relying on credits) to obtain financing, plan, engineer, construct and start-up new equipment. In addition, it will be important that we avoid competing for the same engineering and construction resources as non-small refiners and that there is time to determine the effectiveness and cost-efficiency of available technology.
- 4. We endorse setting the benzene baseline years at 2004-2005 so that companies will be unable to manipulate their baseline. On the other hand, because we are planning to expand our refinery capacity from 55,000 bpd to 70,000 bpd, we strongly endorse provisions that would encourage such significant and risky investment such as a 2010 volume baseline with at least a 130% volume limitation and/or inclusion in the volume baseline of all expansion for which plans and construction contracts are in place during the volume baseline year -- even if the expansion has not yet been completed.

### **Project Financing**

You specifically asked what we estimate our costs to be and how we would plan to finance

### MSAT 2 compliance capital costs.

We have been able to obtain financing needed to comply with the Ultra Low Sulfur Diesel Rule from the group of banks which provides working capital and letters of credit for our general operations. They are providing term debt which must be amortized over the five year period beginning in September 2006. We are hopeful that once the ULSD loan is amortized, we will be able to approach the same group to structure a lending facility for a benzene project.

We are not sufficiently far along in our analysis of refinery expansion costs and risk/return ratios to have determined financing availability or to have arranged financing options. Our expansion cost analysis is complicated by the possible future unknown cost impact of the EPA refinery initiative/New Source Review program. We are watching current federal legislative initiatives to encourage refinery expansion with interest.

We now produce an average of 33,000 bls (1.39 million gals) of gasoline/day. On a very preliminary basis, after conversations with UOP, we now estimate that total benzene reduction capital costs could range between \$30 and \$45 million.

Process	<b>Total Low Cost</b>	<b>Total High Cost</b>
Install platformate splitter and Bensat unit to remove platformate stream benzene	\$10 million	\$20 million
Expand isom unit or add another to recoup lost octane	\$ 5 million	\$10 million
Install hydrogen plant (if necessary)	\$15 million	\$15 million
Total	\$30 million	\$45 million

It is our understanding that EPA has estimated our total capital cost for a Bensat unit at \$5.7 million. Clearly, our estimates significantly exceed that amount.

We appreciate your consideration of these comments and would be happy to respond to questions or provide further information if that would be helpful. I can be reached at 303.628.3800 X460 or sallen@gwec.com.

Sincerely yours,

GARY-WILLIAMS ENERGY CORPORATION

Sally V. Allen Vice President, Administration and Governmental Affairs

## **SER Written Comments # 3:** Countrymark Cooperative

### COUNTRYMARK COOPERATIVE, LLP

October 13, 2005

Mr. Alexander Cristofaro c/o Mark Wilson 1200 Pennsylvania Avenue, NW MC 1803A Washington, D.C. 20460

### Dear Sir:

In your letter dated September 19, 2005 to Small Entity Representatives (SERs) concerning the proposed regulation reducing the content of benzene in gasoline the SERs were asked to comment on the regulatory flexibility analysis elements set out in the letter. Countrymark Cooperative, LLP (Countrymark) has the following comments concerning the five area listed in the letter:

- 1. It is Countrymark's opinion that all small refiners who refine gasoline will be impacted by the proposed rule. The impact will vary from small refiner to small refiner but will without a doubt effect over twenty (20) small refiners in their ability to operate and could threaten their possible existence.
- 2. Until the proposed rule is final, it is difficult to give a description of projected reporting, record keeping, and other requirements resulting from the proposed rule. However, all small refiners producing gasoline will be required to have additional record keeping, testing, and other activities which will need to be preformed by individuals with professional skills. The nature and number of such employees and the type of records and testing will only be known after the rule is adopted but it will undoubtedly add considerable record keeping and expense.
- 3. It would be difficult to set out all relevant federal rules that may be duplicated, overlapped or conflict with the proposed rule. However, all small refiners are presently coping with three recent rules adopted by EPA concerning the sulfur content of gasoline and diesel fuels. Again, the exact nature of the proposed rule will have a great deal to do with how it might effect the sulfur regulations previously adopted by EPA.

4. The impact of previous regulations on small refiners has been significant and a number of small refineries have closed in the last fifteen (15) years. The environmental regulations have contributed to many of these closures. The number of regulations recently adopted by EPA concerning sulfur content of fuels has resulted in substantial expense to all small refiners and has created operational problems in order to produce the fuels mandated by EPA. The amount of capital needed to comply with these regulations has far exceeded the return on such capital.

The proposed rule is much more complicated as it effects refinery operations more than the previous regulations. The previous regulations could be complied with in most cases by adding additional equipment. However, in some cases, the reduction of benzene to the proposed level could be such that it would be impossible for a refinery to produce marketable gasoline with a satisfactory octane level even if the equipment to reduce benzene is installed.

Since small refiners are spread out all over the United States and make a small percentage of the gasoline refined, exempting small refiners would have a minimal impact in the overall benzene level. A proposed rule which would allow small refiners to produce gasoline at their present benzene levels and provide for no backsliding, would seem to be the most desirable and effective way to proceed. This would minimize any significant impact of the proposed Rule on small refiner entities without damaging the overall result desired by EPA.

5. It is possible that if the benzene level is reduced to .62 that some small refiners will not be able to survive as gasoline producers and whether or not this will result in small refineries closing will remain to be seen. The possibility is definitely real and any community which has a small refinery will be substantially impacted by the closing. Jobs will be lost, small businesses will no longer have the refinery as a customer, and the income generated in the community by the refinery will cease to exist. Of all the regulations which have been proposed and adopted by EPA this proposed rule could have the most significant impact on small refiners.

Attached to the above letter in Section D were other substantive questions for SERs on the Mobile Source Air Toxic Rulemaking. Countrymark's answers to those questions are as follows:

1. <u>Overall Response to Potential Small Refiner Options</u>. The small refiner options set out in Section B each have some merit, however, two problems exist. First-Does the small refiner have ample funds to make the necessary improvements to the refinery to meet the proposed benzene levels? Second - Even if a small refiner could obtain the necessary funds to install the equipment could the refinery operate in such a manner as to produce marketable grade with a sufficient octane level.

In most cases, we believe it will be difficult for small refiners to meet the second requirement. Thus, the only logical option, which will allow the small refiners to be sure to continue produce marketable gasoline is to allow small refiners to continue to produce gasoline with a benzene level equal to the present level. Certain restrictions could be placed in order to prevent backsliding and even some requirements to make every effort without adding additional equipment to lower benzene levels.

- 2. <u>Level of the Standard.</u> Countrymark has previously provided to the panel and EPA its comments concerning the proposed level of .62 and we refer you to those comments concerning the impact of the level on Countrymarks operation. Without question, to comply Countrymark will have to add additional expensive equipment which will not result in any return on investment but will simply be an additional expense as will be the continuing operational expenses of such equipment. It is uncertain if the equipment which is now available and affordable could actually place Countrymark in a position to provide marketable gasoline. Without the income from gasoline it is doubtful that Countymark refinery could continue to operate.
- Cost Compliance and Leadtime. We do not agree with EPA's preliminary 3. estimates of refinery level costs for the MSAT II program. The reference to an eight million barrel per day unit is obviously erroneous since we know of no refinery of that size anywhere in the world. We believe that the proper figure was an 8,000 barrel per day, however, since that figure is incorrect, we then question the rest of the calculations in that paragraph. The cost figures provided by EPA for Countrymark were 2.7 million dollars for the necessary equipment and an operating cost estimate of 1.14 cents a gallon. We are attaching an evaluation by our Refinery Manager marked "Attachment A" which contains estimates of both the capital costs for the necessary equipment and the operating costs per gallon of gasoline produced. He estimates the capital costs for installation of a BenSat unit at 7.4 million dollars with a operating costs of 1.3 cents per gallon. He also points out the operating problems that would result even if the equipment could be financed and installed. In his opinion even with the equipment it would be difficult if not impossible for Countrymark to achieve a .62 benzene level. We would also point out that in our opinion it would be difficult for Countrymark to recover the additional capital and operating costs.

The leadtime to install any equipment from initial planning to construction and startup would be considerable. We are not in a position at this time to provide an estimate of the time involved in complying with the proposed regulations since we are in the process of installing the necessary equipment to comply with the EPA rules to remove of sulfur from diesel fuels and after that, installing the necessary equipment to reduce sulfur in gasoline.

Until these two projects are completed it would be very difficult for us to estimate the necessary leadtime to comply with the proposed rule. Undoubtedly, considerable time would be involved, since it would first be necessary to line up financing for the installation of the additional equipment necessary to remove benzene. Countrymark has already undertaken projects costing in excess of \$40 million dollars and additional financing for benzene removable equipment will be difficult to obtain if not impossible. Secondly, obtaining the necessary permits will take considerable time since we are already experiencing permitting delays for the other projects. Our best estimate at this time is that it would take in excess of four (4) years to comply with the proposed rule.

- 4. <u>Financing.</u> We have already touched on the financing problem. It was very difficult for Countrymark to arrange financing for the hydro-treater. We have yet to obtain financing for the necessary equipment to desulfurize gasoline and because Countrymark has been determined by EPA to be a "Branded Refiner", it will have the expense of establishing a very costly and time consuming testing program. We do not see any of the options including free credits as being helpful in obtaining the necessary financing.
- 5. <u>Credit Trading Program.</u> We have never been positive about credit trading programs because of the uncertainty of the availability of credits and their costs. Certainly with the other projects we are involved in, it would not be possible for Countrymark to obtain credits for early compliance. If credits are available and purchased, the additional costs for such credits are generally not recoverable in the cost of the product. We would not envision purchasing credits in order to continue to produce gasoline, as we feel it would make gasoline refining unprofitable. In conversations with other small refiners we have not found anyone who feels that a credit program is the answer to the continued existence of a small refiner.
- 6. <u>Small Entity Burden and Regulatory Flexibilities.</u> We have previously touched on this in our comments above. We feel the burden on small refiners of adding additional equipment to remove benzene and the problems it creates in the operation of our refinery, is disproportionate to the benefit resulting in the reduction in benzene from our present level to the level in the proposed rulemaking. Each successive EPA regulation heaped upon small refiners results in complicating refinery operations and reducing the ability of the small refiner to be profitable.

This is the fourth such regulation in recent years and each has placed a cost burden disproportionate to their ability to create profits from their operations. We have already suggested that the best option to be granted to small refiners is to allow them to operate at their present benzene level and provide restrictions so there is no back sliding.

EPA could provide incentives to small refiners to reduce benzene content through operational methods without having to install additional expensive equipment. We have previously pointed out that small refiners produce a small percentage of gasoline nationwide and in their marketing areas and that their continued operation at their present benzene levels would not materially impact the goals of the EPA in reducing benzene levels in gasoline nationwide.

7. Other Comments. The present EPA regulations will have the effect of reducing the amount of motor fuels available while at the same time there has been little or no increase in refinery capacity except for creep in refinery capacity. No new refineries have been constructed in the United States in many years and to our knowledge only one is planned and it is having difficulty obtaining the necessary permits. Any new refineries will take years to come on stream. Many small refiners and even some mid sized refiners have gone out of business. We recently see how vulnerable our refinery capacity is to interruptions due to weather or electrical outages. The result of the proposed regulation will without a doubt reduce the amount of gasoline available through the domestic refining complex. We hear government officials, business leaders and the general public complaining about the high prices of refined fuels and their concerns about our nation being dependent on off shore refined products. They stress the need for more refining capacity thus reducing our dependency. Yet, on the other hand, the EPA regulations continue to reduce the amount of domestic refined product available which results in increased dependence on off shore sources and increases the price of refined product to the consumer. It would seem that this is not the time to adopt yet another rule that could force the closure of some refineries and will definitely reduce the amount of gasoline produced.

We are sure that it is not EPA's intention to cause any small refiner to cease operations or to reduce the amount of refined product available from domestic sources. In order to assure continued operations by small refiners, we believe the regulation should have both both a refinery by refinery de minimis exemption provision and also a hardship provision which would not be temporary but would allow a small refiner to operate until such time as it could meet the .62 benzene level. In either EPA could take into consideration the benzene level of the refinery, the location of the refinery which reference to any non-attainment area, the amount of gasoline produced, the area in which the gasoline is marketed, the percentage of gasoline that refiner produced compared to the total gasoline either refined or marketed in its PADD, and the overall effect of exempting the refiner on the program to reduce benzene. In the case of the hardship exemption, EPA could put certain restrictions or set timetables for later reduction of benzene by the small refiner or it could establish a higher benzene level than required by the regulation but lower than the base period benzene level of the small refiner. In both cases, EPA could establish a benzene level for the refiner in order to prevent backsliding.

We again call your attention to the comments of our Refinery Manager which is marked "Attachment A" concerning the problems Countrymark will experience at its refinery even if it can obtain financing to install the necessary equipment in an attempt to achieve a benzene level of .62. The problem could be alleviated if Countrymark is allowed to blend ethanol into a gasoline component with a benzene level above .62 at its terminals. Ethanol cannot be blended at a refinery to achieve the .62 benzene level and then shipped through a pipeline because of the its nature to pickup moisture. We would ask that EPA provide in its regulation to allow a small refiner to achieve the .62 benzene level by allowing blending of ethanol into a gasoline component which leaves the refinery above .62 but could be reduced to the .62 level by blending of ethanol at a terminal.

Because of the severe impact this regulation will have on small refiner and because they are all different and will have great difficulty complying, we feel that it is necessary to have a de minimis exemption and a hardship exemption on a case by case basis and we recommend such to EPA.

We ask the SBREFA Panel to recommend to EPA to reconsider the benzene level proposed in this rule for small refiners and set the level taking into consideration the problems that small refiners will experience in attempting to reduce benzene to .62. We also ask the Panel to recommend the inclusion of both a de minimis and a hardship exemption on a case by case basis.

Countrymark appreciates the opportunity to be involved in the SBREFA process and to provide these comments to the SEBFRA Panel and the EPA and we look forward to working with both as this regulation moves forward.

Sincerely,

John H. Stern Vice President