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May 30, 2006

Ms. Margo T. Oge, Director  
Office of Transportation and Air Quality  
U.S. Environmental Protection Agency (6401A)  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

Proposed Mobile Source Air Toxics  
Phase 2 Standards; 71 FR 15804  
Docket ID No. EPA-HQ-OAR-2005-0036

Dear Ms. Oge:

NPRA, the National Petrochemical & Refiners Association, appreciates the opportunity to submit the enclosed comments on the proposed Mobile Source Air Toxics Phase 2 (MSAT Phase 2) standards. NPRA is a national trade association with 450 members, including those who own or operate virtually all U.S. refining capacity, as well as most of the nation's petrochemical manufacturers with processes similar to those of refiners. Our members will be significantly affected by any changes in fuel specifications, including this proposed action. We request that the enclosed written comments become part of the official record of this rulemaking.

NPRA believes it is possible to enjoy reliable and affordable fuel supplies while preserving, and continuing our environmental progress. However, this goal can only be achieved if the costs and benefits of new regulatory requirements are carefully weighed in the context of their impact on energy supplies. The state of the transportation fuels market today requires careful attention to potential impacts on supply.

NPRA's recommendations are supported by two landmark refining studies issued by the National Petroleum Council (NPC), an advisory group to the U.S. Department of Energy. The NPC issued a report on the state of the industry in 2000 ("U.S. Petroleum Refining: Assuring the Adequacy and Affordability of Cleaner Fuels"), urging policymakers to pay particular attention to the timing and sequencing of any changes in product specifications. Failing such action, the report cautioned that adverse fuel supply ramifications could result. Unfortunately, this warning has been almost totally ignored, adding to the market volatility we have experienced over the last few years.

On June 24, 2004, former Energy Secretary Abraham requested that the NPC to update and expand its refining study and a report was released in December 2004



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("Observations on Petroleum Product Supply"). This second NPC report included timely and appropriate recommendations, of which few have been implemented.

NPRA supports a MSAT Phase 2 final rule that is environmentally sound and economically justifiable, while avoiding impacts on gasoline supply. NPRA's members are dedicated to working cooperatively with the Agency as final rules are promulgated and implemented.

Sincerely,

A handwritten signature in black ink, appearing to read "Charlie Drevna", written in a cursive style.

Charlie Drevna

Attachment

c: Docket ID No. EPA-HQ-OAR-2005-0036.

**COMMENTS OF  
NPRA,  
THE NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION,  
ON EPA'S PROPOSED MOBILE SOURCE  
AIR TOXICS PHASE 2 STANDARDS  
(71 FR 15804)  
Docket ID No. EPA-HQ-OAR-2005-0036**

**A. The Agency should re-evaluate the MSAT Phase 2 potential impacts on gasoline supply.**

The Agency optimistically projects that the net effect of this MSAT Phase 2 proposal on gasoline supplies will be potentially zero.<sup>1</sup> As justification for this projection, EPA believes that the proposed averaging, banking and trading (ABT) program with the 0.62 vol% benzene level is: 1) feasible; 2) would be met without extreme economic consequences; and 3) that all refineries would be able to comply. NPRA is not so sanguine.

The Agency understands that MSAT Phase 2 rules will not have an even impact on refineries because there is a wide variation in the current gasoline average benzene contents (Preamble, Table VII.C-2, summer 2003, conventional gasoline plus RFG, domestically-produced, 71 FR 15868):

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<sup>1</sup> Draft Regulatory Impact Analysis: Control of Hazardous Air Pollutants from Mobile Sources, EPA420-D-06-004, February 2006, p. 9-42.

**No. of Refineries by Range of Individual Refinery  
Average Gasoline Benzene Content (volume %)**

<b>PADD</b>	<b>&lt;0.5</b>	<b>0.5-&lt;1.0</b>	<b>1.0-&lt;1.5</b>	<b>1.5-&lt;2.0</b>	<b>2.0-&lt;2.5</b>	<b>≥2.5</b>
1	4	3	3	0	2	0
2	0	5	8	11	1	1
3	4	18	10	7	0	2
4	0	1	4	6	3	2
5, ex CA	<u>0</u>	<u>0</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>2</u>
Total, ex CA	8	27	26	27	8	7

Another way to view the regional variations is to calculate the percentage of refineries with average benzene levels at 1.5 volume % or higher (using the table above):

<u>PADD</u>	<u>%</u>
1	17
2	50
3	22
4	69
5, ex CA	<u>88</u>
Total, ex CA	41

Obviously, there is a wide range of starting points. This diversity suggests that the compliance costs will be lower for some refineries and higher for others. The Agency fully understands that the per-gallon cost impacts of its MSAT Phase 2 proposal will vary widely by PADD.<sup>2</sup> In fact, EPA further projects that refineries in PADDs 4 and 5 face higher per-gallon compliance costs than the rest of the country.

EPA has also predicted actual refinery compliance strategies.<sup>3</sup> EPA's refinery cost model predicts which benzene control steps each individual refinery would take to minimize overall costs. The selection of individual refinery benzene control strategies depends on several factors – both dependent and independent. These may include the specific type of in place existing equipment currently at the refinery, the proximity to the petrochemical market, and estimated benzene reduction technology costs compared to the cost of buying a credit. The Agency expects that 39 refineries will reduce average benzene levels below 0.62 vol% and will not need credits, 49 refineries will reduce average benzene levels above 0.62 vol% and will need credits, 19 refineries already have average benzene levels below 0.62 vol% and do not need credits, and 8 refineries will not make process improvements to reduce average benzene levels and will need credits.

The Agency estimates that 92 refineries of the total 115 gasoline-producing refineries in the U.S. would have to install new capital equipment or change their refining operations: 25

<sup>2</sup> Ibid., Figure 9.6-2, p. 9-33.

<sup>3</sup> Ibid., Table 6.5-2, p. 6-38.

refineries will use benzene removal, 32 others will select benzene removal with isomerization, 24 will choose benzene extraction, and 11 will adopt benzene saturation. Six refineries will not take any benzene reduction technology option and will rely solely on purchasing credits (71 FR 15902). In addition, there are 19 refineries with average gasoline benzene levels already below 0.62 vol% and do not need to make any process improvements.<sup>4</sup>

Refiners also have other options not outlined by EPA which, if implemented, may well have significant adverse gasoline supply impacts. In response to MSAT Phase 2 standards, refineries could choose to close, reduce gasoline production, or export more gasoline. Gasoline supplies would be adversely affected if MSAT Phase 2 resulted in any of these compliance strategies.

Gasoline imports, a vital component of overall gasoline supply especially in PADD I, would also be controlled by this MSAT Phase 2 proposal. The following table demonstrates that imported gasoline in 2003, on average, would have been out of compliance with the proposed average level of 0.62 vol%, and would require either additional processing or purchase of MSAT2 credits:

**Average Benzene Levels of Imported Gasoline in 2003<sup>5</sup>**  
(volume %)

	<u>CG</u>	<u>RFG</u>	<u>TOTAL</u>
Summer	1.022	0.682	0.850
Winter	0.826	0.715	0.768
Total	0.914	0.701	0.804

Finalization of MSAT Phase 2 regulations as proposed by the Agency could result in lower gasoline imports if importers do not wish to incur the additional expense of purchasing credits from domestic refineries.

NPRA does, however, support EPA’s proposal not to impose an overall per-gallon benzene content cap on conventional gasoline. We agree with the Agency that implementation of this type restriction could result in the closure of entire refinery (71 FR 15869).

**B. The timetable for compliance should be lengthened to at least a full four years.**

NPRA suggests that, as in past regulatory approaches impacting fuels and fuel formulations, the refining industry be given at least four full years to comply with the final rule. While the Agency’s proposed timeframe for promulgation of the final MSAT Phase 2 rule only falls short by a few months of a full four-year implementation schedule, unanticipated delays in the rulemaking process cannot be discounted. We thereby suggest that the compliance schedule be adjusted to accommodate a full four-year implementation schedule that would commence at the time of final promulgation of the rule. Some refiners may need a little more time to make a

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<sup>4</sup> Ibid., Table 6.5-2, p. 6-38.

<sup>5</sup> Ibid., Table 6.2-1, p. 6-7.

decision on the compliance technology (i.e., benzene extraction versus saturation) because of the interactions with other refinery operations. Therefore, if the final rule is promulgated in February 2007 and is based on a calendar year average standard, then the rule should be effective no sooner than January 1, 2012.

**C. The focus of the rule should be on the average benzene content for all gasoline.**

The proposed MSAT Phase 2 standard would be an annual average maximum of 0.62 volume % benzene content on all gasoline (the total of conventional gasoline and RFG production or imports), and would replace annual RFG, anti-dumping and MSAT Phase 1 toxics requirements. EPA proposes to keep the current per-gallon 1.3 volume % benzene content cap for RFG, but not to impose a per-gallon benzene content cap on conventional gasoline. NPRA supports the proposal not to include a per-gallon benzene content cap on conventional gasoline and to focus on reducing the average benzene content of all gasoline.

**D. NPRA supports the proposed Averaging, Banking, and Trading (ABT) program.**

EPA has also proposed a nationwide (outside California) ABT program, an early credit opportunity from 2007-2010, and a standard credit opportunity beginning in 2011 by producing gasoline with average benzene content levels below 0.62 volume %. Credits can be used for compliance, banked for later use, or traded nationwide (outside of California). Standard credits would have 5 year life and early credits could be used for compliance in 2011, 2012 and 2013 only. NPRA supports a national, flexible ABT program and the opportunity, as the proposal recommends, to generate early credits and to carry-forward a MSAT2 deficit to the following year.

Furthermore, NPRA supports the Agency's proposal not to manage MSAT2 credit trading, but rather to allow trading with minimal restrictions (i.e., credit has not been transferred more than twice, credit transferor would not create a deficit as a result of the credit transfer, credits can be traded only between refiners and importers, credits can be traded nationally without geographic restrictions).

**E. Qualifying production for generating MSAT2 credits should be expanded.**

Section 80.1270 states that credits may be generated only by refiners that "produce gasoline by processing crude oil through refinery processing units." Some refiners produce gasoline from materials and methods other than by solely processing crude oil. These methods, aided by further downstream processing units, should not be excluded from the ABT program, and NPRA believes that the limitation is merely an oversight. Therefore, section 80.1270 of the proposal should include refiners who produce gasoline by processing intermediate feed stocks as well as crude oil through refinery processing units.

**F. The generation of early MSAT2 credits should be strongly encouraged.**

The Agency has proposed an early credit program and these early credits could be used for MSAT Phase 2 compliance in 2011, 2012 and 2013 only. All early credits could be used for compliance with MSAT2 on a one-for-one basis (e.g., a gallon of early credit benzene can be used to offset a gallon of benzene deficit in 2011). NPRA supports EPA's early credit program.

EPA selected three years to use early credits for MSAT2 compliance, 2011 through 2013. The Agency divided estimates of early credit generation by early credit demand (661,652,145 gal benzene/218,795,867 gal benzene per year = 3.02 years).<sup>6</sup> NPRA believes that EPA should lengthen this period to use early credits in order to strongly encourage the generation of early credits. EPA could discount the value of early credits after the first three compliance years (i.e., 0.75 \* value of remaining early credits in year 4, 0.5 \* value of remaining unused early credits in year 5, 0.25 \* value of remaining unused early credits in year 6, and early credits could not be used after compliance year 6). A discounting schedule would provide further incentives to use early MSAT2 credits in the first three compliance years or to trade them before their value declines.

**G. The life of standard MSAT2 credits should be five years.**

EPA proposes that a standard credit can be used for compliance in the year generated or in the next five years (see 80.1295(d)(2)). This proposed provision should be retained in the final rule.

**H. Early compliance should be an unconditional option.**

The Agency is considering early compliance with the proposed average 0.62 volume % benzene content gasoline standard (71 FR 15881). However, EPA suggests eligibility conditions (i.e., limited to refiners that have historically had better than average toxics performance, lower than average benzene and sulfur levels, and a significant volume of gasoline impacted by the phase-out of MTBE as an oxygenate). There should not be any eligibility conditions. Early compliance should be strongly encouraged. All refiners should have the opportunity to substitute MSAT Phase 2 rules for RFG, anti-dumping and MSAT Phase 1 toxics requirements as soon as possible. Furthermore, if a refinery can comply early, it should be able to generate standard credits before 2011. If the level of the promulgated average MSAT Phase 2 benzene content standard (0.62 volume % is proposed by the Agency) is feasible, then some refineries will be able to comply before 2011. NPRA believes that refiners should have the option to switch to MSAT Phase 2 standards before 2011 unconditionally.

**I. The option to include oxygenates added to gasoline downstream from the refinery is important.**

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<sup>6</sup> Ibid., p. 6-44.

EPA proposes at 80.1238(d) to allow refiners the option to include oxygenate added downstream from the refinery. This provision is not new as it is also part of the current MSAT Phase 1 standards at 80.825(e). NPRA supports the incorporation of 80.1238(d) in the MSAT Phase 2 proposal.

**J. Tier 2/Gasoline Sulfur rules should be the sole regulatory mechanism used to implement gasoline NO<sub>x</sub> requirements.**

EPA promulgated Tier 2/Gasoline Sulfur standards in 2000 (65 FR 6698; 2/10/00). The Agency now proposes that the Tier 2/Gasoline Sulfur rules be the sole regulatory mechanism used to implement gasoline NO<sub>x</sub> requirements, because all gasoline will continue to meet or exceed the NO<sub>x</sub> requirements of the RFG and Anti-dumping programs. This is an excellent example of reducing the regulatory burden by removing unnecessary regulations due to changing circumstances.

NPRA supports this proposal. The summer and winter RFG NO<sub>x</sub> emissions standards have been met with the implementation of the Gasoline Sulfur/Tier 2 standards and the summer and winter RFG NO<sub>x</sub> emissions standards should be deleted immediately. Similarly, the conventional gasoline anti-dumping NO<sub>x</sub> standards should be deleted immediately for refineries subject to the Gasoline Sulfur/Tier 2 annual average 30 ppm sulfur standard.

Therefore, effective January 1, 2007, NO<sub>x</sub> emissions should not be required to be reported on the RFG batch reports and the RFG and anti-dumping report for previously-certified gasoline. In addition, the RFG NO<sub>x</sub> emissions performance averaging report should no longer be required. For conventional gasoline, NO<sub>x</sub> emissions should not be required to be reported on the anti-dumping batch reports, the anti-dumping annual report, and the anti-dumping report for previously-certified gasoline if the refinery is subject to the Gasoline Sulfur/Tier 2 annual average 30 ppm sulfur standard.

Furthermore, NPRA believes the RFG NO<sub>x</sub> retail compliance surveys should be discontinued because they could not fail after 2006 and there would not be a RFG NO<sub>x</sub> emissions standard to ratchet. The RFG Survey Association will submit a plan for 2007 for EPA approval, and this plan should exclude RFG NO<sub>x</sub> retail surveys in 2007.

**K. Gasoline reporting and recordkeeping should be reduced.**

If, as suggested by NPRA, the Agency deletes MSAT Phase 1, RFG NO<sub>x</sub>, RFG toxics, and anti-dumping toxics, and if EPA promulgates MSAT Phase 2 benzene content standard, then gasoline batch testing, reporting and recordkeeping regulations should be revised. EPA may continue to require sulfur and benzene content testing, reporting and recordkeeping for every gasoline batch, but there would be no regulatory purpose to continue RVP, distillation, olefins, oxygen, and aromatics for CG and for winter RFG. RVP, distillation, olefins, oxygen and aromatics would only have a regulatory purpose for RFG summer VOC regulatory compliance.



If the Agency deletes MSAT Phase 1 and RFG toxics, then RFG toxics retail survey regulations should also be revised. If the Agency promulgates a MSAT Phase 2 benzene standard effective in 2011, then the RFG toxics retail compliance surveys should be discontinued after 2010 because they could not fail after 2010 and there would not be a RFG toxics emissions standard to ratchet. During 2010, the RFG Survey Association will submit a plan for 2011 for EPA approval and this plan should exclude RFG toxics retail surveys in 2011.

**L. The proposed MSAT Phase 2 standards are a significant energy action.**

EPA asserts that the proposed MSAT Phase 2 standards are not a “significant energy action” as defined under Executive Order 13211 because this is not likely to have a significant adverse effect on the supply, distribution, or use of energy (71 FR 15890, 15927). NPRA strongly disagrees.

The Agency’s MSAT Phase 2 proposal would have an adverse effect on domestic gasoline supplies if refineries closed, reduced gasoline production, and/or exported more gasoline. Gasoline supplies would also be adversely affected if MSAT Phase 2 resulted in reduced gasoline imports.

Refineries may not implement benzene content reduction strategies as EPA expects. Some would, but NPRA does not have confidence that the Agency has estimated correctly for every refinery. EPA’s proposal places a very large burden on the benzene content credit trading program. Since the Agency projects a very tight benzene content credit market, it is unreasonable to assume that every refiner seeking benzene content credits will always find affordable credits.

“Significant energy action,” as defined in section 4(b) of Executive Order 13211, includes “notices of proposed rulemakings: (1)(i) that is a significant regulatory action under Executive Order 12866 or any successor order, ...” Section 3(f) of Executive Order 12866 defines “Significant regulatory action” as “any regulatory action that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more . . .” EPA projects that the annual aggregate costs associated with the proposed MSAT Phase 2 gasoline benzene content standards will be \$185.533 million in 2011 and higher after 2011 (71 FR 15903). Clearly, just based on EPA’s own cost projections, this MSAT Phase 2 proposal is a significant energy action.

Furthermore, EPA estimates that the projected benzene extraction from MSAT2 would reduce the volume of reformate available for gasoline production by an equivalent of 23,500 b/d.<sup>7</sup> The Agency believes that this volume will be made up through other processes with little or no net reduction in gasoline production.<sup>8</sup> NPRA is not as confident that this volume reduction can be merely assumed away.

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<sup>7</sup> Ibid., p. 9-42.

<sup>8</sup> Ibid., p. 9-43.

**M. NPRA opposes a MSAT Phase 2 standard for toxics.**

NPRA opposes a MSAT Phase 2 standard based on total toxics, such as the basis for the current MSAT Phase 1 rules. NPRA agrees with the Agency that a toxics emission performance standard is significantly more complicated to implement and to enforce when compared to a benzene rule (71 FR 15862). NPRA also agrees with EPA that there is continued confidence in the direct relationship between the benzene content in gasoline and automotive benzene emissions and that a small reduction in gasoline benzene content results in large reductions in automotive benzene emissions (71 FR 15863, 15864).

NPRA supports EPA's decision not to further control polycyclic organic matter, 1,3-butadiene, formaldehyde, acetaldehyde (71 FR 15860), gasoline aromatics content (71 FR 15864), and diesel fuel parameters (71 FR 15863).

**N. The summer RVP standard for gasoline should not be reduced.**

NPRA does not support a national reduction in gasoline summer RVP as a new mobile source air toxics emissions reduction program. There would be potential adverse gasoline supply impacts from nationwide additional removal of butanes and pentanes.

**O. States are already preempted from benzene and toxics standards for gasoline and waivers cannot be granted by EPA.**

EPA explains the merits of federal preemption in the preamble for the federal RFG and anti-dumping final rules, which includes the following statements:

*The regulations proposed here will affect virtually all of the gasoline in the United States. As opposed to commodities that are produced and sold in the same area of the country, gasoline produced in one area is often distributed to other areas. The national scope of gasoline production and distribution suggests that federal rules should preempt State action to avoid an inefficient patchwork of potentially conflicting regulations.*

59 FR 7809.

EPA acknowledges that the current RFG benzene rule preempts states from regulating benzene content in gasoline in RFG areas. EPA asserts that all states (other than California) are preempted from gasoline benzene content standards (71 FR 15871) by this MSAT Phase 2 benzene standard.

The federal preemption provisions in the Clean Air Act preserve a rational motor fuel supply because states are precluded from unilateral adoption of unique specifications unless EPA grants a waiver. NPRA believes that states are already preempted from benzene and toxics standards for gasoline and have been so preempted at least since 1994 when the federal RFG and

anti-dumping standards were promulgated (59 FR 7716; 2/16/94). EPA made this point very clear in 1994 in the preamble for the final RFG and anti-dumping standards: “EPA, therefore, is issuing today’s final rule under the authority of sections 211 (k) and (c), and promulgate under section 211(c)(4) that dissimilar State controls be preempted unless either of the exceptions to federal preemption specified by section 211(c)(4) applies.” 59 FR 7809. (emphasis added) Furthermore, the federal MSAT Phase 1 standards adopted in 2001 (66 FR 17230) preempt states from initiating non-identical gasoline toxics requirements.

A State or political subdivision, other than California, may not adopt a benzene content, exhaust toxics or total toxics standard for gasoline that is different from the federal standard without requesting a waiver. However, the Agency cannot grant such a waiver. EPA recognizes the consequences of this situation:

*. . . section 211(c)(4)(C) of the Act allows for a waiver of preemption of state standards only where necessary to achieve a NAAQS. A similar mechanism is not clearly provided for States seeking to control ambient concentrations of toxics in their areas. Thus, without some regulatory mechanism, this proposal could have the effect of preventing States from addressing local toxics concerns under all circumstances because a waiver may not be available.*

65 FR 48079.

“Second, state fuel measures can only be justified by the need to achieve a NAAQS, so state fuel measures directed at achieving public health or welfare benefits other than a NAAQS, e.g., toxic exposure from other pollutants, may not be approvable into a SIP.”<sup>9</sup> “Additional federal controls on air toxics, particularly benzene emissions, have been very important to the States, since under current CAA authority they cannot obtain a waiver of preemption to control air toxics emissions unrelated to achieving a NAAQS.”<sup>10</sup>

Therefore, the Agency has acknowledged the need for a State to request a waiver and that granting a waiver is not available. States are already preempted from benzene and toxics standards for gasoline. Waivers cannot be granted by EPA because state benzene and toxics standards for gasoline are not necessary to achieve a NAAQS.

#### **P. There should be no further reductions in gasoline sulfur content.**

NPRA does not support further reductions in the sulfur content of gasoline as an additional mobile source toxics emissions reduction program. The EPA Gasoline Sulfur/Tier 2 program was very expensive and hydrotreating equipment at refineries was not designed to comply with possible new lower gasoline sulfur standards. These circumstances, coupled with the implementation of ultra low sulfur diesel (ULSD) regulations for highway use (June 2006) and non-road applications (June 2007), the implementation of the renewable fuels standard

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<sup>9</sup> U.S. EPA, Study of Unique Gasoline Fuel Blends (“Boutique Fuels”), Effects on Fuel Supply and Distribution and Potential Improvements, EPA420-P-01-004, October 2001, page 13.

<sup>10</sup> Ibid., page 22.

(RFS), and the removal of MTBE from RFG suggest that adding any additional, let alone unjustified, fuel specification change will place unnecessary strain on an already overstrained gasoline market.

**Q. EPA's commercial mailing address needs to be corrected.**

Applications for an early credit benzene baseline are proposed to be sent to 501 3<sup>rd</sup> Street, N.W. for commercial delivery, per 80.1285(b) (see 71 FR 15942). This should be changed to 1310 L Street, N.W.

Applications for small refiner status are proposed to be sent to 501 3<sup>rd</sup> Street, N.W. for commercial delivery, per 80.1340(b) (see 71 FR 15944). This should be changed to 1310 L Street, N.W.