

# EPA Presentation to the Boutique Fuels Task Force

May 12, 2006

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# Fuel Types in US

## Federal fuels

- Required nationwide or across significant portions of the country
- Examples: ULSD, low-sulfur gasoline, federal Reid Vapor Pressure (RVP), reformulated gasoline (RFG)

## • Boutique fuels

- Definition – special fuels required by states for purposes of meeting air quality goals
- Adopted under state law and approved by EPA as part of SIP
- Currently 12 states have 15 boutique fuel programs meeting this definition

## • Other unique fuels

- State or area-specific fuels required by law for reasons other than air quality
- Examples: EtOH mandates (MN); MTBE bans

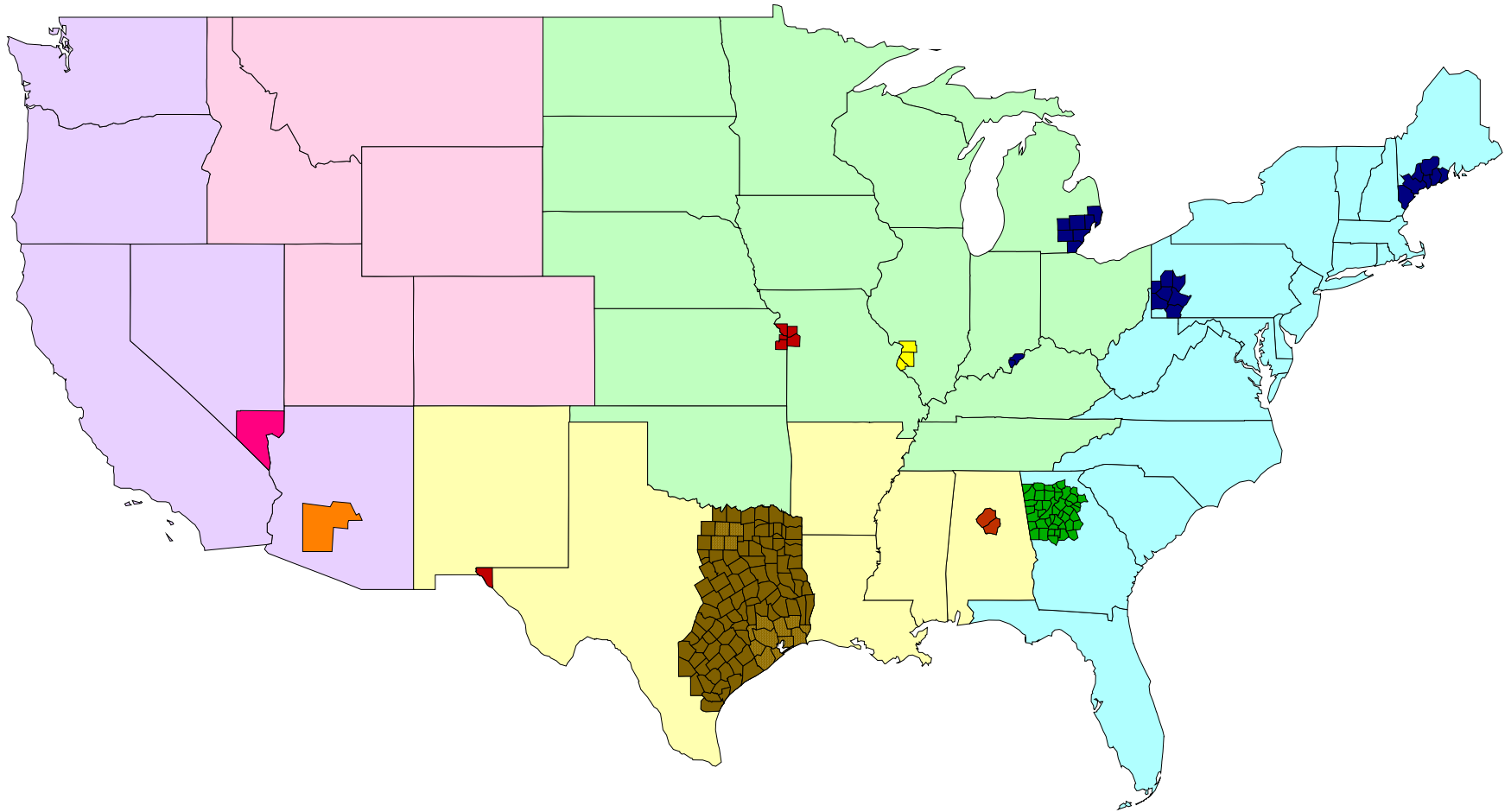
# Legal Authority for Boutique Fuels: Preemption and Waivers

- Under 211(c)(4)(A) of the Clean Air Act, states are generally barred from prescribing any control of a fuel or fuel additive if EPA has promulgated such a control.
- Two exceptions: 1) If the control is identical and/or, 2) California has authority to place further controls otherwise preempted.
- States may prescribe and enforce preempted fuel controls as a SIP measure if EPA waives preemption. Section 211(c)(4)(C).
- EPA may waive preemption if the state control or prohibition is “necessary to achieve” the NAAQS which the plan implements.
- “Necessary to achieve” is demonstrated if: 1) no other measures exist that would bring about timely attainment or 2) other measures exist but they are unreasonable or impracticable. CAA § 211(c)(4)(C).
- EPA Act Provisions discussed below implement new limitations.

# State Interest in Boutique Fuels

- All current boutique fuels based on volatility except Texas's LED, a few have additional controls
- Local fuel programs have provided significant public health benefits at minimal cost
  - Current programs yield approx. 2-26 tpd VOC
    - Atlanta currently at 43 tpd
    - Inventory benefits being updated to reflect impact of new programs
  - Production cost is pennies: 0.3 – 3 cents per gallon
- Many programs adopted with local stakeholder support
- California has separate authority to have own fuel programs

# State Boutique Fuel Programs – May 2006



- PADD 1: East Coast
- PADD 2: Midwest
- PADD 3: Gulf Coast
- PADD 4: Rockies
- PADD 5: West Coast

- RVP of 7.0psi
- RVP of 7.0psi w/Sulfur Content
- RVP of 7.2psi
- RVP of 7.8psi

- Texas Low Emission Diesel Fuel & State RVP Controls of 7.8psi
- Texas Low Emission Diesel and Federal RFG or RVP Control
- Cleaner Burning Gasoline
- Winter Gasoline

# US Refineries and Major Product Lines

Refinery Crude Capacity in MBPD



## Crude Capacity Rankings in BPD\*

Rank	Company	Crude Cap.	Rank	Company	Crude Cap.
1	Valero Energy Corp.	2,802,387	27	Western Refining Inc.	90,000
2	ConocoPhillips	2,207,700	28	National Cooperative Refining Assoc.	82,200
3	ExxonMobil Refining & Supply Co.	2,046,000	29	Alon USA	70,000
4	BP PLC	1,489,650	30	Lion Oil Co.	70,000
5	Harathon Petroleum Co. LLC	974,000	31	United Refining Co.	66,700
6	ChevronTexaco Corp.	909,000	32	Petro Star Inc.	65,500
7	Sunoco Inc.	880,000	33	Delek USA	60,000
8	Flint Hills Resources (Koch)	773,775	34	Cenex Harvest States	57,500
9	CITGO Petroleum Corp.	755,400	35	Placid Refining Co. LLC	55,000
10	Motiva Enterprises LLC	740,000	36	Calumet Lubricants Co.	54,000
11	Tesoro Petroleum	558,000	37	Gary-Williams Energy Corp.	52,500
12	Hovensa LLC	495,000	38	Paramount Petroleum Corp.	52,000
13	Shell Oil Products US	406,200	39	Hunt Refining Co.	43,225
14	Shell Deer Park Refining Co.	333,700	40	Ergon-West Virginia Inc.	42,400
15	Lyondeell-Citgo Refining LP	282,600	41	US Oil & Refining Co.	35,800
16	Total SA (TotalFinaElf or Atofina)	231,252	42	Kern Oil & Refining Co.	25,000
17	Shell Chemical Co.	213,000	43	San Joaquin Refining Co., Inc.	24,200
18	Murphy Oil USA Inc.	158,250	44	Countrymark Cooperative Inc.	23,500
19	ExxonMobil Corp.	156,000	45	Tillamook Lumber	20,000

### Legend

- Speciality Product Refineries (Chemical, Lubes, W...)
- Intermediate Refineries (Process intermediate feed...)
- Asphalt Refineries
- US Refineries
- PADD V

# EPA's Boutique Fuels Study

- Completed in late 2001
- General Findings & Conclusions:
  - Need for greater flexibility in programs addressing transition from winter to summer gasoline
  - Distribution system is able to move adequate supplies as long as no disruption occurs (refinery fires, pipeline breaks, etc.)
    - Current number of fuels may constrain distribution in time of disruption



# EPA 2001 Boutique Fuels Study

EPA evaluated a range of options covering the breadth of recommendations from the various stakeholders

- Menu of 3 fuels program (Fed RFG, Low RVP, or conventional gasoline)
- Menu of 2 fuels program (Fed RFG or conventional gasoline)
- Nationwide Clean Burning Gasoline (CBG)
- Nationwide California CBG

# EPA 2001 Boutique Fuels Study

- Options were evaluated two ways:
  - Maintaining the oxygenate mandate
  - Replacing it with a nationwide renewable fuel requirement
- Options were analyzed with and without a national benzene standard
- EPA evaluated the options for their impact on:
  - Distribution system complexity
  - Air quality
  - Supply
  - Cost

# 2001 Study Results - Impact of Fuel Options

(↑ indicates benefit, ↓ indicates detriment, - - indicates negligible impact)

Option	RFG/ Renewable Mandate	Ease of Distribution	Gasoline Production Capacity	Long Term Cost	Air Quality Impact
3-Fuel	Yes/No	↑	--	--	↑
	No/Yes	↑↑	↑	--	↑
2-Fuel	Yes/No	↑	↑	↓ (higher price)	↑↑
	No/Yes	↑↑	↑	--	↑↑
Federal CBG	No/Yes	↑↑↑	↓↓↓	↓↓↓	↑↑
California CBG	No/Yes	↑↑↑	↓↓↓↓	↓↓↓↓	↑↑↑

# 2001 Study: Bottom Line Conclusions

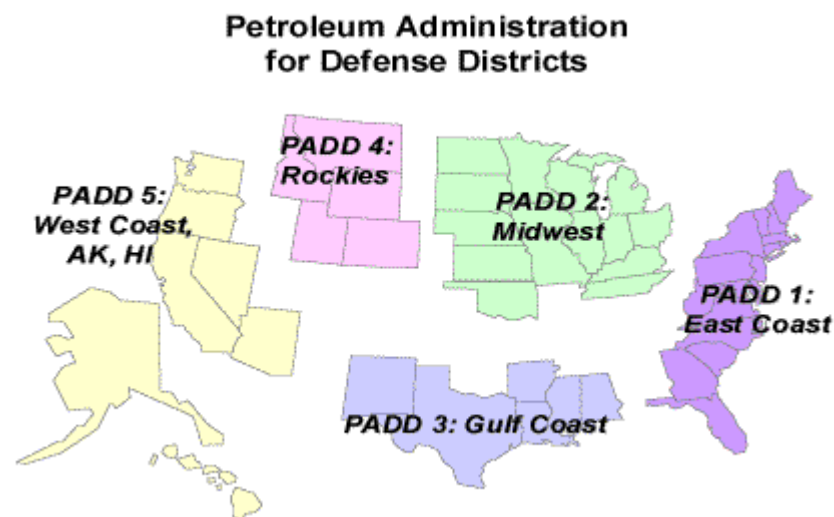
- Boutique Fuels do not generally constrain the gasoline system, unless there are disruptions
- Fewer fuel types will directly improve fungibility
- Options exist which can improve fungibility and maintain or improve air quality
- These options do not have to remove existing state fuel authority
- Addressing the RFG oxygen mandate is a key issue (now addressed by EPA Act)
- EPA received a number of comments on the study reflecting a wide range of views on the options presented

# 2005 EPAct Actions

- EPA's study identified a number of areas that needed legislative action
- 2005 Energy Policy Act included many of these suggestions
  - Renewable Fuels Standard
    - EPA developing comprehensive proposal now
  - Elimination of RFG Oxygen Requirement
    - Effective May 8, 2006 nationwide
  - Air toxics reductions
    - National Benzene standard proposed by EPA
  - Boutique fuel listing
    - EPA to issue proposed list later this month
  - Other related actions, including:
    - Consolidation of North and South grades of RFG
    - Joint actions with the Dept. of Energy: Boutique Fuel Report to Congress in August, 2006 and Study in June, 2008

# EPA Act Boutique Fuels Provision

- Once published, list may not be expanded beyond fuel types already in the PADD and on the list.
- Thus, EPA Act does not allow any new fuel in a specific petroleum distribution area or PADD (except for one: a 7.0 psi low volatility fuel).
- If new fuel is introduced, DOE and EPA must study supply/air quality issues.



These EPA Act Provisions will potentially limit new fuels adopted under SIP provisions.

# Questions for Task Force

- Does your state utilize a SIP-adopted boutique fuel?
- Have you had any disruptions of supply solely due to the “boutique” nature of the fuel?
- Under what circumstances would you consider adopting a boutique fuel program?
- Under what circumstances would you consider dropping or modifying your existing boutique fuel program?
- What do you think of the 2001 study list of options?